REQUIREMENT MODEL FOR CIAC SERVICES FEEDBACK SYSTEM

(CSFS)

EISSA HAMOOD ABDULWAHID

Universiti Utara Malaysia
2012

REQUIREMENT MODEL FOR CIAC SERVICES FEEDBACK SYSTEM (CSFS)

A project submitted to Dean of the Awang Had Salleh graduate School of Arts and Science in partial fulfillment of the requirements for the degree Master of Science (IT) Universiti Utara Malaysia

By

EISSA HAMOOD ABDULWAHID

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ABSTRACT

The universities may have an edge on the candidate's competition, each strives to be a world recognized educational institution therefore Universiti Utara Malaysia is striving to keep hold of its global vision through the Centre for International Affairs & Cooperation (CIAC) department which is in charge of this mission. Services provided by the CIAC such as visa, accommodation and transportation are very important for the improvement of the academic and administrative quality and excellence in the education in Universiti Utara Malaysia. A requirement model for CIAC services feedback system based on the perspective of the students is developed to provide the CIAC's decision-makers a wealth of valuable information about the response levels of the students regarding the critical services provided by the university. This requirements were gathered and developed in order to come out with a system that can perform survey easily, cost-effectively, time shortly with reports in the form of charts, graphs without needs of using data analysis tools. The collected requirements are verified and validated using a prototype to confirm that it fulfills the client needs and specifications. Rational Unified Process (RUP) methodology was adopted in order to fulfill the objectives.

ACKNOWLEDGEMENT

I wish to express my heartfelt thanks to the many people who made this project possible. There are far too many here to name them all. However, I would like to particularly name a few. First, I am grateful to my supervisor, Mrs.Nor Iadah Yusop for her valuable suggestions, ideas and help. In addition I would like to thank the interviewees for their cooperation and enthusiasm in participating in this research especially Dr.Adrian from CIAC. Also I would like to express my deepest sense of gratitude to my parents and my brother Mahmood who encouraged me through and helped me in every possible way to continue my postgraduate studies.

THANK YOU ALL

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LIST OF ABBREVIATIONS

CIAC: The Centre for International Affairs & Cooperation

CSFS: CIAC Services Feedback System

CHAPTER ONE

1.1 INTRODUCTION

At present, universities' leaderships is seeking a way to get an in-depth understanding for students' activities, desires, needs, and all students' interests that can provide the university employees with student satisfaction information which help to make the work in the university more effective and more efficient (Dongsheng & Wenjing, 2009). A feedback system is one of the effective ways used widely in order to obtain data or information relating to students interests (Petruzzellis, D'uggento & Romanazzi, 2006). An online survey system is becoming a great replacement to traditional paper and mail-based surveys to collect data and information (Singh et al., 2009), and they are used to compensate for serious inherited disadvantage of traditional formats. Among the reasons are, web provides opportunity to compensate for the deficiency of slow distribution, return time and other disadvantages of traditional format (Pargas et al., 2003). It is obviously observable that most people or organizations manage their survey using traditional method by distributing their survey through the mail or by telephoning, and some may afford to distribute by hand (Ariffin & Norshuhada, 2008; Zulikha & Ariffin, 2005; Tronstad, et al., 2009). Currently, where digital is the theme, this is not a timely solution for gathering information because it does not have fast circular returning and responding from the respondents. Other issues such as cost, time and effectiveness are also within considerations. Therefore, a feedback model based on survey management system was required by the Centre for International Affairs & Cooperation (CIAC) in Universiti Utara Malaysia to be the solution for these issues.

1.2 PROBLEM STATEMENT

A major factor in the ability of UUM to keep hold of its global vision is the degree of satisfaction perceived by students. The evaluation of the satisfaction of UUM

students on various kinds of services provided is a very important factor for making decision by the higher authorities of UUM. The UUM is having various offices in the university. Currently the Centre for International Affairs & Cooperation (CIAC) is the office that manages all international affairs and cooperation as UUM continually strives to be a world recognized educational institution. The services provided by the CIAC are visa application which is important service for international students, CIAC collects required documents from the international students and send them to the immigration authorities, accommodation is another important service provided by CIAC to the international students it routes the application of the students towards the student residential halls, the CIAC facilitates international students for the registration procedure and provides direction to complete the process, the transportation services provided by the CIAC for the international students. Unfortunately, this office does not have any effective computerized system to get feedback and evaluate the services such as visa application, accommodation application, transportations, registration and other major services provided to reflect the satisfaction of the students served. In order to provide better services according to students demand and improvement in the current services provided, the feedback on the services provided is necessary. However, the feedback gathering and evaluation operations over it are time consuming. To solve the above mentioned online evaluation operation of the CIAC services provided a requirement design model is developed with the help of prototype development.

1.3 RESEARCH QUESTION

This proposed research would answer the following question

1. What are the requirements for the CIAC services feedback system?

1.4 RESEARCH OBJECTIVE

The main objective of this project is to develop a requirement model for a CIAC services feedback system. Specifically the following objectives are aimed:

a. To gather the requirements for the CIAC services feedback system.
b. To develop the requirement model for the CIAC services feedback system.
c. To validate the requirement model for CIAC services feedback system.

1.5 RESEARCH SCOPE

The requirement model for the CIAC services feedback system will provide the CIAC a solid base and initiation to come out with an effective system that gathers feedbacks from UUM international students (degree, M.Sc, Ph.D. and DBA) on the provided services. The students will be able to give feedback online by using the CIAC services feedback system based on the requirement model produced through filling the online questionnaire forms provided, answering various questions related to the services quality and provision. The questions are designed and categorized to get the clear and right feedback from the students.

1.6 RESEARCH SIGNIFICANT

The major contribution of this project is to build an effective and useful requirement model for CIAC feedback system which provides the CIAC department with a solid base and initiation to come out with an effective system that would play important role in order to ease and facilitate the process of gathering feedbacks from the international students easily Therefore, time and effort would be reduced into its minimum. Based on the produced model, an effective system could be produced to assist and help the CIAC department through following features:

- Allowing office's staff to manage numerous surveys by using the functions of creating, activating/deactivating, updating and deleting survey.
- Measurements and statistics which could be provided by CIAC services feedback system that help to examined relationships between UUM and its customer (Students) and measure customer's satisfaction with services offered by UUM.

1.7 SUMMARY

Requirement model of CIAC services feedback system is proposed to the Centre of International Affairs &Cooperation *(CIAC)* in the University Utara Malaysia in order to come out with an effective web based application which would enables feedback to be gathered easily, cost-effectively and time shortly.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter covers some literatures which are related to the context of this project. The students are the main customers of any university that's why the customer satisfaction to be studied in this project is included. Web-based technology and E-survey technology areas are also a part of the literatures. Basically, there are three main points which the focus will be on. The first is the general overview of customer satisfaction in the universities and the factors related to it. The second section introduces the web-based technology and the online survey application and their advantages over paper-based applications. The last sections cover some related works which have been done in the area of online questionnaires.

2.2 OVERVIEW OF SATISFACTION

The universities main aims contain student satisfaction. A student who is satisfied with their loyalty of the competitive outcomes. The satisfied student can play important role in the international market of the higher education. (Kotler & Fox, 2002). The business mission of the university is counter the issues of the cultural diversities, changing methods of teaching, requirements and services for the students. This provides students to choose a university as their learning destination because the various universities offers educational course along with the special environment of the study.

The global market of the education is becoming important due to the primary and secondary benefits of the university and country. The various higher educational institutions are curious about the market, productivity, net profits

and quality of services provided by the university to the students. (LeBlanc & Nha, 1997).

This quality of service in the universities is providing their ranking high levels in the world. Most of the universities focus on their key performance indicators to improve their services for the students to compete in the market (Donaldson & Runciman, 1995).

The quality of service effects on the higher educational institutions are long lasting. Many of the universities receive international students, that brings internationalization for the academic programs and services which is nowadays important issue for the higher education institutions as a factor of the key performance indicators (Drucker, 1997).

The cross border education is provided by also the online universities so the traditional universities are having competition to get the international students. The scope of the international education has brought the challenges for mobilizing their courses and services regarding the needs of the international students (Naidoo, 2006).

Many higher educational institutions or universities have opened their campuses internationally either on shore or off shore. The foreign higher education institutions are also investing to open campuses all around the world. This brings competition in the higher education institutions for provision of the programs, arrangements plans and the contributions to the country. Moreover the new changes in the finance and the policies of the universities have brought wide area of the services for the operations of the institutions. The new changes are made to the successful delivery of the learning services and other services to their students. The international students arrive through scholarships, self finance, exchange program and other sources. (Naidoo, 2006).

The following diagram elaborates the significant aspects pertaining to the student satisfaction such as accommodation, safety and social.

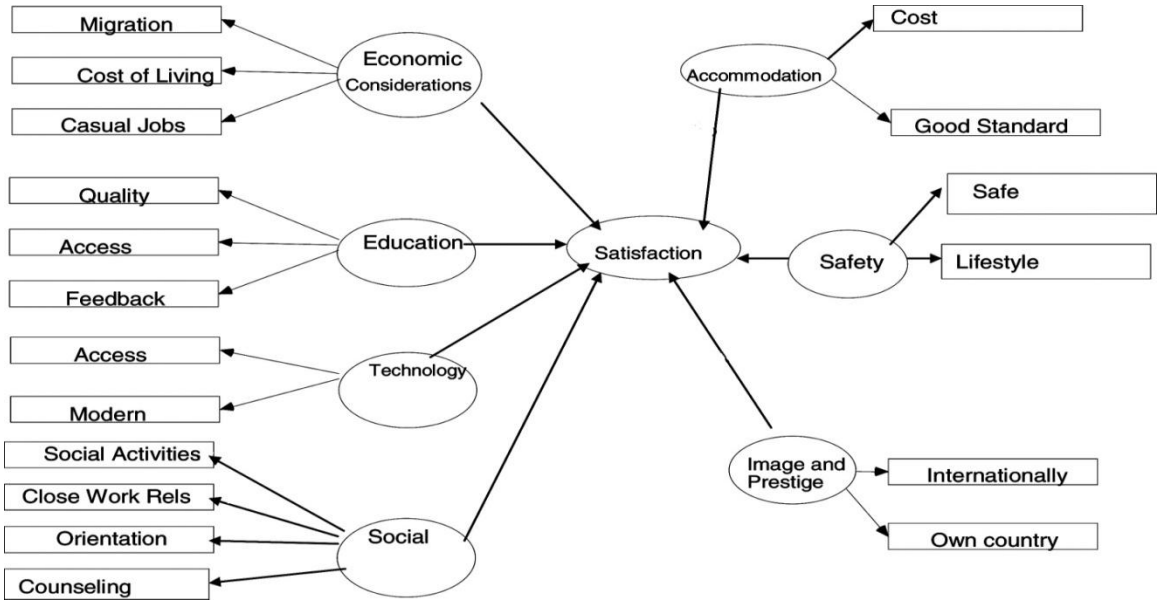

Figure 2. 1 Model of Student Satisfaction Factors

Adopted from: (Arambewela & Hall, 2009).

The student satisfactions shown in Figure 2.1 model are factors which are affecting the satisfaction of the students in the university. The factors used in this model are helpful in this research to understand the requirements of the students towards the services provided by CAIC.

2.3WEB-BASED TECHNOLOGY

2.3.1 Web-Based Application

Wiki Answers stated that, in the software engineering field, web application, which is known as web-apps, are applications that are accessed through a web browser over an internal network such as the intranet or external network such as an internet. Moreover, it is a kind of computer software application that is implemented using code via browser

supported language such as java Script, HTML, Java and relayed on a common web browser that provide the execution of the application. According to Nijaz (2003) web based applications technology are increasing rapidly and demonstrated two points; end user's perspective as the main goal and developing web enabled software with the main aim of providing less client side. As this project is related to the requirement model of services provided by CIAC and the validation of the requirement model is made through prototype which is a web based application.

2.3.2 Advantages of Web-Based Applications

The introduction of the internet in the world made it global village. The internet currently having various web based application used widely in the major parts of the world. The usage of the web based application is because of its features from that some important features are given below as compare to the stand alone applications:

- Compatibility of Cross Platform: The stand alone applications are normally created for performing special task in which the application is developed for. The web based applications are made from the web technologies like C#, PHP, Java etc. These technologies offer developed applications to run over many operating system (Ralpah, 2009).
- Update Procedure: The update procedure in the web based application is not requiring any human resources like stand alone applications because the download and installation are done unattended. The software updates in the large organizations are time taking but in the web based applications it is done automatically (Susan, Victor, 2004).
- Urgent Access: The web based applications as they are not requiring procedure for the installation and configuration therefore the matter of the hardware software management is done just though login keys.

- Trying is easy: The web based application offers demo versions and limited versions through that the users are able to download and try the trial and purchase the full version later when satisfied with services.

- Lower memory requirement: The requirement of the temporal memory at the user level is sensible as compare to the stand alone applications which are using heavily the random access memory. The web based applications are normally depending on the server side programming which uses the memory of the servers that allows the web based application to use the less memory resources of the user (Ralpah, 2009).
- Fewer Bugs: The web base applications are having less bugs as compare to the stand alone applications because the various versions of the web based applications are made error free and time to time they are checked for the bugs (Ralpah, 2009).
- Less Cost: The stand alone applications are normally costly because they require the technical, marketing and distribution resources that increase the cost of the application. These tasks in the web based applications are done freely and online for the fine services.
- Data Dissemination: The sharing and movement in the web based application is done online. The users can access the data from anywhere of the world at anytime (Wossner, Etal, 2002.).
- Concurrency: The various users can access the same web based application at a time. They can store their data and perform the transaction online and concurrent at a time. The physical presence of the user is not required in the web based application on the spot (Susan, Victor, 2004).
- Security: The safety of the data is major feature of the web based application normally in the stand alone application the data can be lost due to the failure of the permanent disk and at any time the data can be lost. But in the web based application the data is having backups at

various locations in the form of the servers. The backup procedure is done automatically.

- Flexibility of the Development Tools: The languages used in the development of the web based applications can be written in any languages which provide platform independent like operating systems (Ralpah, 2009).

2.3.3 Web-Based Application Categories

Murugesanugn & Ginige (2005) categorized web based applications into six categories. Table 2.1 shows their functionality. The categorizes concept assists developers to understand and identify web based applications requirements and the developments as well.

Table 2. 1 Web Application Categories

Category	**Example(s)**
Informational	Online newspapers and online books.
Interactive	Online forms and online games.
Transactional	Online systems.
Workflow Oriented	Supply chain management.
Collaborative work environment	Distributed systems.
Online Communities/ Marketplaces	Discussion groups.

The Table 2.1 illustrates the categories of the web based applications this application for the feedback of services provided is laying in the category of the interactive online forms, here the users can access the online questionnaires and provide a feedback.

2.4 OVERVIEW OF WEB BASED SURVEYS

According to Leedy & Ormrod (2001) nowadays the survey word is being used in various places for the collection of the data from the population and individuals. The survey is a method to collect the data from the individuals (Leedy & Ormrod, 2001). The traditional ways and news ways are there for the conduction of the survey like email, mail, call, telephone, interview and web survey are normally used (Scheuren, 2004). Despite of the traditional survey mechanisms the collection of data from the internet usage the websites and emails are dominating in this field (Leedy & Ormrod, 2001; Catherine, Dimitrion, & Mike, 2001). The internet based survey is having two technologies to be used like website and email. With the usage of email the survey is send to the required person email address then the person fill the survey and sends back (Davis, 1989).

In the web the respondents are reading the survey like a web page then the answers are given over there (Carey, Mao, Smith, & Vredenburg, 2002). Referring to the (Galin, 1998), the major diversity in these two technologies of the survey the email is pushing approach and the web is pulling approach. The email messages are sent to the inbox of the required respondent through sending an email message to the address of the respondent. In the web the respondent will see a web page where more visualization are available (Catherine, Dimitrion, & Mike, 2001).

The web based surveys are very popular and they performed on the internet.

The administrators are able to create the online questionnaire and the distributions of the questionnaire are done over the internet (Hair, et al., 2006).

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2.5 ONLINE SURVEYS AND THEIR ADVANTAGES

The survey online technology is new and still in developing phase. In past years, conducting and creating an online survey requires more time and requiring experiences with web authoring programs, scripting program, and HTML code. Nowadays, online survey services and authoring software packages provide easier

and faster way. Personal computers are in this stage now and there is no more significant to know about technical details. There is alternative way to deliver which will save many users from learning about web applications details. Web based survey applications are programs that run on web servers using web pages as user interface. The new kind of software will be easy, cheap, reliable, mobile and often powerful than paper based survey or desktop survey for regular users.

In one of their articles of Roztocki & Lahri (2003) had mentioned advantages of online surveys over desktop and paper based survey applications. The following few points would highlight the most some advantages of online questionnaire:

- **Time effectiveness:** Referring to the Roztocki & Lahri (2003) the time of the response for any web based survey is very less as compare to the traditional method of the data gathering. The web based survey offers distributions of the survey fast and reliable. The survey is distributed to the respondents in a reasonable time. The collected data which is in the form of digital no need efforts of the human resource for data entry.
- **Cost Benefits**: The cost of the development and maintenance is cheap in the web based surveys because it does not use pen and pencil. (Vate-U-Lan, 2007).
- The mostly authors claims that the web based survey are cost effective unlike traditional survey needs travel and other resources expenses.
- **Quality of Responses and Human-Error Reduction**: The traditional surveys are having issues of multiple entries and the human errors in their responses. It overall effects the quality of the response. (Forsman & Varedian, 2002).
- The web based survey is having less missing entries. The double and duplicate entries are eliminated in this type of survey.
- **Access to Larger Populations in Different Geographic Areas:** The remote areas and far away areas of the world are not easy to access, the web based survey can help in this situation because their access to the participants is higher than the traditional surveys.
- **Reduce the effort of the participants:** The participant's efforts for the handling the questionnaire are lower in the web based survey. The participants are given

one web page URL where they can access it easily and they can fill it. The questionnaire can be open any time, it can be sent through email, it also can be print this reduces efforts of the participants.

Since the feedback required model is based on the web survey, the important advantages of the web based survey are given above which are time, cost, quality, access, reduction and etc. These advantages of the web based survey enables effective collection of the feedback through web.

2.6ONLINE QUESTIONNAIRES APPLICATIONS

There are many online questionnaires applications like Ecevas, sKeySurvey, Web Surveyor WWW Survey Assistant, and Hosted Survey. Brief descriptions of these applications have also been mentioned below.

2.6.1 Ecevas

E-course evaluation it is based on online survey it is widely used in universities such as Universiti Utara Malaysia such Course evaluations are part of University's commitment to excellence in teaching and learning (Ecevas, 2012). Such system is easy, convenient, secure, anonymous, and confidential way in order to get the right and effective feedback which result in good quality of service in the university.

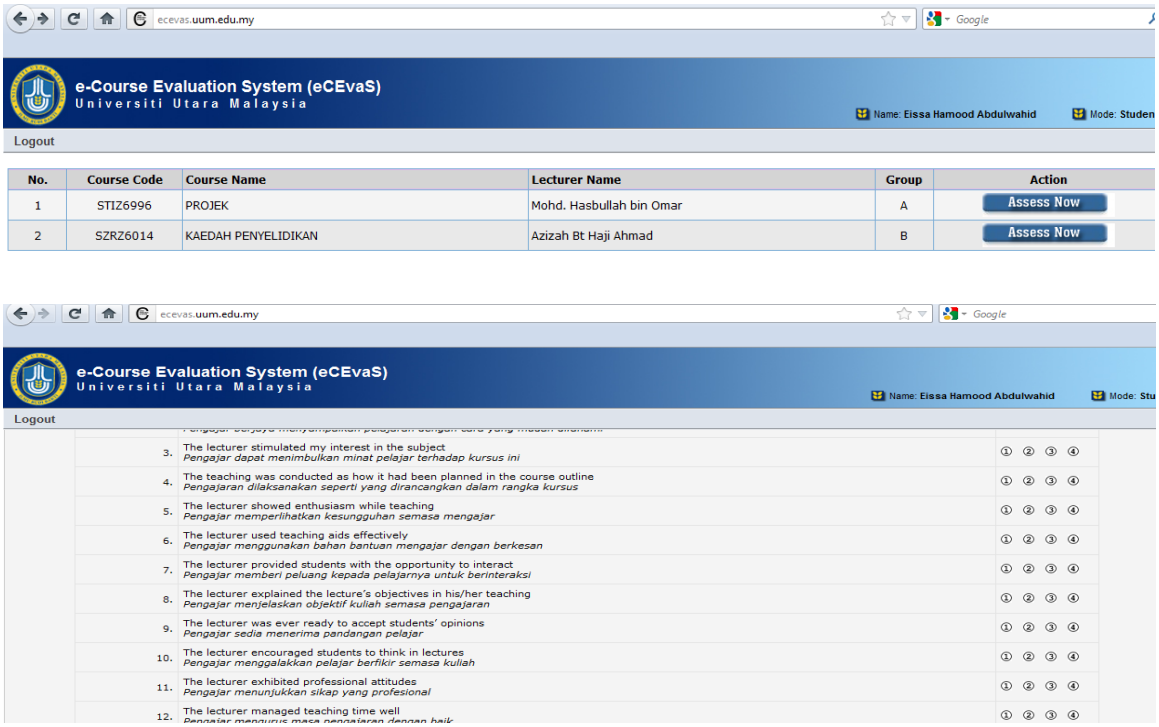


Figure 2. 2 Ecevas system

The Figure 2.2 shows Ecevas system which is used for the course evaluation at the Universiti Utara Malaysia, it covers only the course evaluation but not the other major services provided by the university to the international students. This project is similar to the Ecevas in terms of functionality such as activate the session, index type either student or lecturer, types of questions and etc.

2.6.2 KeySurvey

According to KeySurvey , web based program is easy to use and deliver designing and distributing survey features that need to conduct sophisticated and multi language surveys after that collecting data from respondents. Macer (2009) concluded that analysis and reporting side of KeySurvey is a bit of a disappointment after all the capabilities in KeySurvey. It is not easy to create simple reports showing charts and frequencies. It could include a broad range of statistics. This might be sufficient for some users, but the reporting formats and the use of tools

will be difficult for some. Then, they will build an alternative report to fill their requirements.

The KeySurvey is reviewed here because it is related in terms of capabilities like generating survey reports, collecting feedback etc.

2.6.3 WebSurveyor

The web surveyor is also another web based online survey application software developed for the customization and creation, pooling and distribution of the questionnaires. This software creates HTML based survey pages which permits personals to send the questionnaire or survey towards the some aimed groups or individuals in the reasonable time. The results of the gathered data are kept on the server and this server works in real time. This server performs analysis on the collected data and then generates graphs and reports which explains the information of the results. The reports are having statistical analysis of the answers given by the respondents from the questions were asked from them in the given questionnaire (King, 2005).

The Web surveyor application which is similar to this system because it contains survey, pools and questionnaires, these features are used to gather the feedback from the populations.

2.6.4 Hosted Survey

As stated in hostedsurvey.com, Hosted Survey is another survey tool available. This tool is entirely web-based. It handles conditional branching where the answer to a single question can branch to a series of questions; and, it can randomize the questions. Another feature of this tool is the ability to break up the questions into groups or sections

Generally the literature review carried out pertaining to the online questionnaire systems developed earlier are having various capabilities like the collection of the data from the users in the form of answers and questions. The online questionnaires are also able to produce the reports after evaluating the data given by users in the shape of answers.

2.7 SUMMARY

In this chapter, it has discussed the background of customer satisfaction in the universities and the factors related to it followed by defining the online surveys and their advantages. Some survey applications have been described in this chapter as well.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The methodology used in to develop the model which was adopted was the Object Oriented. There are various approaches of the methodology here the Rational Unified Process (RUP) methodology is used. This is an object oriented methodological approach which can be used in a web based application development. This approach contains various steps that leads to the development of the final product.

The complete approach of the RUP also known as lifecycle is similar to the spiral model which has various elements ordered in a sequence to complete a task or target. The RUP lifecycle is having various steps and also it can be changes according to the project requirements.

3.2 RATIONAL UNIFIED PROCESS

Referring to Sommerville (2004) the Rational Unified Process (RUP) is an iterative software development lifecycle which is developed the Rational Software Corporation. The rational software corporation is the branch of the IBM in 2003. The RUP is a not a single way to develop the software it has a framework where the developer can alter the phases and processes of the development. The various development organizations are using this methodology for their software development because it provides customizations according to the needs of the organizations.

In the lifecycle of the RUP the processes are divided in the phases and sections. The project which is implemented in the RUP normally is having four steps,

inception, elaboration, construction and transitions steps. The following Figure 3.1 is illustrating life cycle of the RUP.

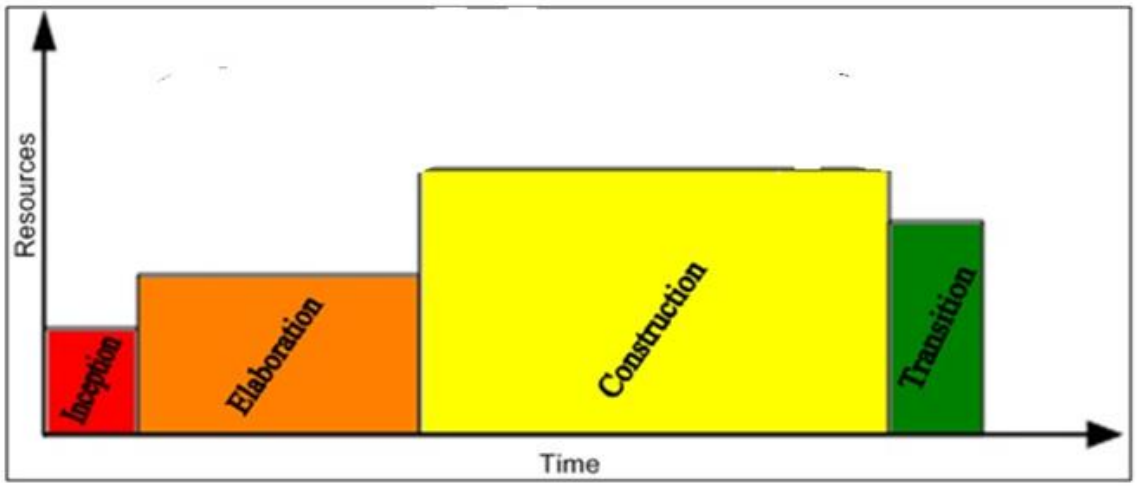


Figure 3. 1 RUP Methodology

Adopted from (Sommerville, 2004)

❖ Inception phase

In the phase of inception the establishment of the project is done. The inception is having information and data collection for the system development. The various activities are performed in this phase for the planning and preparation of the project feasibility. The information and scope of the project is determined in this and the resources available for the project.

At the end of this phase the product is the collected data for the CIAC department which is having real information for the development of the model.

❖ Elaboration phase

The main objective of the elaboration phase is the problem awareness. In this area the architecture of the system is understood and important tasks are performed which are given below:

- The detailed awareness of the client and system requirements:
  The requirements for the client are collected from the staff of the CIAC

Department of the UUM.

- The list of requirements is made after interviewing the staff of the department these requirements and their analysis is given in the chapter four of this report. The requirement was mainly gathered through asking some questions asked directly to the director of the department as follow:
  - Can you give me an overview of the department background
  - What are the roles and functions of the department
  - What are the main problems of the department that are related to information technology
  - You have asked for feedback system which would help you to get feedback and gain more understanding about the students needs. What are the techniques and tools that you use to get feedback normally?
  - How many types of the users you expect the system will have?
  - Can you list the tasks and authorities for each user of the system?
  - Kindly, can you list down the features that you would like to have in the system?

- Tools required for development:

  We proposed the following platform for prototype development:

Front End (JS)	Java Server Pages (JSP)/Java Script
RDBMS	MySQL v.5.0
Server OS independent)	Any OS (Java is platform
Client OS (IE/Fire Fox)	Any OS with Internet browser
Framework	Java

Client Side

- Required(Hardware):
  - Intel Pentium III 1.6 GHz (min)
  - 512MB DDR Random Access Memory
  - 10/100 Mbps Ethernet
- Required(Software):
  - Any Operating System – (Win XP/Vista, Mac OS, Unix…etc)
  - Internet browser. (Mozilla Firefox 3.0 or Windows EI 5.5 or above)

- Construction phase

  In the construction step of the methodology here the system design, programming and validation are done. The major task in this step is the development of the model. This phase is time taking in the whole methodology. The visualization and the design of the physical model is developed here. Also the programming and code of the prototype is written here for the validation.

3.3 SUMMARY

This chapter explained how the researcher uses the methodology of Rational Unified Process in order to achieve the objective of the project. The outcome of RUP had produced inception phase that is Collection of information about CIAC and their background, in other words having clear idea of what the expected model should look like. The elaboration phase contained preparing list of requirements, identifying required tools and proposal document. The construction phase completed the requirement model.

CHAPTER FOUR

FINDINGS

4.1 INTRODUCTION

This chapter provides the findings of this study. The findings are presented based on the steps taken in order achieve the objective of this project, starting with gathering and analysis the requirements

4.2 REQUIREMENTS ANALYSIS

The researcher has conducted several interviews with the director of the CIAC department as well as with some random selection of UUM international students. The researcher was able to collect information regarding the problems that is faced by CIAC people in term of getting feedback from the students regarding the services provided to them by the department such as the visa application and the difficulties faced related with the other services provided by the CIAC. Additionally, there were recommendations given by people in CIAC and students in which they addressed some features they are willing to be included in the system.

The department director has highlighted that CIAC does not have an online survey system. Students are not able to give back a feedback regarding the services provided by the CIAC so normally they will go to the CIAC direct to complain or to give some feedback which is time consuming for both stuff and the students. Additionally, he pointed out the some problems of using paper based questionnaire such as slow survey distribution and slow return time. Coming to fellow students concerns, an important issue which international students face was the absence of a system which allows them to give their opinion and feedback

about the services being given such as the visa, transportation and academic common issues being faced.

At the end of the interviews they hoped to have an online feedback system which provides them such plat form for of getting feedback and getting to know the feedback of the international students in UUM.

4.2.1 Functional Requirements

Listed below are the functional requirements of the system. In the priority column, the following abbreviations are used:

- M – mandatory requirements (something the system must do)
- D – desirable requirements (something the system preferably should do)
- O– optional requirements (something the system may do)

Table 4. 1 List of Functional Requirements

No.	Requirement ID	Requirement Description	Priority
	CSFS_01	**Login**	
1.	_01_01	User log in to the system by key-in user name and password	M
2.	CSFS_01_02	System verify the user name and password if wrong show him message that rennet user name and password	M
	CSFS_02	**Change Administrator's Password**	
3.	CSFS_02_01	administrator can change his/her password	M
	CSFS_03	**Create New Index**	
4.	CSFS_03_01	administrator can create new index	M
	CSFS_04	**Activate Index**	

5.	CSFS_04_01	administrator can activate Indexes for specific sessions	D
6.	CSFS_04_02	administrator can deactivate Indexes for specific sessions	
	CSFS_05	**Delete Index**	
7.	CSFS_05_01	Admin can delete Indexes for specific session	M
	CSFS_06	**Add New Questions**	
8.	CSFS_06_01	administrator can add new questions to specific index and at the same time to questions' library	
	CSFS_07	**Add Questions from library**	
9.	CSFS_07_01	administrator can add questions to specific index from questions' library	
10.	CSFS_07_02	System displays message if there is no questions stored in database for selected library	
	CSFS_08	**Update Index Questions**	
11.	CSFS_08_01	administrator can update questions for specific index	M
12.	CSFS_08_02	System displays message if there is no questions stored in database for selected index	O
	CSFS_09	**Delete Index Questions**	
13.	CSFS_09_01	administrator can delete questions for specific index	M
14.	CSFS_09_02	System displays message if there is no questions stored in database for selected index	O
	CSFS_10	**Take Survey**	
15.	CSFS_10_01	Participant can take and submit a survey	M
16.	CSFS_10_02	System will display information message and logout the participant automatically if there is no	O

		an active survey	
17.	CSFS_10_03	System will display information message and logout the participant automatically if s/he already taken the survey	O
18.	CSFS_10_04	Participant can cancel the activity of submitting the survey	O
	CSFS_11	**Show Satisfaction Level**	
19.	CSFS_11_01	Administrator can see Satisfaction Level for specific session	M
20.	CSFS_11_02	System will display information message if there is no result for selected session	O
	CSFS_12	**Show Index Statistics**	
21.	CSFS_12_01	Administrator can see Index Statistics for specific session	M
22.	CSFS_12_02	System will display information message if there is no result for selected session	O

4.3. REQUIREMENT ANALYSIS

4.3.1. Use Case Diagram

The following is the use case diagram of the requirements. The complete interaction of the actors user and administrator is illustrated in the diagram.

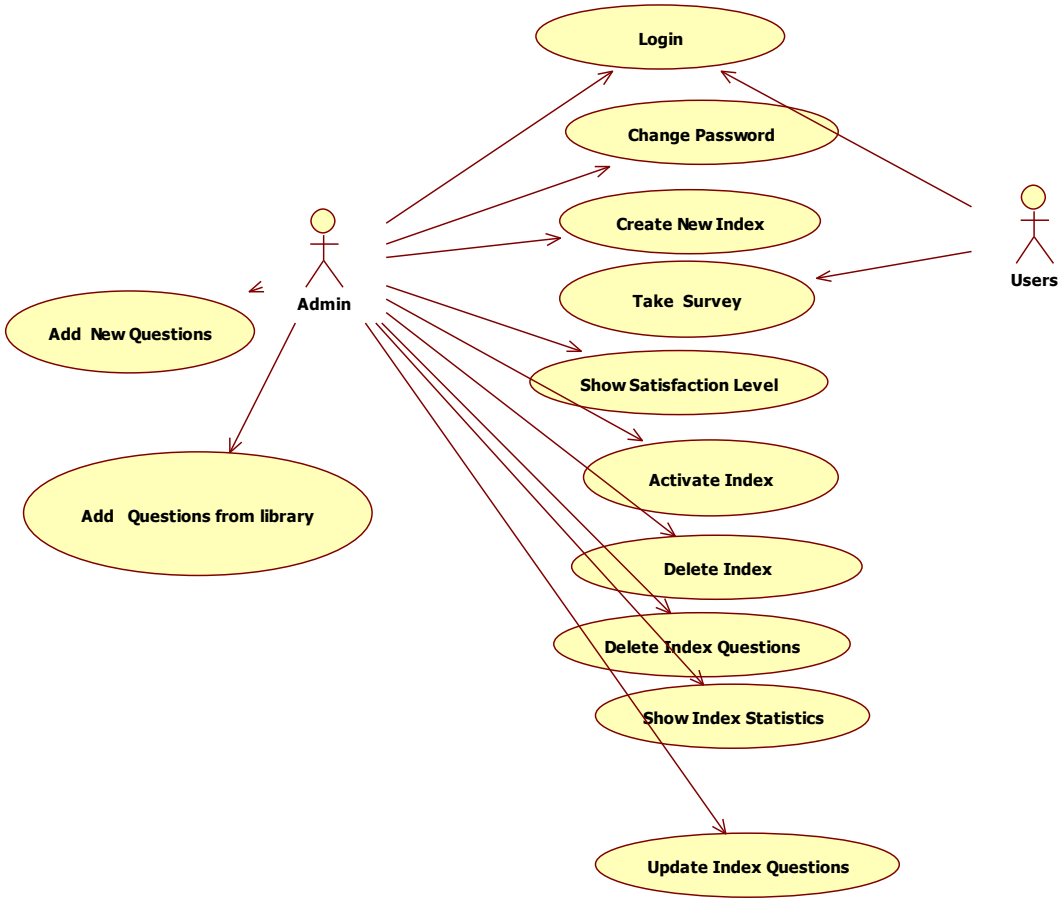


Figure 4.1 Use Case Diagram

4.3.2. Use Case Specification

4.3.2.1. Login [CSFS_01]

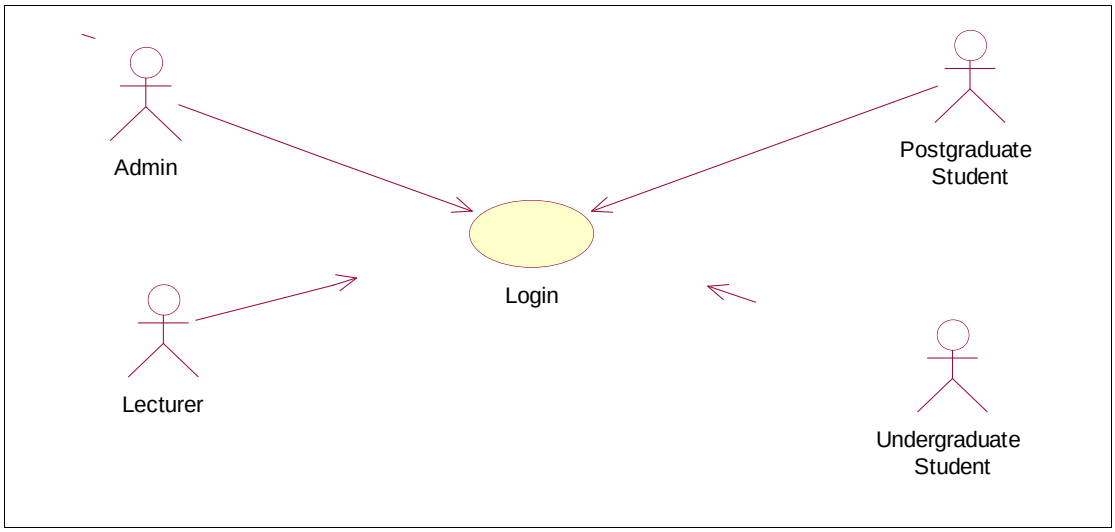


Figure 4.2 : Log in Use Case

Description

This use case is initiated by all users (Admin, lecturer, postgraduate student, undergraduate student). This use case would allow users with valid username/passwords to access the system.

Characteristic of Activation

Event driven (on Admin, lecturer, postgraduate student, undergraduate student's demand).

Pre-Condition (S)

User must have account in the system.

Description

a. Normal Flow [CSFS_01_01]:

1. This use case begins when user keys in valid username and password.

2. User press [Login] button.

3. System would check whether the username/password are valid ones.

4. If username/password is correct the system would proceed to the next interface. For invalid username/password [E-1].

b. Exception Flows.

E-1: Invalid Username/password [CSFS_01_02]:

1. System will display error message, if the username or password is incorrect

Post-Condition

User is logged into the system and ready to use it.

Rule (S)

Not Applicable.

Constraint (S)

Username/password must be alphanumeric data type.

4.3.2.2. Change Password [CSFS_02]

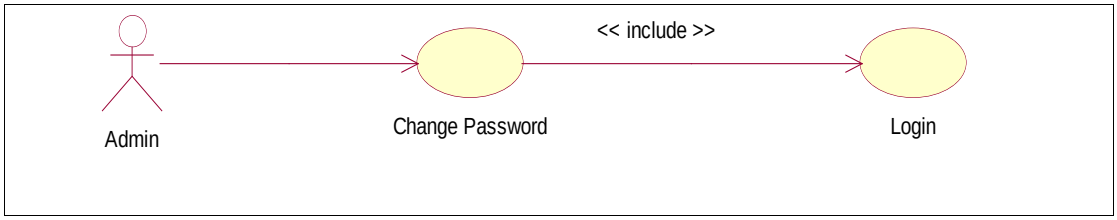


Figure 4.3 Change Password Use Case

Description

This use case is initiated by CSFS's administrator. It shows how the administrator can update and reset his/her account's password.

Characteristic of Activation

Event driven (on administrator's demand).

Pre-Condition (S)

Administrator has to be logged-in successfully in order to update his/her account's password.

Description

a. Normal Flow [CSFS_02_01]:

1. This use case begins when Administrator goes to the account's details page.

2. Administrator set new password in the new password field then press [Update] button.

Post-Condition

Administrator’s password should be updated successfully.

Rule (S)

Not Applicable.

Constraint (S)

Password must be alphanumeric data type.

4.3.2.3. Create Index [CSFS_03]

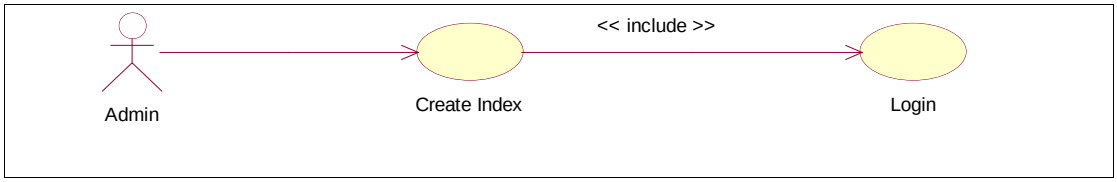


Figure 4.4 Create Index Use Case

Description

This use case is initiated by CSFS's administrator. This use case would allow the administrator to create new index.

Characteristic of Activation

Event driven (on administrator's demand).

Pre-Condition (S)

Administrator has to be logged-in successfully in order to create new index.

Description

a. Normal Flow [CSFS_03_01]:

1. This use case begins when Administrator goes to the Create index page.

2. The system will would display form of required index criteria.

3. Administrator key in query data and press [Create] button.

Post-Condition

Index must be created successfully.

Rule (S)

Not Applicable.

Constraint (S)

Not Applicable

4.3.2.4. Activate Index [CSFS_04]

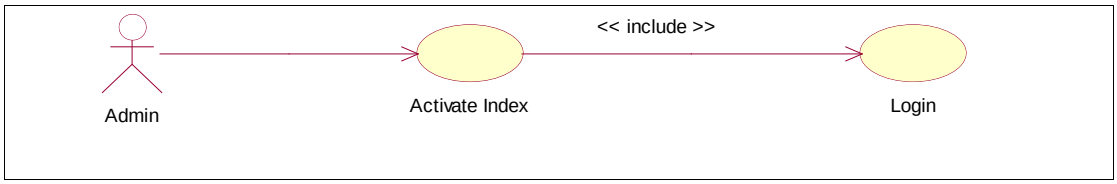


Figure 4.5 Active Index Use Case

Description

This use case is initiated by CSFS's administrator. This use case would allow the administrator to control the time of activating or deactivating specific indexes.

Characteristic of Activation

Event driven (on administrator's demand).

Pre-Condition (S)

Administrator has to be logged-in successfully in order to activate indexes.

Description

a. Normal Flow [CSFS_04_01]:

1. This use case begins when Administrator goes to the Activate index page.

2. The Administrator selects the index session from the combo box to activate the indexes for that session.

3. System would display information message that the indexes for selected session are activated.

4. Administrator can deactivate Indexes for specific sessions [A-1].

b. Extension Flows (Alternative):

A-1: Deactivate index [CSFS_04_02]:

The Administrator selects the index session from the combo box to deactivate the indexes for that session.

System would display information message that the indexes for selected session are deactivated.

Post-Condition

Index must be activated successfully.

Rule (S)

Not Applicable.

Constraint (S)

Not Applicable.

4.3.2.5. Delete Index [CSFS_05]

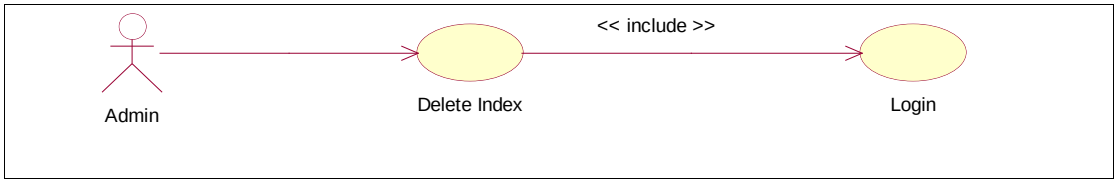


Figure 4.6 Delete Index Use Case

Description

This use case is initiated by CSFS's administrator. This use case would allow the administrator to delete the whole indexes' content.

Characteristic of Activation

Event driven (on administrator's demand).

Pre-Condition (S)

Administrator has to be logged-in successfully in order to delete indexes.

Description

a. Normal Flow [CSFS_05_01]:

1. This use case begins when administrator goes to the Delete index page.

2. The administrator selects the index session from the combo box to delete the indexes for that session.

3. System would display information message that the indexes for selected session have been deleted.

Post-Condition

Index must be deleted successfully.

Rule (S)

Not Applicable.

Constraint (S)

Not Applicable.

4.3.2.6. Add Index Questions [CSFS_06]

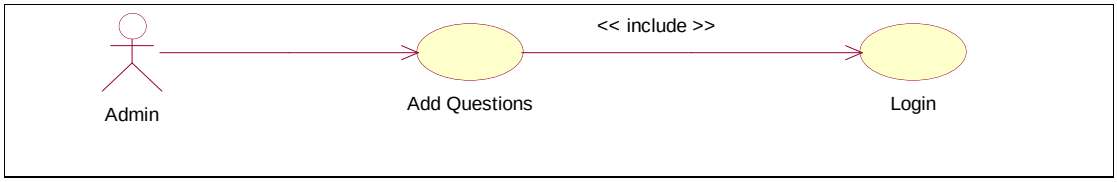


Figure 4.7 Add Index Use Case

Description

This use case is initiated by CSFS's administrator. This use case would allow administrator to add questions to specific index and at the same time to question's library.

Characteristic of Activation

Event driven (on administrator's demand).

Pre-Condition (S)

Administrator has to be logged-in successfully in order to add questions to specific index and library.

Description

a. Normal Flow [CSFS_06_01]:

1. This use case begins when administrator goes to the add question page.

2. The system will would display form of required criteria for adding questions.

3. Administrator key in query data and press [Add questions] button.

Post-Condition

Questions must be added successfully.

Rule (S)

Not Applicable.

Constraint (S)

Not Applicable.

4.3.2.7. Add Index Questions From Index Library [CSFS_07]

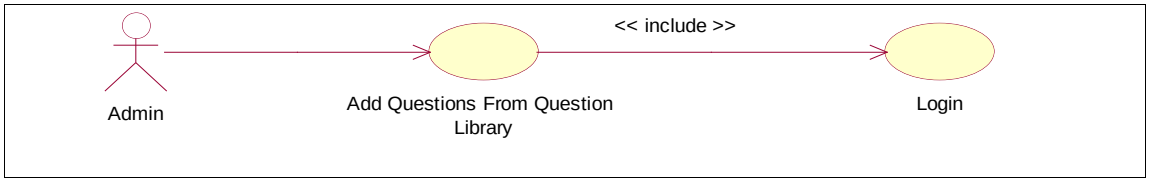


Figure 4. 8 Index Question Use Case

Description

This use case is initiated by CSFS's administrator. This use case would allow administrator to add questions from questions library to specific index.

Characteristic of Activation

Event driven (on administrator's demand).

Pre-Condition (S)

Administrator has to be logged-in successfully in order to add questions to specific index.

Description

a. Normal Flow [CSFS_07_01]::

1. This use case begins when Admin goes to Add Question From Library page.

2. The administrator selects the index library from the combo box.

3. System would display information message if there are no questions stored in that library [E-1].

4. System would display a list of questions' library.

5. The administrator selects the questions s/he wants them to be added.

6. The admin selects the index type and session from combo boxes that s/he wants the selected questions to be added into.

7. Admin press [Add questions] button.

b. Exception Flows.

E-1: No Questions stored [CSFS_07_02]: :

1. System would display information message if there are no questions stored in that library.

Post-Condition

Questions must be added successfully.

Rule (S)

Not Applicable.

Constraint (S)

Not Applicable.

4.3.2.8. Update Index Questions [CSFS_08]

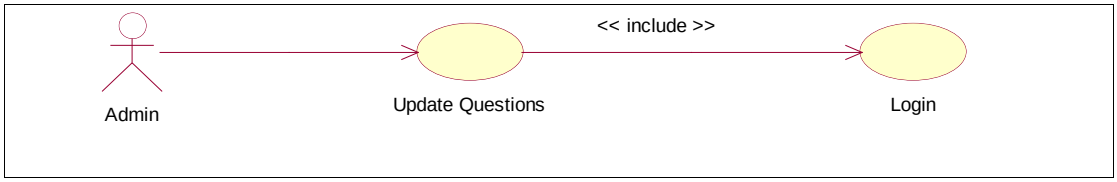


Figure 4.9 Update Index Question Use Case

Description

This use case is initiated by CSFS's administrator. This use case would allow administrator to update questions of specific index.

Characteristic of Activation

Event driven (on administrator's demand).

Pre-Condition (S)

Admin has to be logged-in successfully in order to update questions of specific index.

Description

a. Normal Flow [CSFS_08_01]::

1. This use case begins when Admin goes to the Update Questions page.

2. The Admin selects the index from the combo box.

3. System would display information message if there are no questions stored in that index [E-1].

4. System would display a list of questions'.

5. The Admin selects and update the questions he wants them to be updated.

6. Admin press [Update questions] button.

b. Exception Flows.

E-1: No Questions stored [CSFS_08_02]:

1. System would display information message if there are no questions stored in that index.

Post-Condition

Questions must be updated successfully.

Rule (S)

Not Applicable.

Constraint (S)

Not Applicable.

4.3.2.9. Delete Index Questions [CSFS_09]

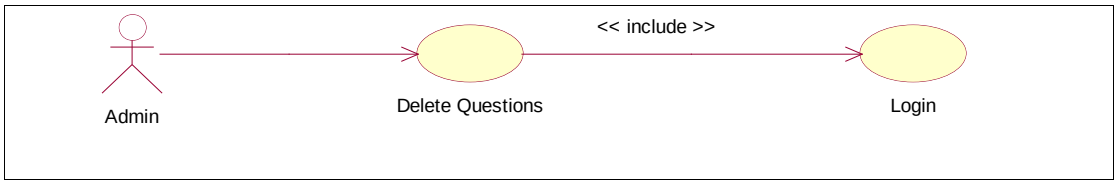


Figure4. 10 delete index question use case

Description

This use case is initiated by CSFS's administrator. This use case would allow administrator to delete questions from specific index.

Characteristic of Activation

Event driven (on administrator's demand).

Pre-Condition (S)

Admin has to be logged-in successfully in order to delete questions from specific index.

Description

a. Normal Flow [CSFS_09_01]:

1. This use case begins when Admin goes to the Delete Questions page.

2. The Admin selects the index from the combo box.

3. System would display information message if there are no questions stored in that index [E-1].

4. System would display a list of questions'.

5. The Admin selects questions he wants them to be deleted.

6. Admin press [Delete questions] button.

b. Exception Flows.

E-1: No Questions stored [CSFS_09_02]

1. System would display information message if there are no questions stored in that index.

Post-Condition

Questions must be deleted successfully.

Rule (S)

Not Applicable.

Constraint (S)

Not Applicable.

4.3.2.10. **Take Survey**[CSFS_10]

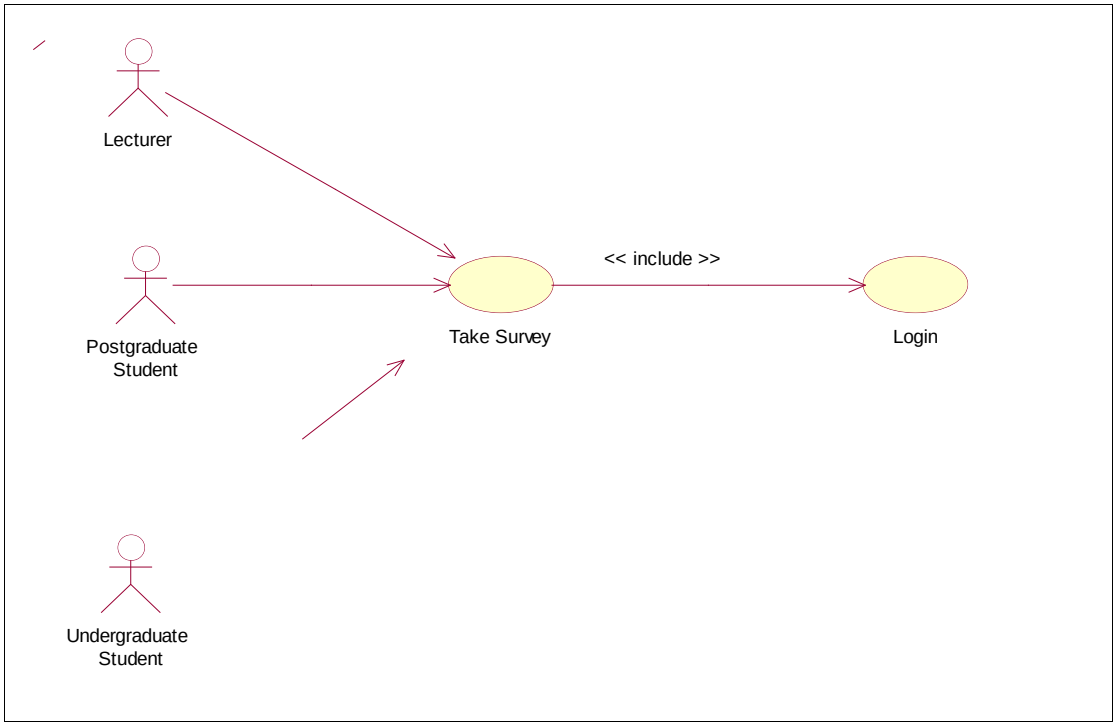


Figure4. 11 Take Survey Use Case

Description

This use case is initiated by CSFS's participants (lecturers, undergraduate student, and postgraduate student). This use case would allow participants to answer and submit survey.

Characteristic of Activation

Event driven (on lecturer, postgraduate student, undergraduate student's demand).

Pre-Condition (S)

Participant has to be logged-in successfully in order to answer and submit the survey.

Description

a. Normal Flow [CSFS_10_01]:

1. This use case begins when participant logs into his account.

2. System will display a list of survey questions.

3. System will display information message and logout the participant automatically if there is no an active survey [E-1].

4. System will display information message and logout the participant automatically if s/he already taken the survey [E-2].

5. Participant answers the survey.

4. Participant press [submit] button.

6. Participant can cancel the process of submitting the survey [A-1].

b. Extension Flows (Alternative):

A-1: Terminate submitting [CSFS_10_02]:

1. Participant can cancel the process of submitting the survey by pressing [Cancel] button.

c. Exception Flows.

E-1: No Active Survey [CSFS_10_03]:

System will display information message and logout the participant automatically if there is no an active survey.

E-2: Survey Taken [CSFS_10_04]:

System will display information message and logout the participant automatically if s/he already taken the survey.

Post-Condition

Survey must be answered and submitted successfully.

Rule (S)

Not Applicable.

Constraint (S)

Not Applicable.

4.3.2.11. Show Satisfaction Level [CSFS_11]

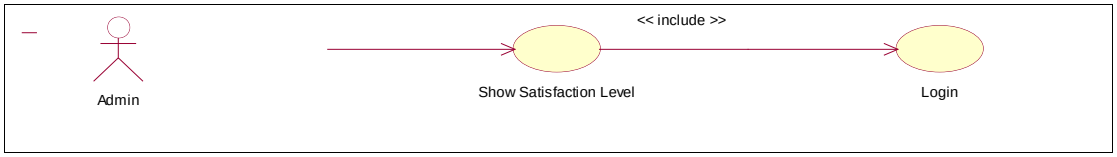


Figure 4. 12 Show Satisfaction Use Case

Description

This use case is initiated by CSFS's administrator. This use case would allow administrator to see Satisfaction Level for specific session.

Characteristic of Activation

Event driven (on administrator's demand).

Pre-Condition (S)

Admin has to be logged-in successfully in order to see Satisfaction Level for specific session.

Description

a. Normal Flow [CSFS_11_01]:

1. This use case begins when Admin goes to the Satisfaction Index Level page for specific session.

2. System will display Satisfaction Index Level for that session.

3. System will display information message and forwards the admin to administrator‘s homepage automatically if there is no result for selected session [E-1].

b. Exception Flows.

E-1: No result [CSFS_11_02]::

1. System will display information message and forwards the admin to admin’s homepage automatically if there is no result for selected session

Post-Condition

Administrator must be able to see the level of satisfaction index for selected session successfully.

Rule (S)

Not Applicable.

Constraint (S)

Not Applicable

4.3.2.12. Show Index Statistics [CSFS_12]

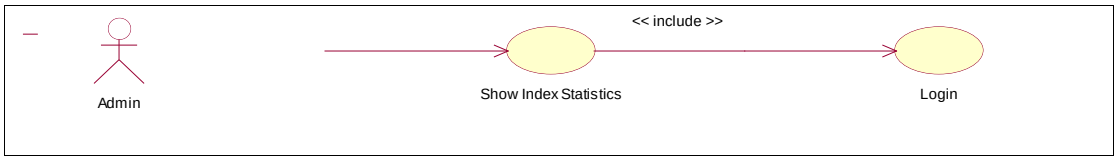


Figure4.13 Show Index Statistics Use Case

Description

This use case is initiated by CSFS's administrator. This use case would allow administrator to see Index Statistics for specific index.

Characteristic of Activation

Event driven (on administrator's demand).

Pre-Condition (S)

Admin has to be logged-in successfully in order to see Index Statistics for specific index.

Description

a. Normal Flow [CSFS_12_01]:

1. This use case begins when Admin goes to the Index Statistics for specific index page for specific index.

2. System will display Index Statistics for specific index.

3. System will display information message and forwards the admin to administrator's homepage automatically if there is no result for selected session [E-1].

b. Exception Flows.

E-1: No result [CSFS_12_02]:

1. System will display information message and forwards the admin to admin's homepage automatically if there is no result for selected session

Post-Condition

Administrator must be able to see the Index Statistics for specific index successfully.

Rule (S)

Not Applicable.

Constraint (S)

Not Applicable

4.3.3. SEQUENCE DIAGRAMS

Please, refer to Appendix A

4.3.4. Class DIAGRAMS

Please, refer to Appendix B

4.3.5. SNAPSHOTS

Please, refer to Appendix C

4.4 PROTOTYPE

4.4.1 Login

This function is initiated by all users (Admin, lecturer, postgraduate student, undergraduate student). This function would allow users with valid username/passwords to access the system as shown in Figure 4.14.

Figure 4.1 Login Interface

4.4.2 Change Password

This function is initiated by CSFS's administrator. It shows how the administrator can update and reset his/her account's password as shown in Figure 4.15.

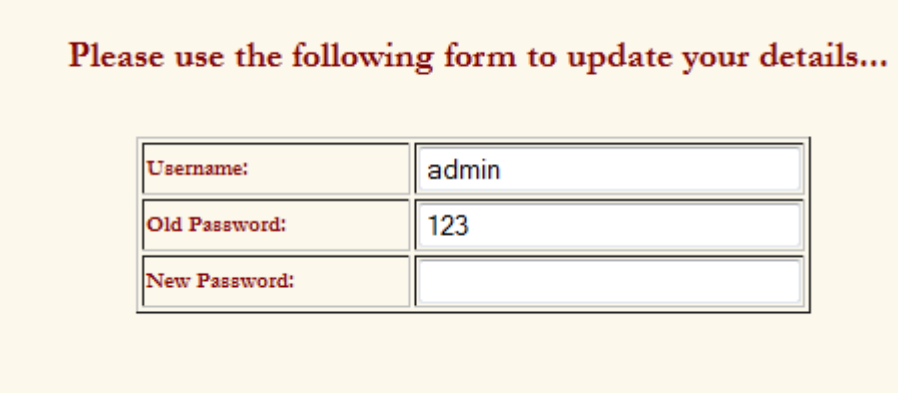


Figure 4.2Change Password Interface

4.4.3 Create Index

This function is initiated by CSFS's administrator .This function would allow the administrator to create new index as shown in Figure 4.16.

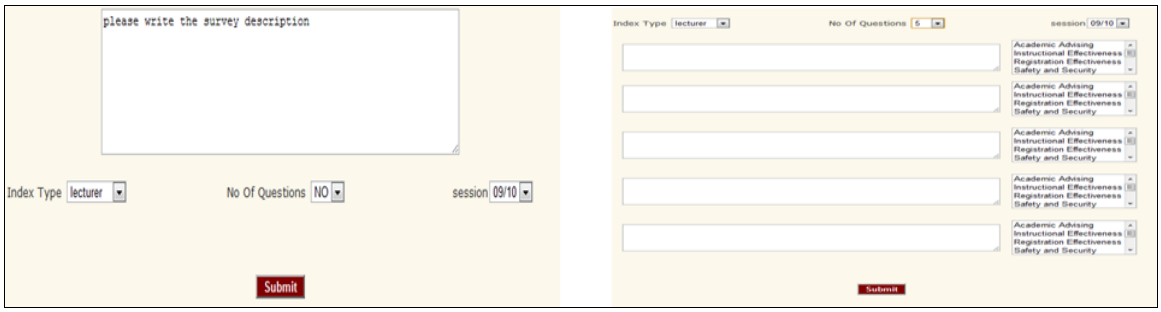


Figure 4. 3 Create Index Interface

4.4.4 Activate Index

This function is initiated by CSFS's administrator. This function would allow the administrator to control the time of activating or deactivating specific indexes as shown in Figure 4.17.

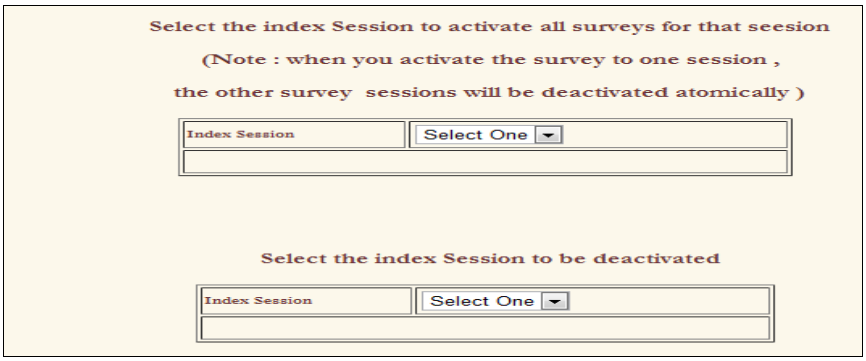


Figure 4.4Activate/deactivate Index Interface

4.4.5 Delete Index

This function is initiated by CSFS's administrator. This function would allow the administrator to delete the whole indexes' content as shown in Figure 4.18.

Figure 4.5Activate/deactivate Index Interface

4.4.6 Add Index Questions

This function is initiated by CSFS's administrator. This function would allow administrator to add questions to specific index and at the same time to question's library as shown in Figure 4.19.

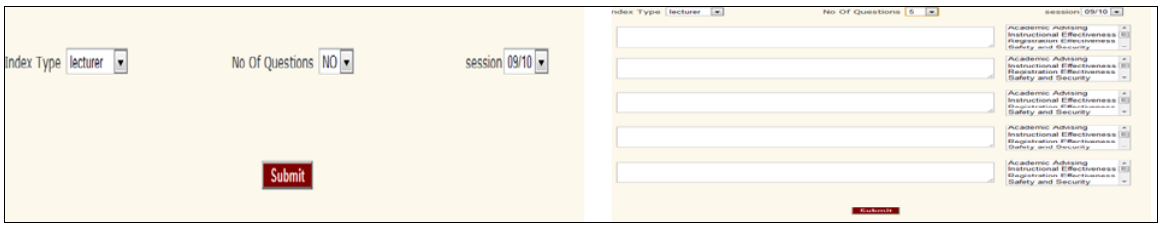


Figure 4. 6Add Index Questions Interface

4.4.7 Add Index Questions From Index Library

This function is initiated by CSFS's administrator. This function would allow administrator to add questions from questions library to specific index as shown in Figure 4.20.

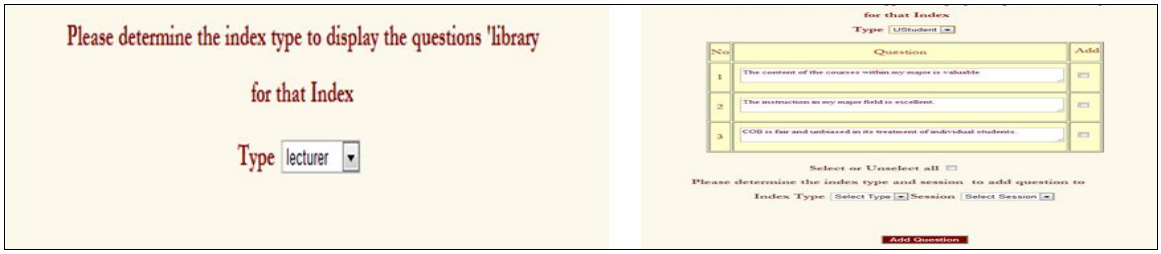


Figure 4. 7Add Index Questions From Index Library s Index Interface

4.4.8 Update Index Questions

This function is initiated by CSFS's administrator. This function would allow administrator to update questions of specific index as shown in Figure 4.21.

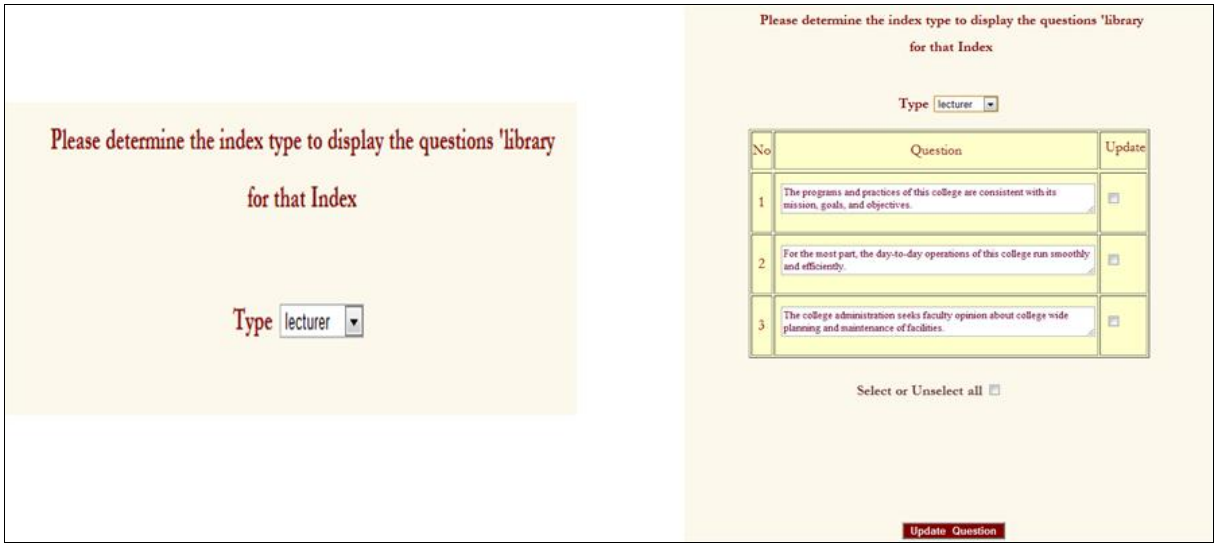


Figure 4. 8Update Index Questions Interface

This function is initiated by CSFS's administrator. This function would allow administrator to delete questions from specific index as shown in Figure 4.22.

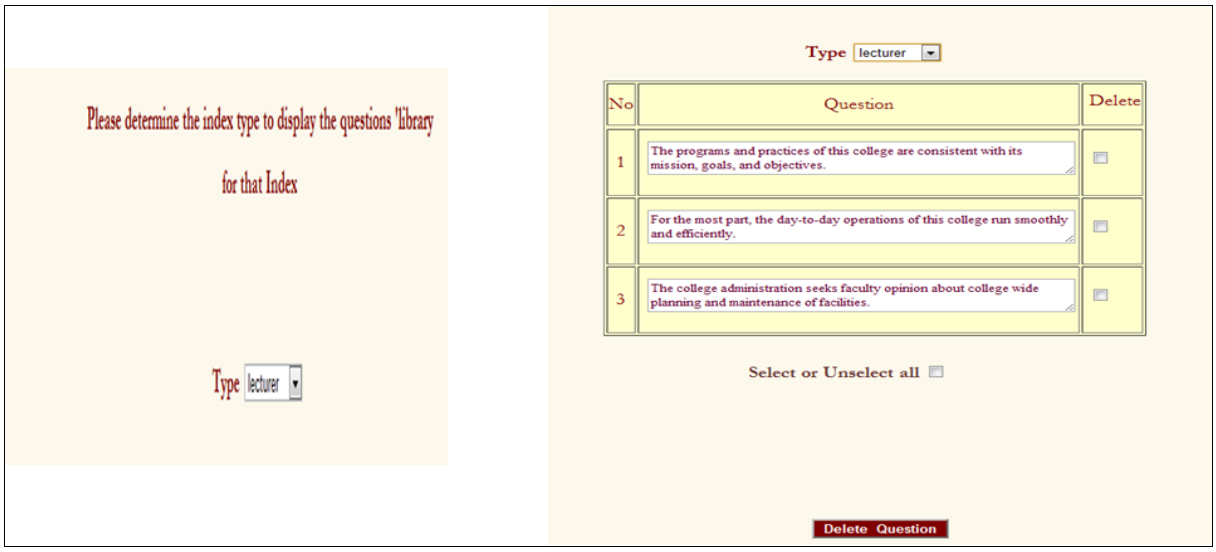


Figure 4. 9 Delete Index Questions Interface

4.4.9 Take Survey

This function is initiated by CSFS's participants (lecturers, undergraduate student, and postgraduate student). This function would allow participants to answer and submit survey as shown in Figure 4.23.

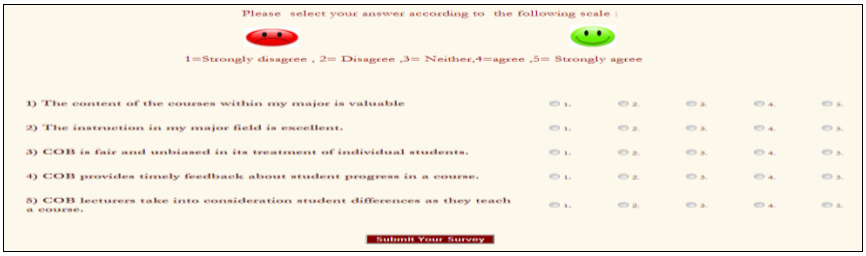
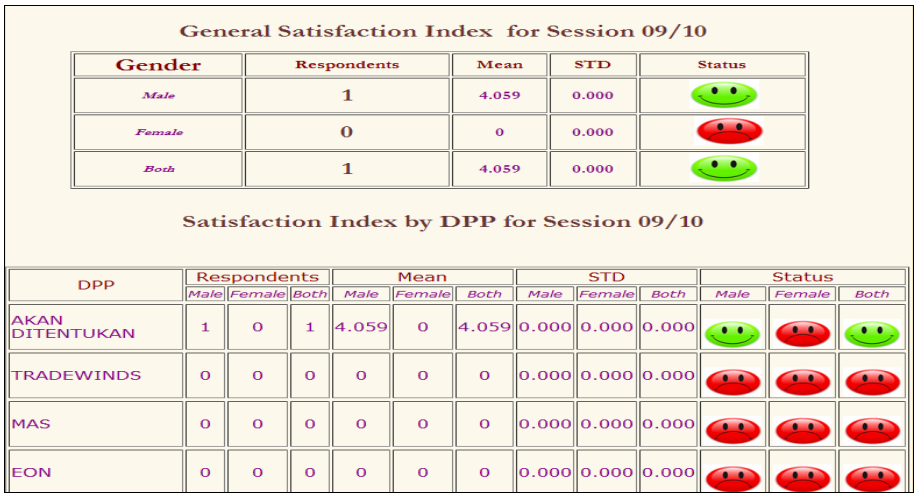


Figure 4. 10Survey Interface

4.4.10 Show Satisfaction Level

This function is initiated by CSFS's administrator. This function would allow administrator to see Satisfaction Level for specific session as shown in Figure 4.24



General Satisfaction Index for Session 09/10

Gender	Respondents	Mean	STD	Status
Male	1	4.059	0.000	
Female	0	0	0.000	
Both	1	4.059	0.000	

Satisfaction Index by DPP for Session 09/10

DPP	Respondents			Mean			STD			Status		
	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both
AKAN DITENTUKAN	1	0	1	4.059	0	4.059	0.000	0.000	0.000			
TRADEWINDS	0	0	0	0	0	0	0.000	0.000	0.000			
MAS	0	0	0	0	0	0	0.000	0.000	0.000			
EON	0	0	0	0	0	0	0.000	0.000	0.000			

Figure 4. 11: Satisfaction Level Interface

4.4.11 Show Index Statistics

This function is initiated by CSFS's administrator. This function would allow administrator to see Index Statistics for specific index as shown in Figure 4.25.

Figure 4. 12Index Statistics Interface

4.5 SUMMARY

This chapter summarizes the analysis and design steps taken in order to come out with the required model.

CHAPTER FIVE

VERIFICATION AND VALIDATION

5.1 INTRODUCTION

This chapter discusses the verification and validation of the produced model through prototype which has been produced by the researcher at the end of the project. The chapter would highlight the verification and validation techniques which the researcher has chosen in order to evaluate the outcomes of the project.

5.2 VERIFICATION AND VALIDATION TECHNIQUES

As a matter of fact there are varieties of testing and evaluation techniques which could be implemented in order to guarantee that the requirement has been met. However, due to the limited time frame for this project the researcher has decided to conduct acceptance testing.

5.3 VALIDATION TESTING

Validation testing is also called acceptance Testing is a functional testing of the scenario given by the client to the developers during the implementation phase. This type of testing is carried out in order to check the functionality of the model whether it could do the functions which it has been developed for. Another reason to conduct functional testing is to verify what the user could do with the system and what could not be done. It also checks the validity of each feature whether it is working in a proper way or not.

The advantage of this type of software testing is the possibility of conducting it during the development phase of the system as well.

Functional testing of the system was conducted two times as shown in Table 5.1 in which the first testing was during the development phase of the system prototype while the second was after completing the system prototype.

The developed model has three types of users; Admin, students, and lecturers. Therefore each test is divided into three parts according to the user type.

Test 1 was conducted during the development and was tested by 1 tester for admin, 2 testers for students and lecturer .it was conducted once each type of user model was completed. Test 2 was conducted once the system was completed and similarly to Test 1, each user has been tested.

The following abbreviations are used and the numbers indicates the number of testers in each test:

- A – Indicates Admin user type.
- B – Indicates student user type.
- C – Indicates lecturer user type.
- P – Indicates Pass result.
- F – Indicates Fail result.
- NA– Not Applicable.

Table 5. 1 Functional testing

Event	**Function**	**1st Test**			**2nd Test**			**Remarks**	
		A 1	**B 2**	**C 2**	**A 1**	**B 2**	**C 2**	**1st Test**	**2nd Test**
Insert	Create new index take and submit Survey, add new question	NA	P	F	P	P	P	Duplicate entry	Fixed
Select	Login, View Satisfaction level, View index statistics.	F	F	P	P	P	F	incorrect results	Fixed
Update	Activate/Deactivate index, update questions &Change Password.	F	P	F	P	F	NA	Unupdated passwords	Fixed
Delete	Delete index & Delete questions.	P	P	NA	P	NA	P		Pass
Buttons	Submit, Back, Add, update, delete, select buttons.	P	P	F	P	P	P	nonfunctional back	Fixed

								button	

The following table summarizes the results of the requirement validation test:

Table 5.2 Validation test Summary

No.	Requirement ID	Requirement description	Success
1.	CSFS_01	Login	√
2.	CSFS_02	Create new index	√
3.	CSFS_03	Change Administrator's Password	√
4.	CSFS_04	Create New Index	√
5.	CSFS_05	Activate Index	√
6.	CSFS_06	Delete Index	√
7.	CSFS_07	Add New Questions	√
8.	CSFS_08	Add Questions from library	√
9.	CSFS_09	Update Index Questions	√
10.	CSFS_10	Delete Index Questions	√
11.	CSFS_11	Take Survey	√
12.	CSFS_12	Show Satisfaction Level	√
13.	CSFS_13	Show Index Statistics	√

5.4 SUMMARY

This chapter highlighted the verification and validation technique which has been implemented in order to evaluate the produced model. Acceptance test was technique chosen by the researcher in order to validate the requirement of the system referring to the requirements and the scenarios given by the client.

There were two main testing in which the first testing was done in few separated session. The second test was performed once the system prototyped was completed. As it has been summarized in Table 5.1 there were few bugs detected in the first test and were fixed. While conducting the second testing which was for the entire model there were few errors and were fixed.

CHAPTER SIX

CONCLUSION

6.1 INTRODUCTION

This chapter provides brief summary of the project. It explains the way this project has been conducted as well as the limitations and constraints encountered the research while working on this project as well as some recommendations which the research would like to address for future work in this area

6.2 CONCLUSION OF THE STUDY

Requirement model is used to model out the user's requirement .CIAC services requirement model is a requirements gathered and developed from the Centre of International Affairs &Cooperation (CIAC) in the University Utara Malaysia in order to gain more in-depth understanding of students their needs and desires regarding the services provided to all UUM's international students and lecturers. This requirement model can be easily referred by other system developers or designers to come out with a real full functional system. A prototype has been built in order to validate the requirement model.

6.3 LIMITATIONS AND CONSTRAINTS

As commonly known, there is no perfect study therefore it was obvious that there would be some difficulties and problem. Some of the problems raised during conducting this project could be summarized into the following:

6.3.1 Time Factor

The research and the development as well as the verification and validation were all done by the researcher in a period of three months which was a tough job to be complete in the way it is supposed to be.

6.3.2 Researchers Response

The expectations of the client were very high and may vary which caused the researcher face a real challenge in order to find solutions which would fulfill the requirements.

6.4 FUTURE WORK

This project was done in a very limited time so that it couldn't be good enough and that's noticed through the basic functionality of the produced model whereby it could be better than that through adding many advance functions such as supporting more than one question type and producing more accurate and advanced reports as well as fulfilling the standard non functional requirement.

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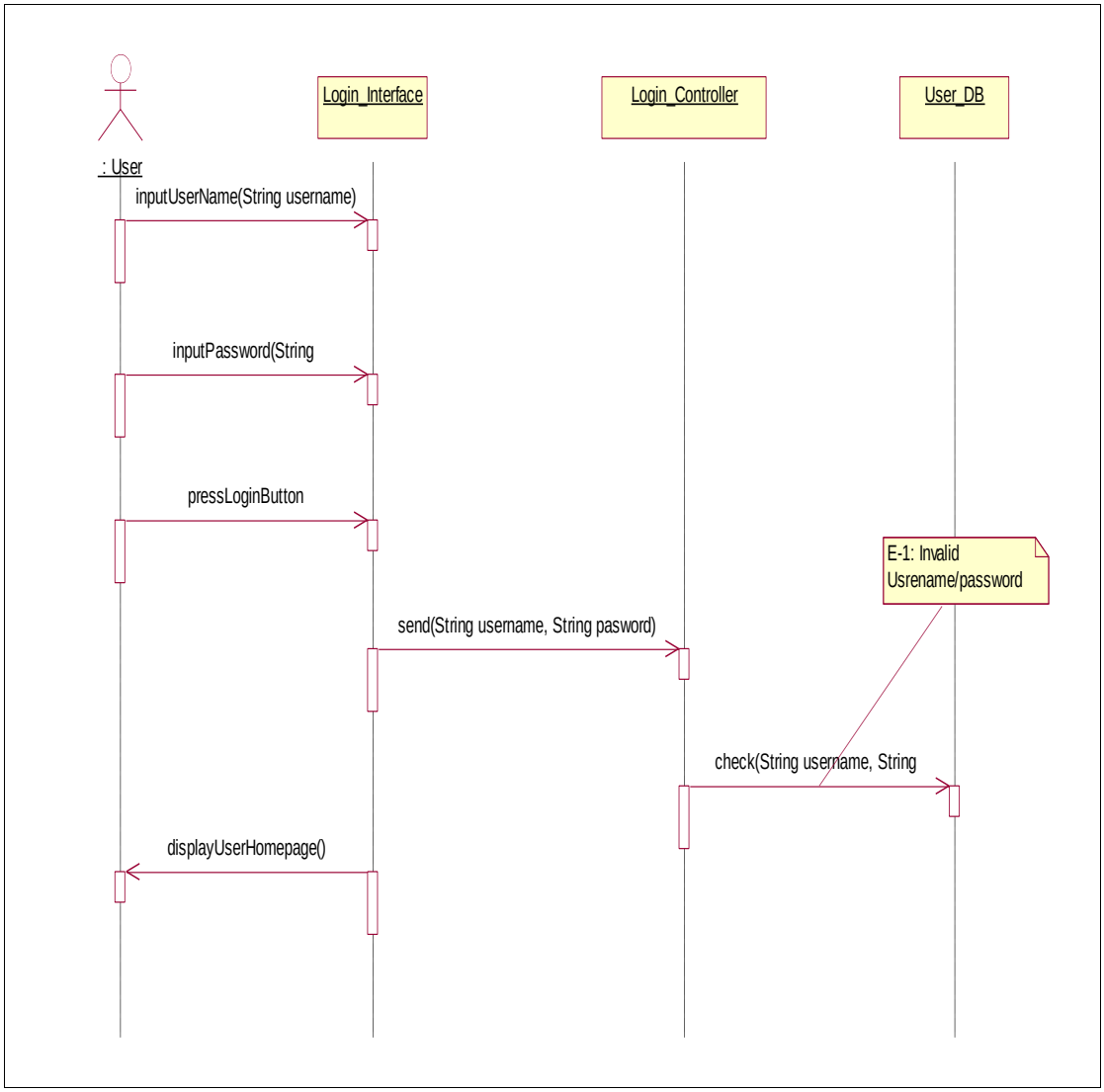
APPENDIX A

Sequence diagrams

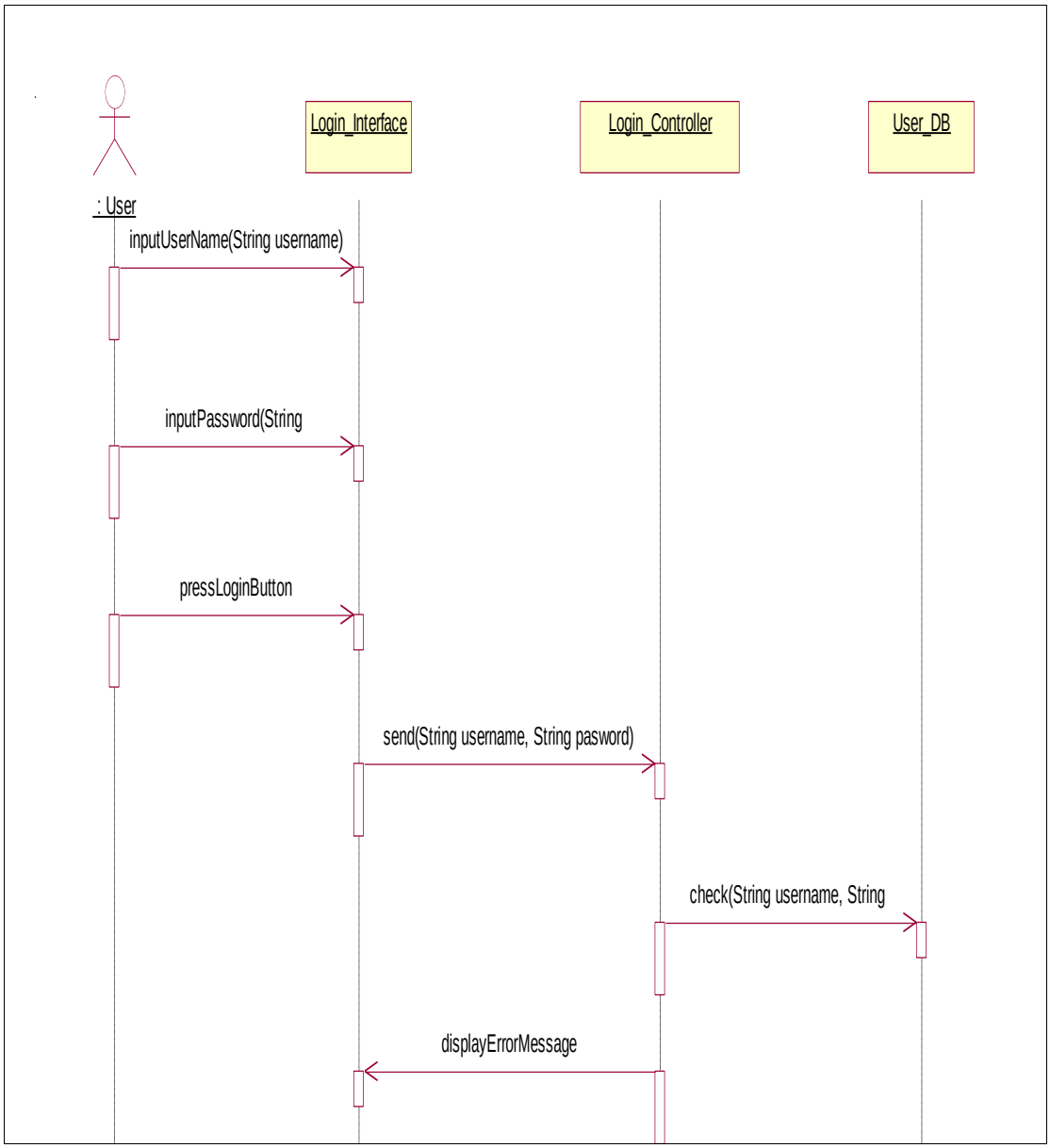
Sequence DIAGRAM

Use Case: Login [CSFS_01]

Normal Flow [CSFS_01_01]

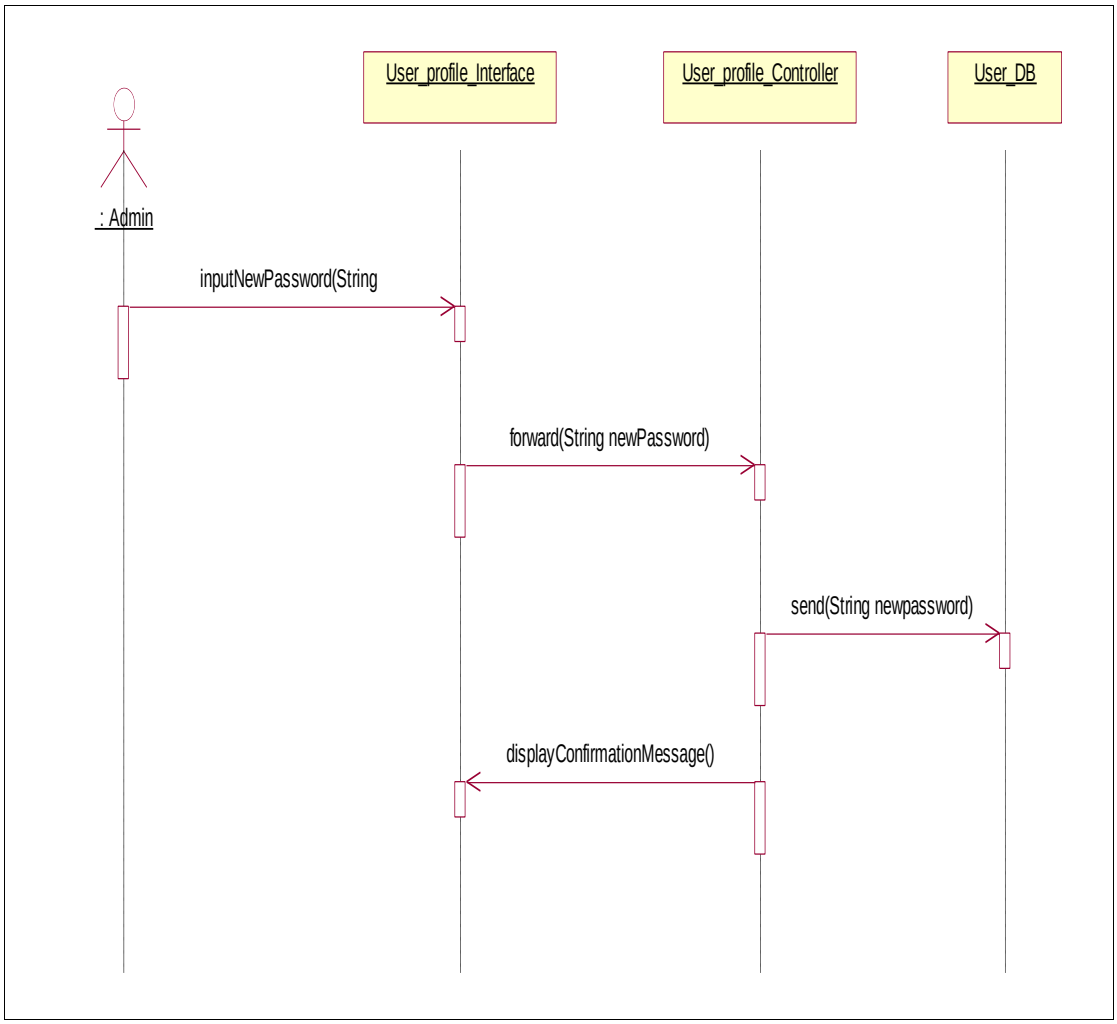


E-1: Invalid Username/password [CSFS_01_02]:



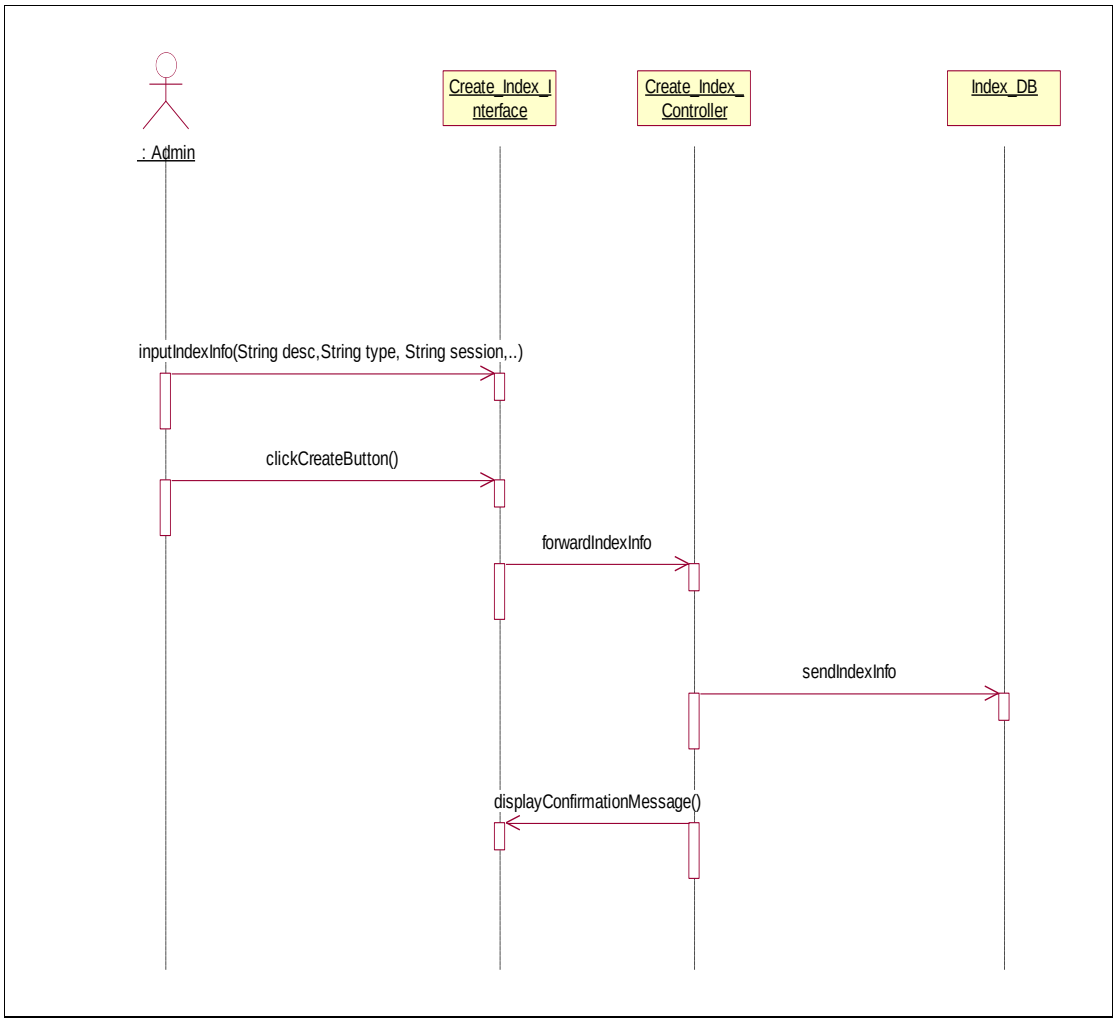
Use Case: Change Password [CSFS_02]

Normal Flow [CSFS_02_01]



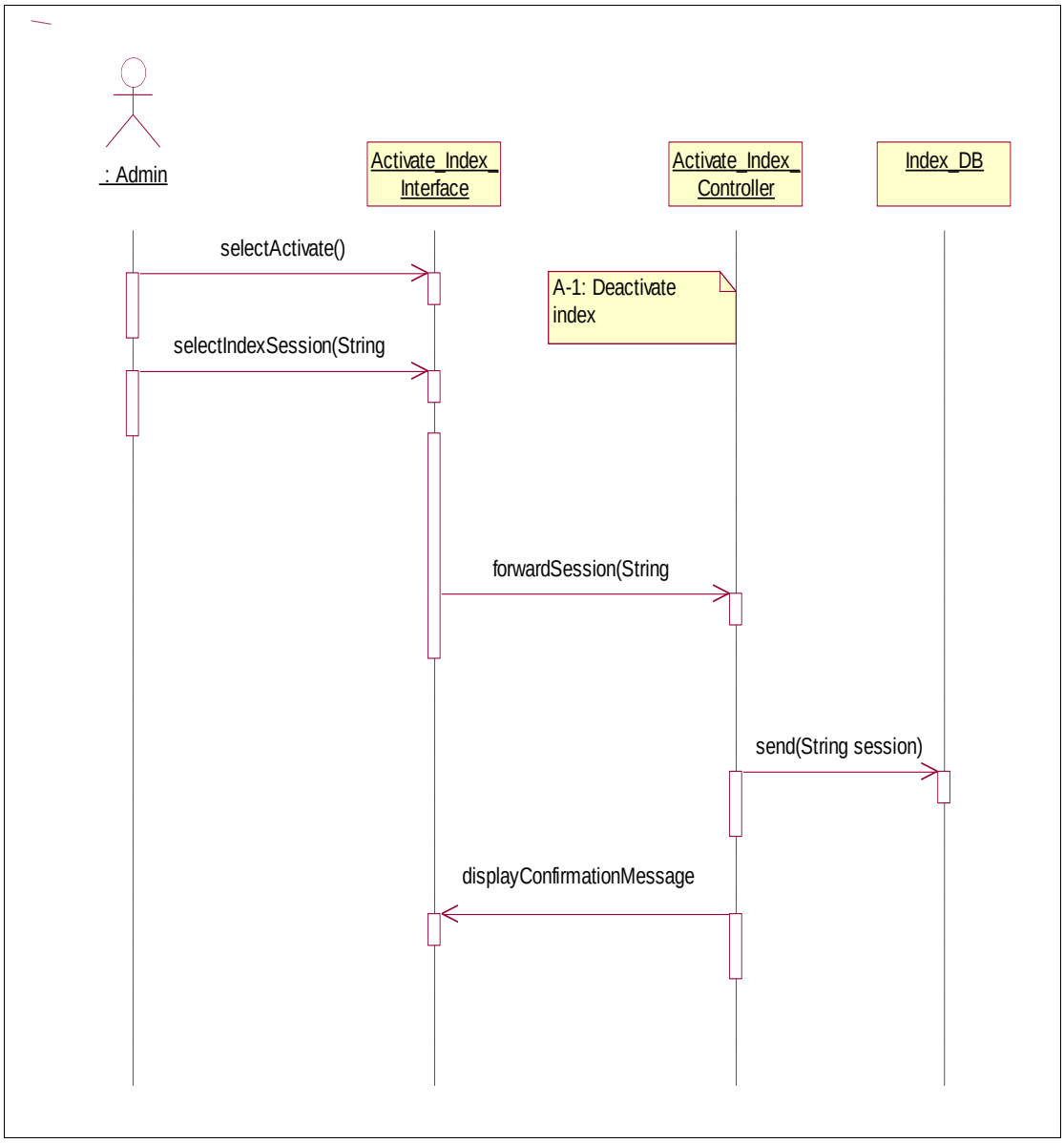
Use Case: Create Index [CSFS_03]

Normal Flow [CSFS_03_01]

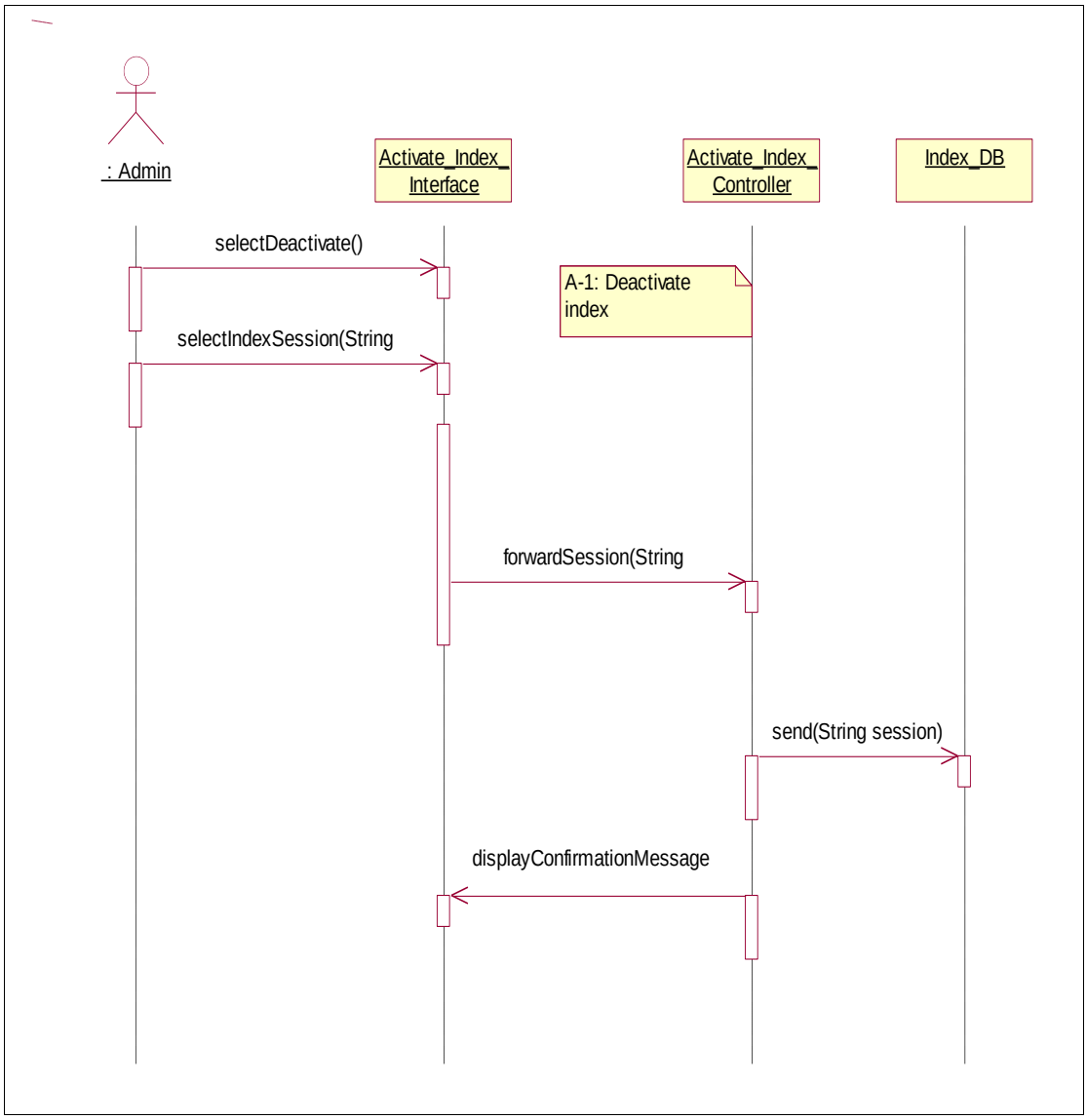


Use Case: Activate Index [CSFS_04]

Normal Flow [CSFS_04_01]

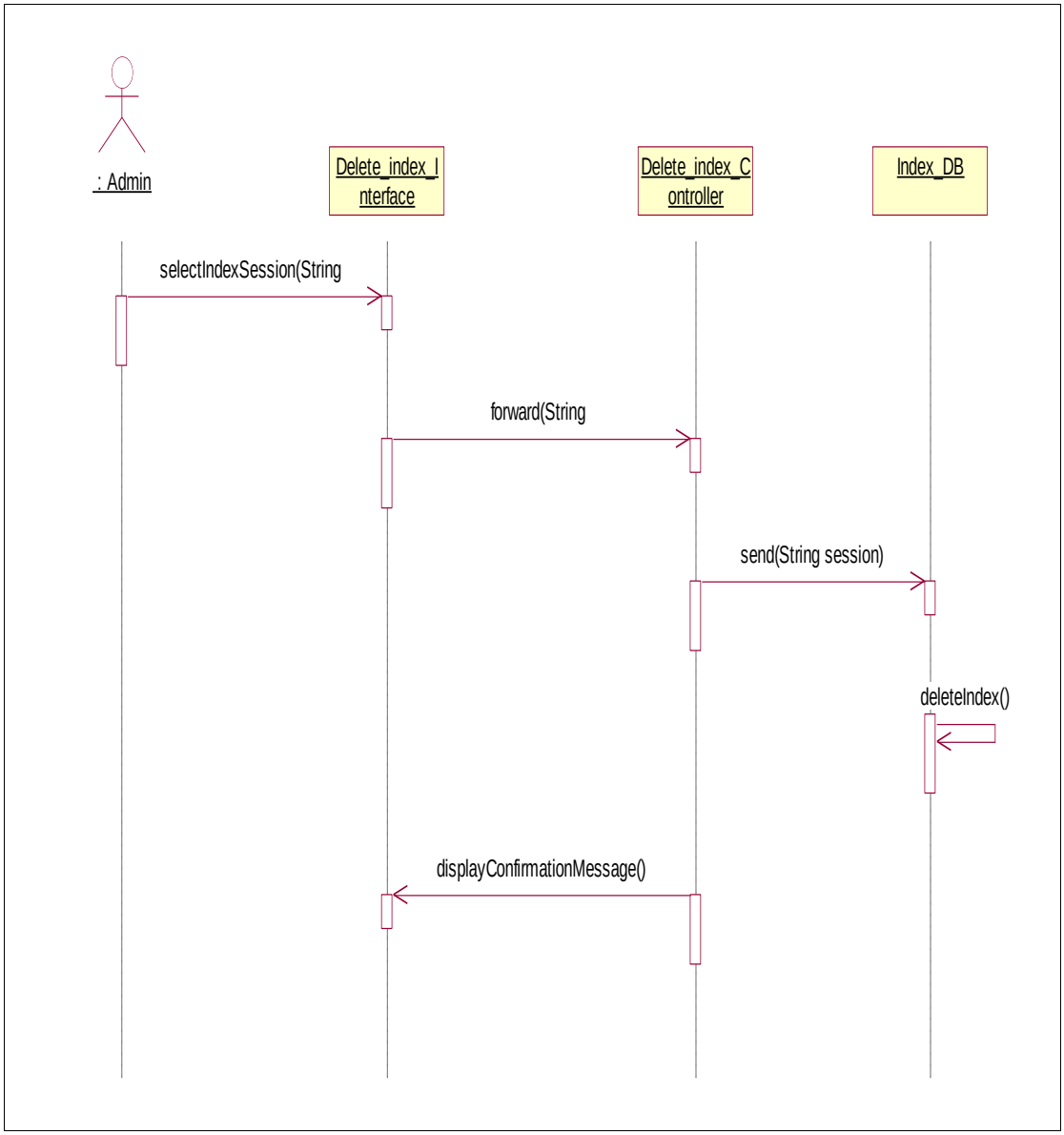


A-1: Deactivate index [CSFS_04_02]



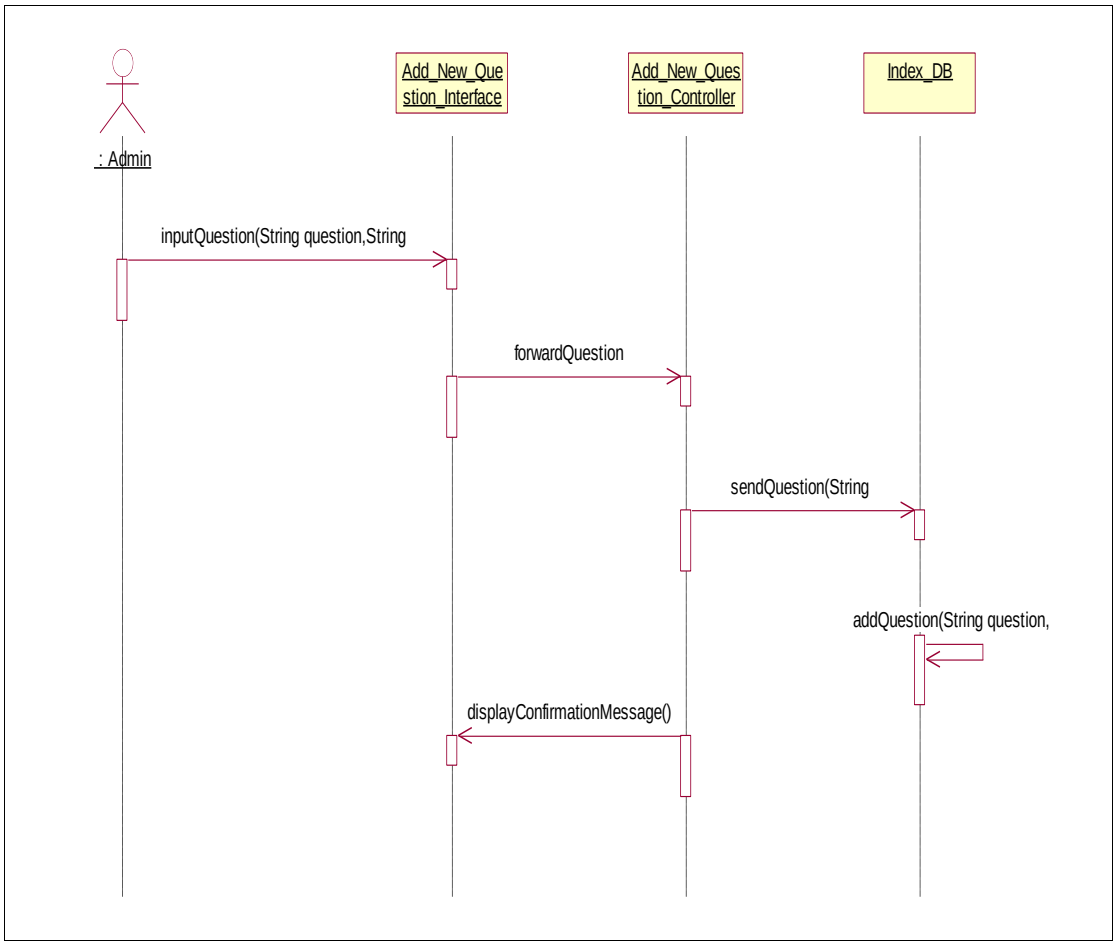
Use Case: Delete Index [CSFS_05]

Normal Flow [CSFS_05_01]



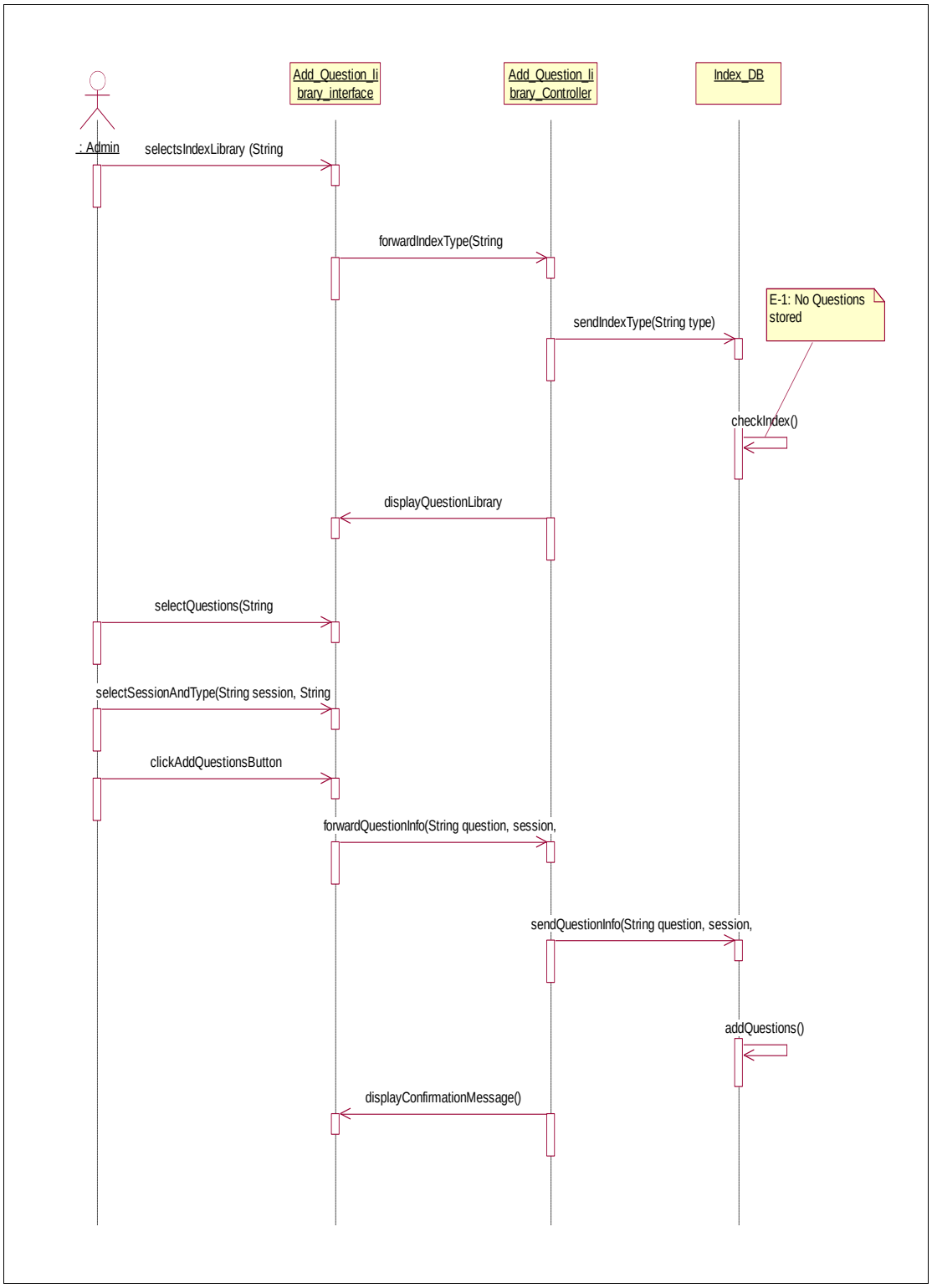
Use Case: Add Index Questions [CSFS_06]

Normal Flow [CSFS_06_01]

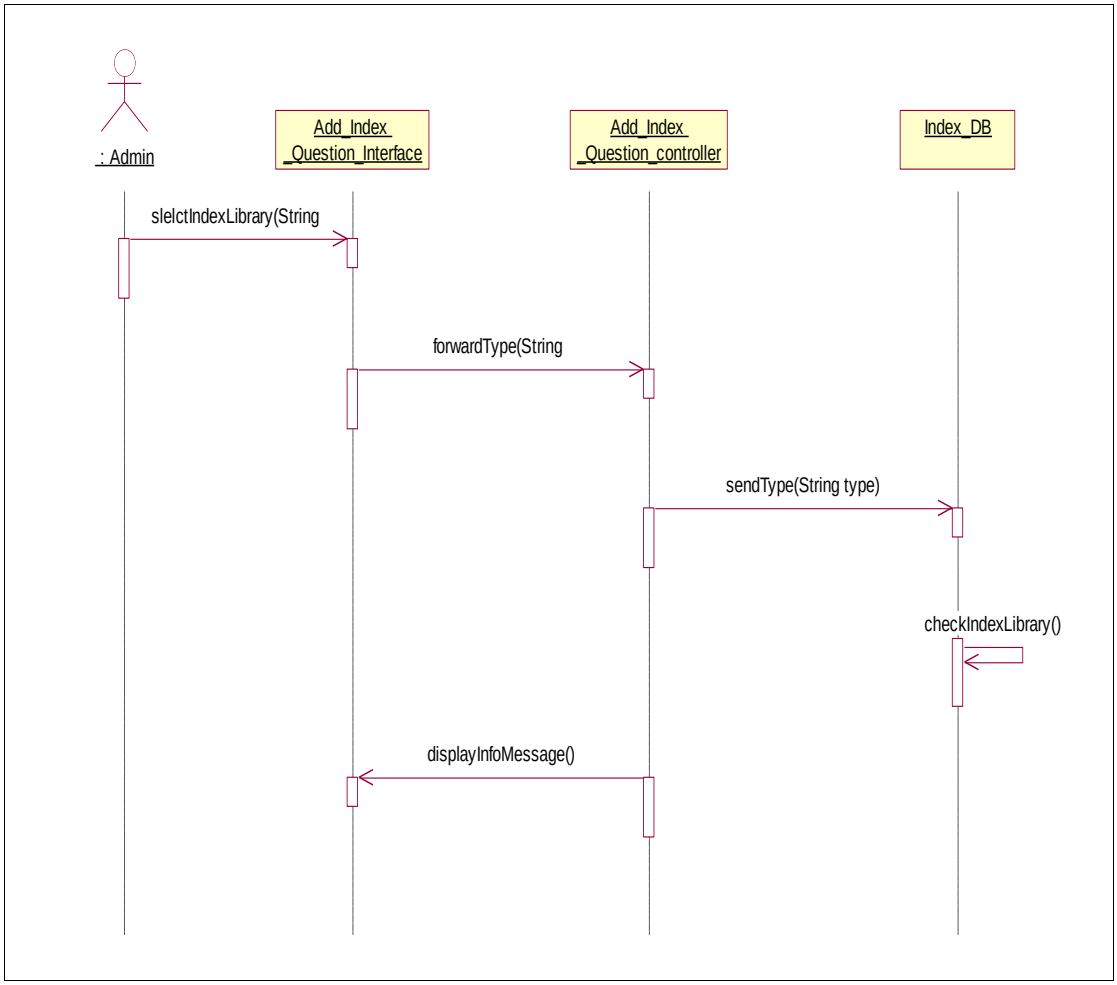


Use Case: Add Index Questions From Library [CSFS_07]

Normal Flow [CSFS_07_01]

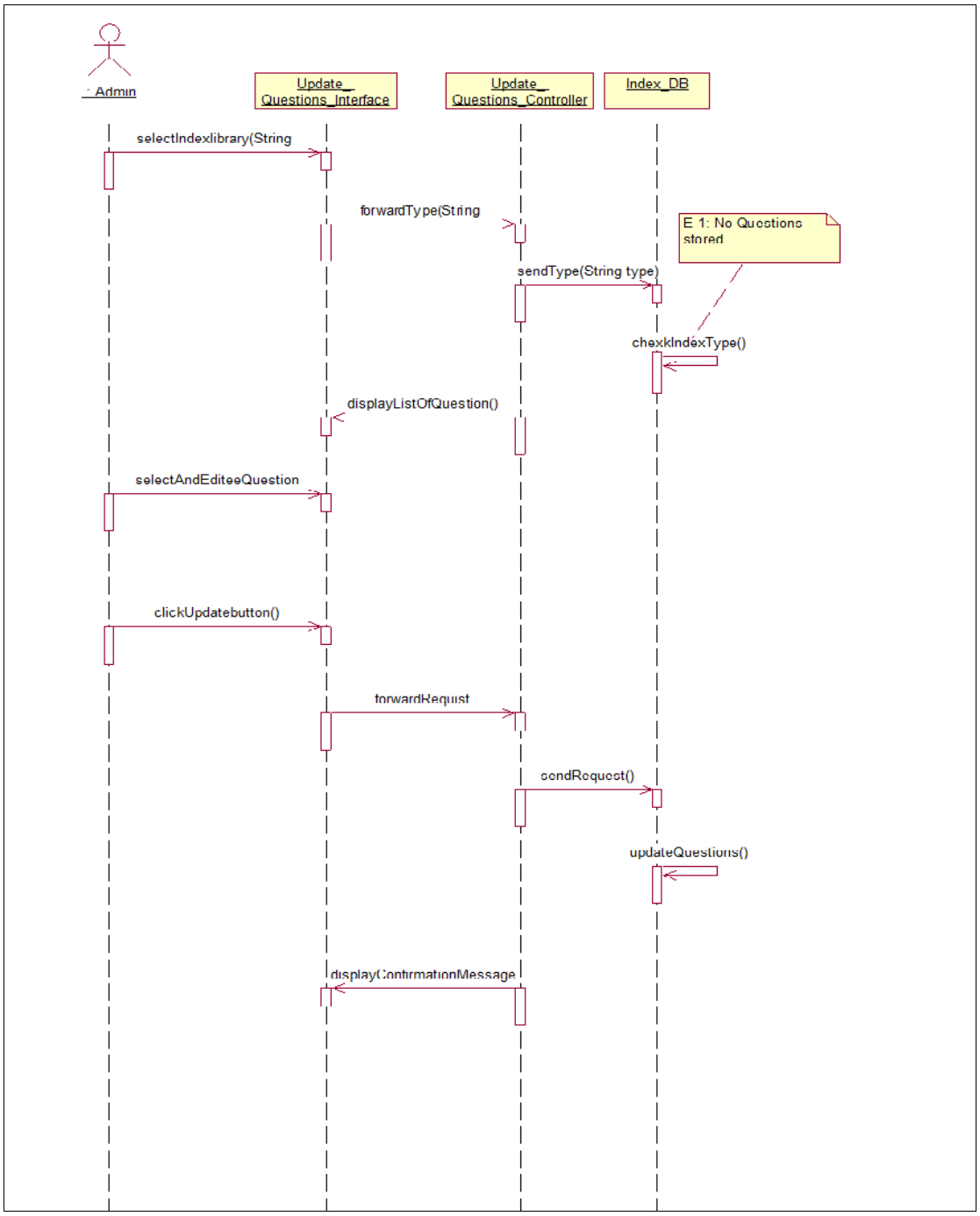


E-1: No Questions stored[CSFS_07_02]

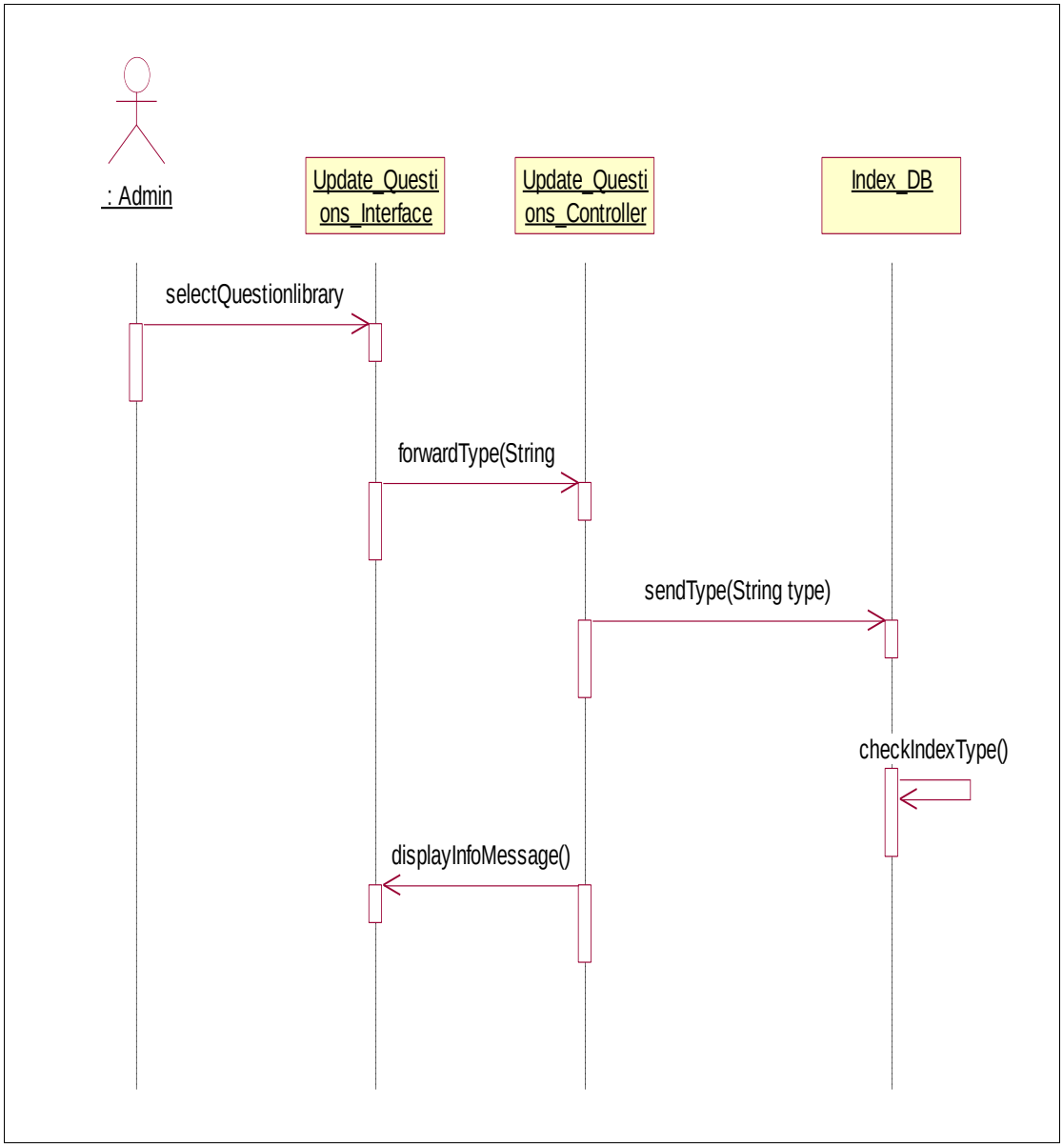


Use Case: Update Index Questions [CSFS_08]

Normal Flow [CSFS_08_01]

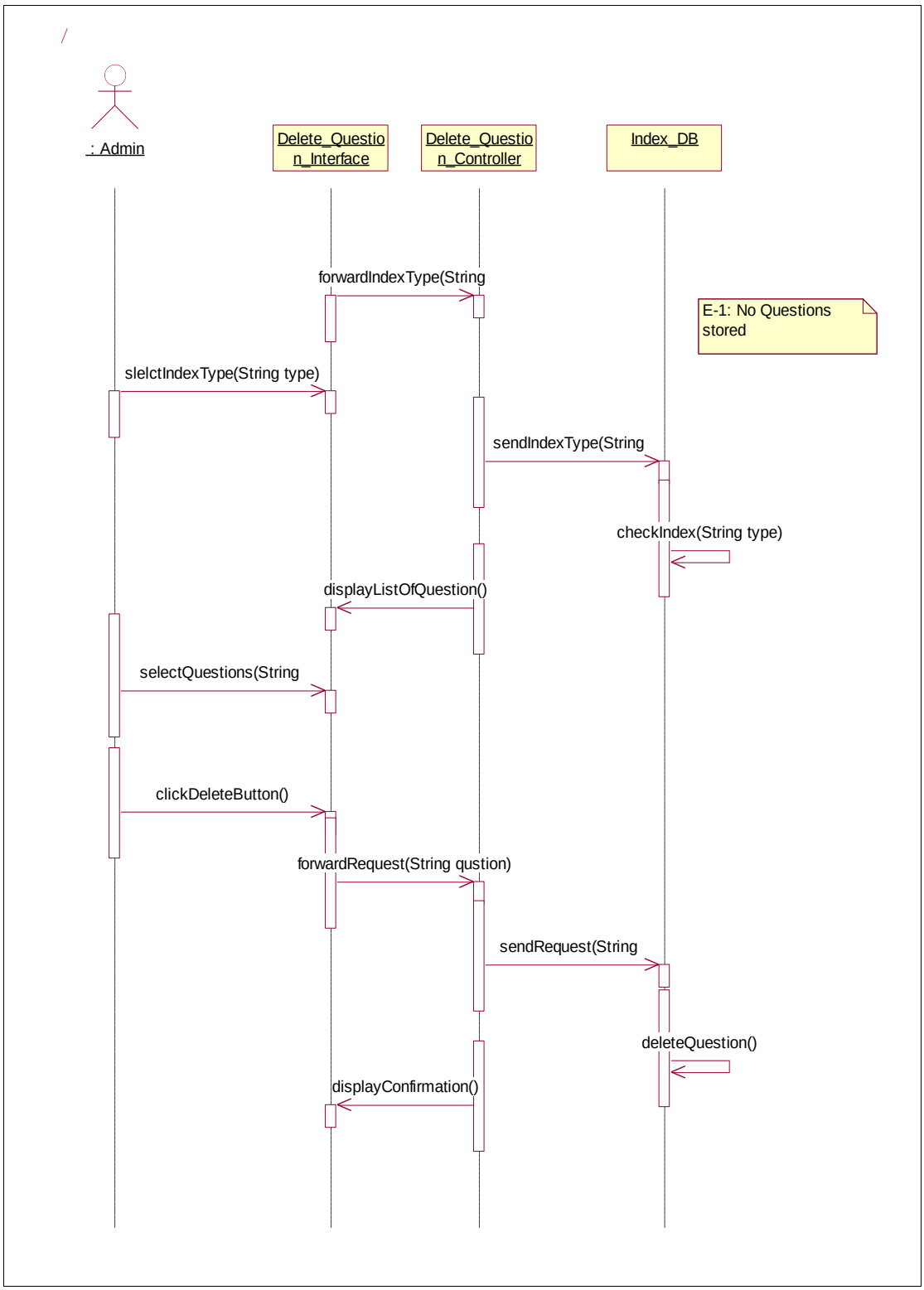


E-1: No Questions stored [CSFS_08_02]

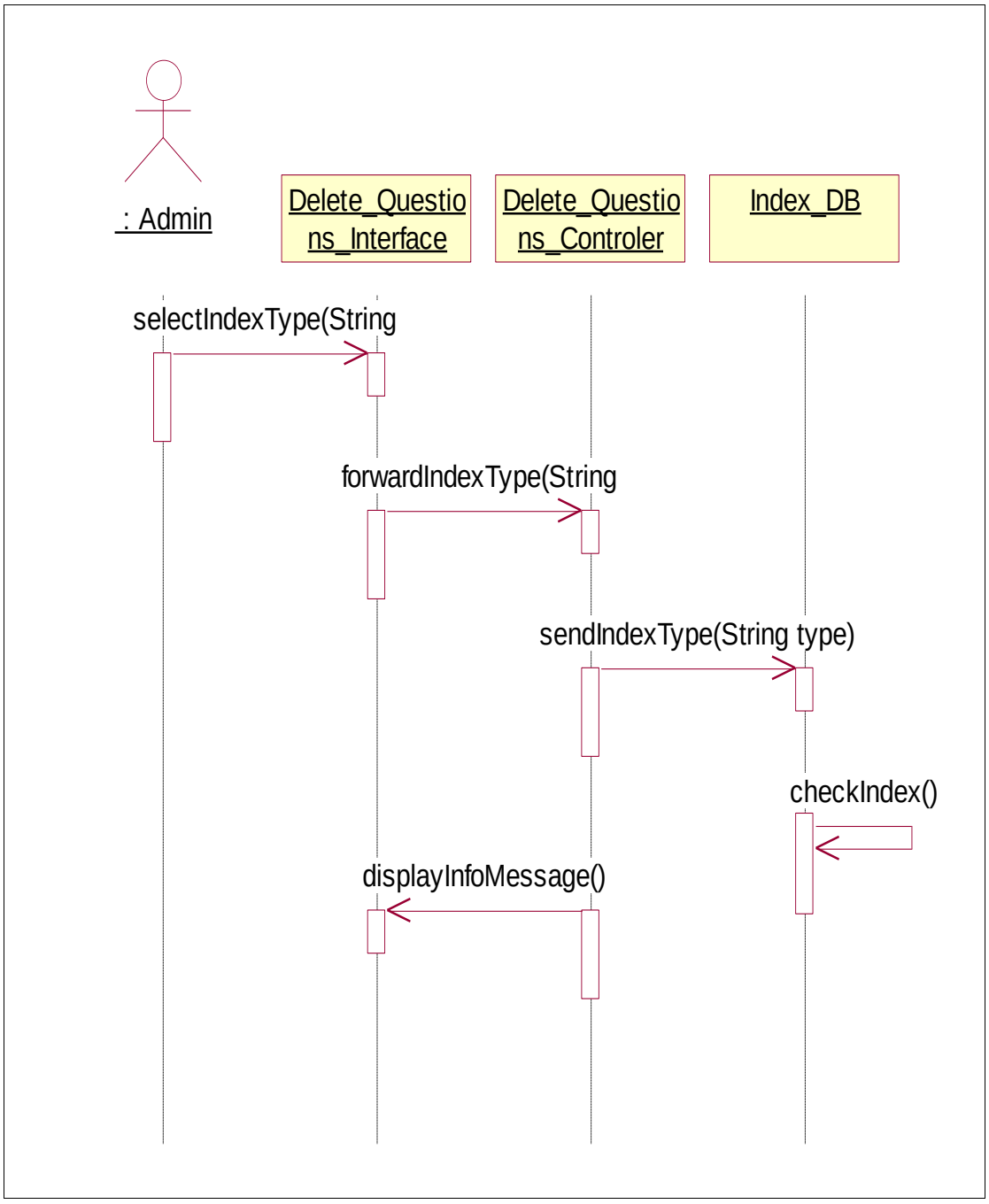


Use Case: Delete Index Questions [CSFS_09]

NormalFlow[CSFS]

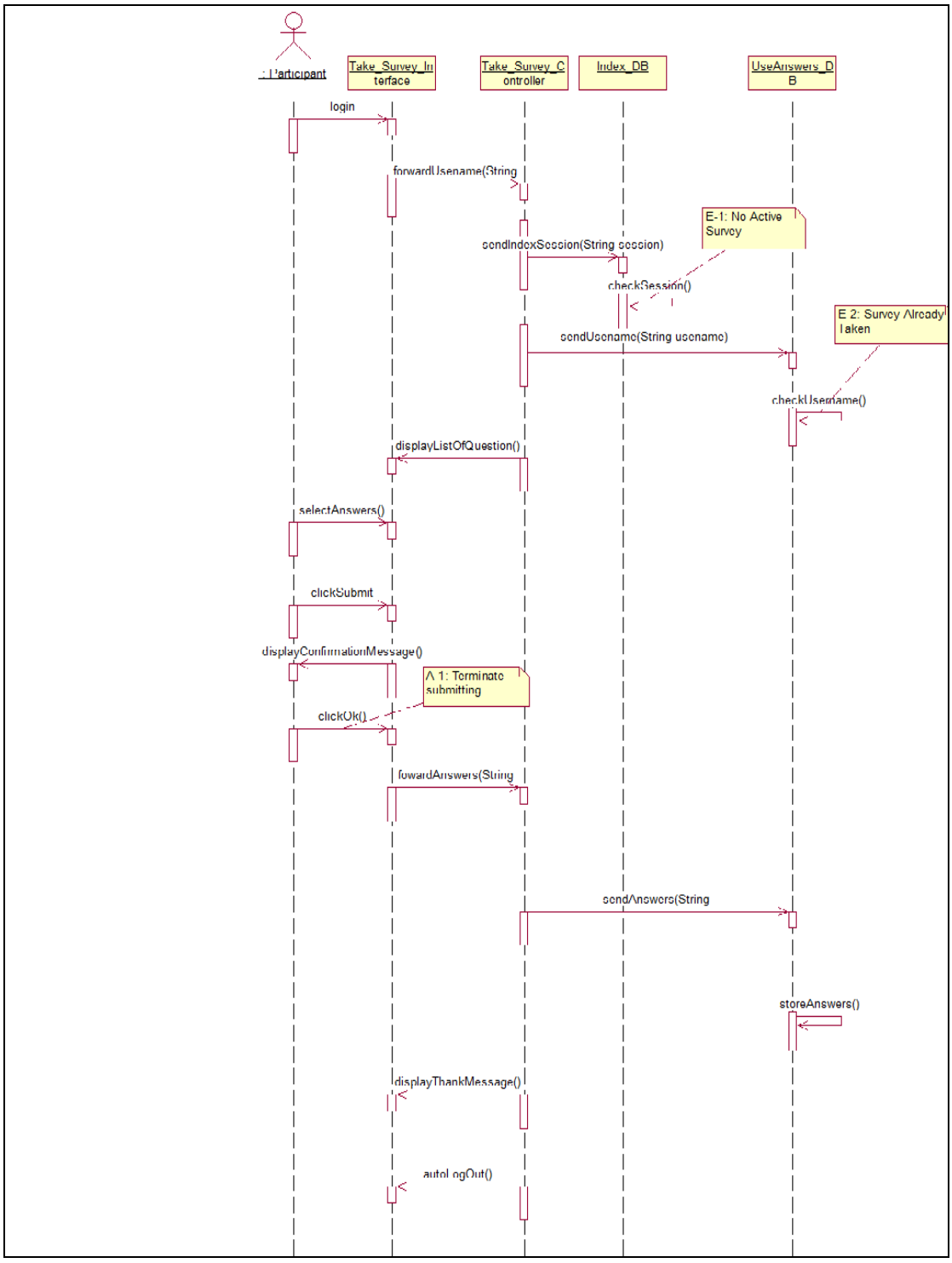


E-1: No Questions stored [CSFS_09_02]

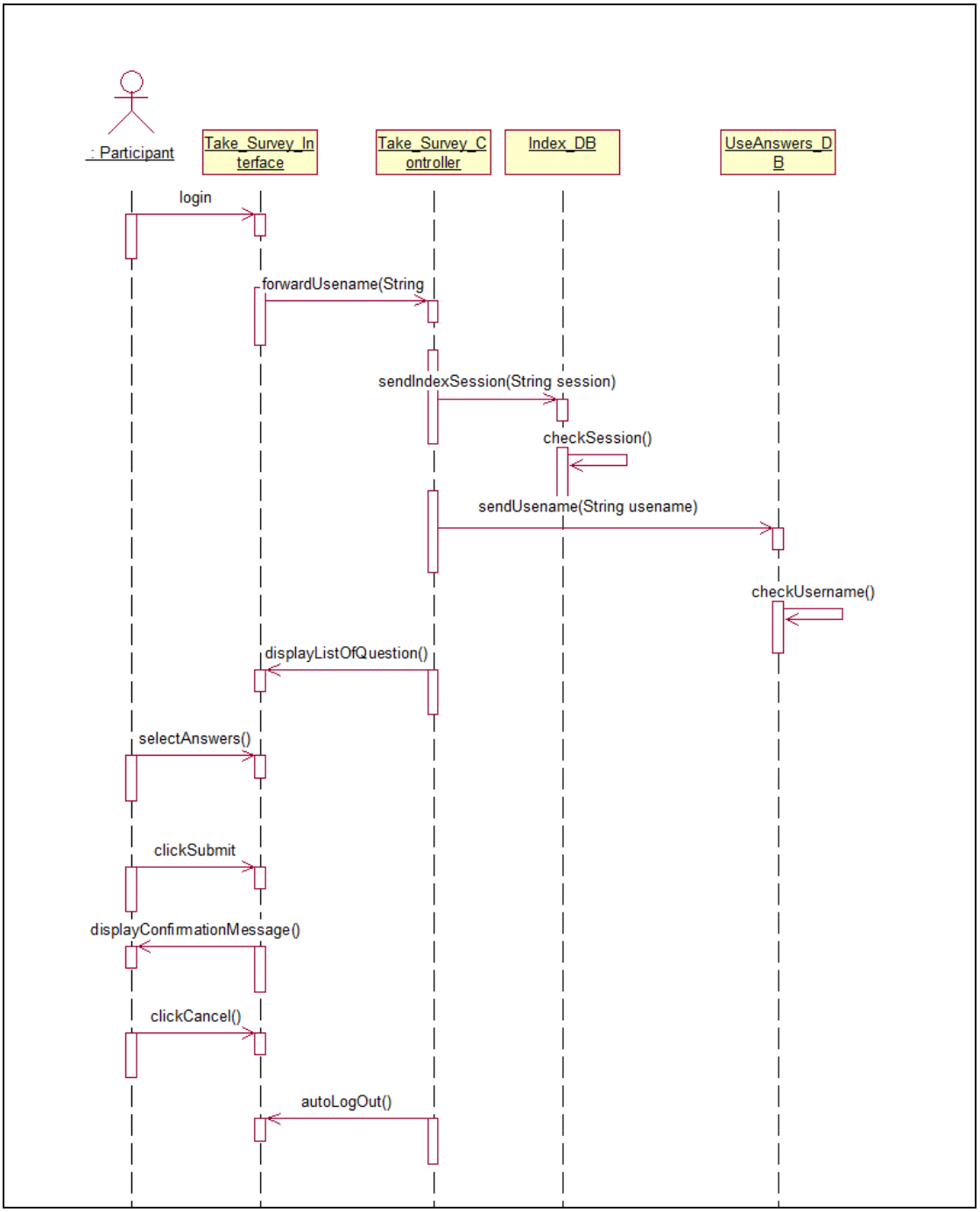


Use Case: Take Survey [CSFS_10]

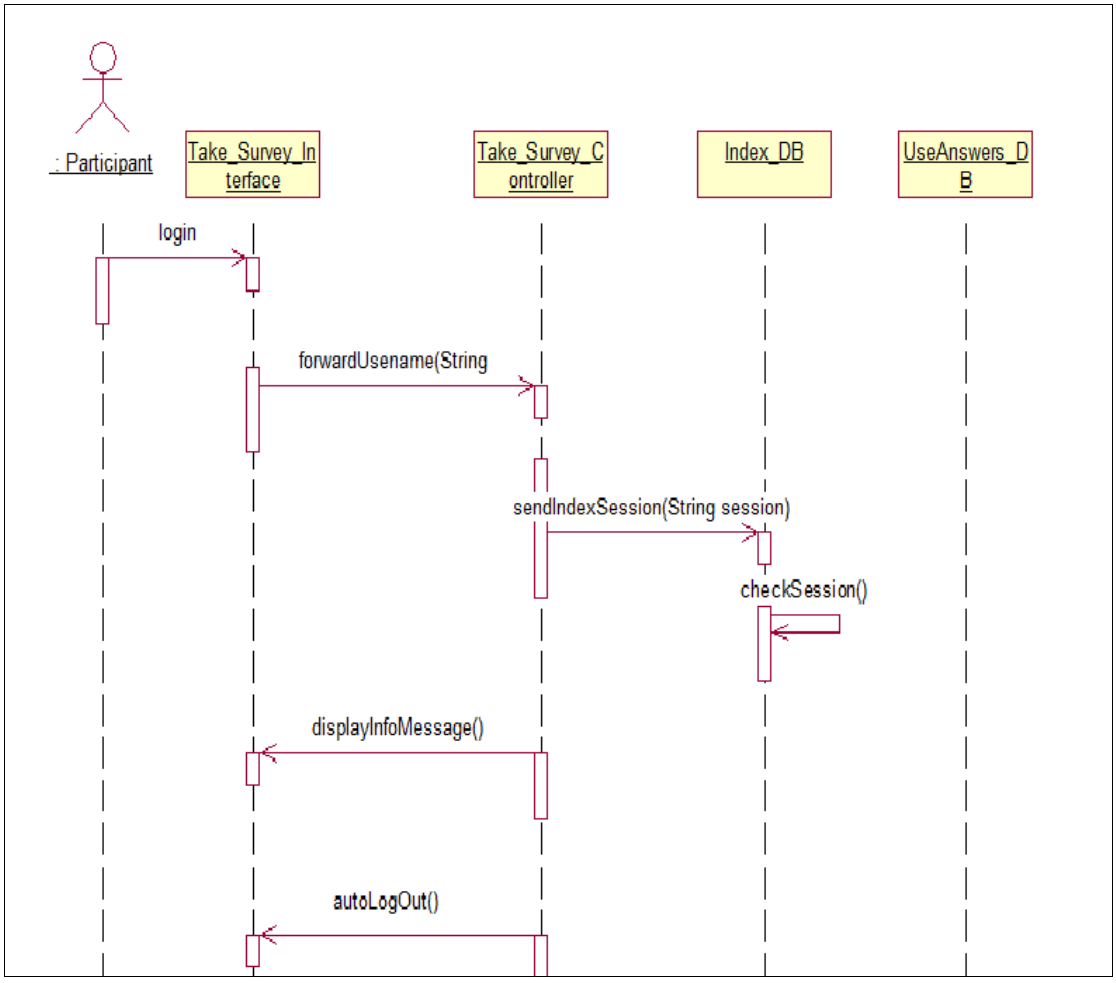
Normal Flow [CSFS_10_01]



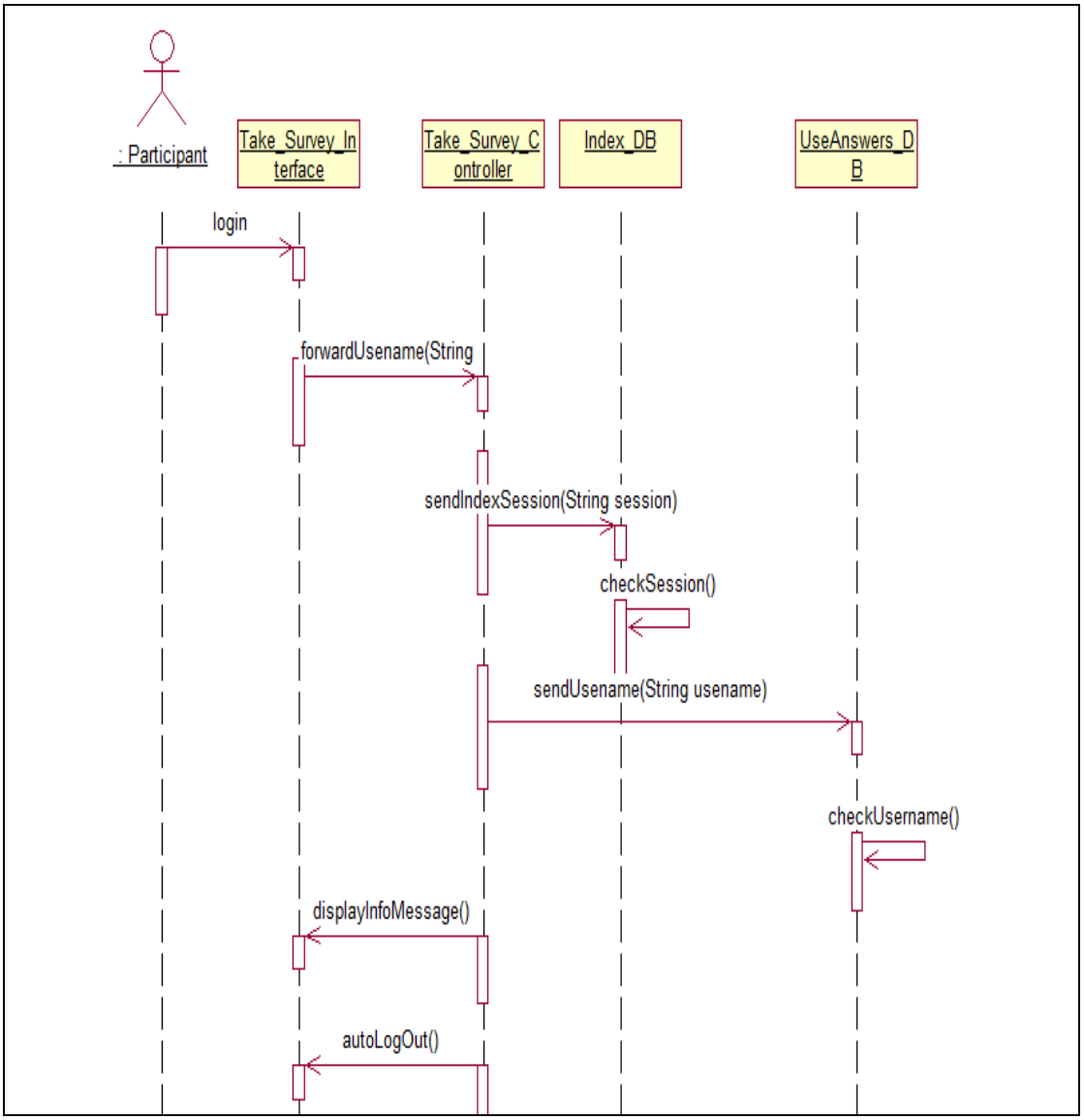
A-1: Terminate submitting [CSFS_10_02]



E-1: No Active Survey [CSFS_10_03]

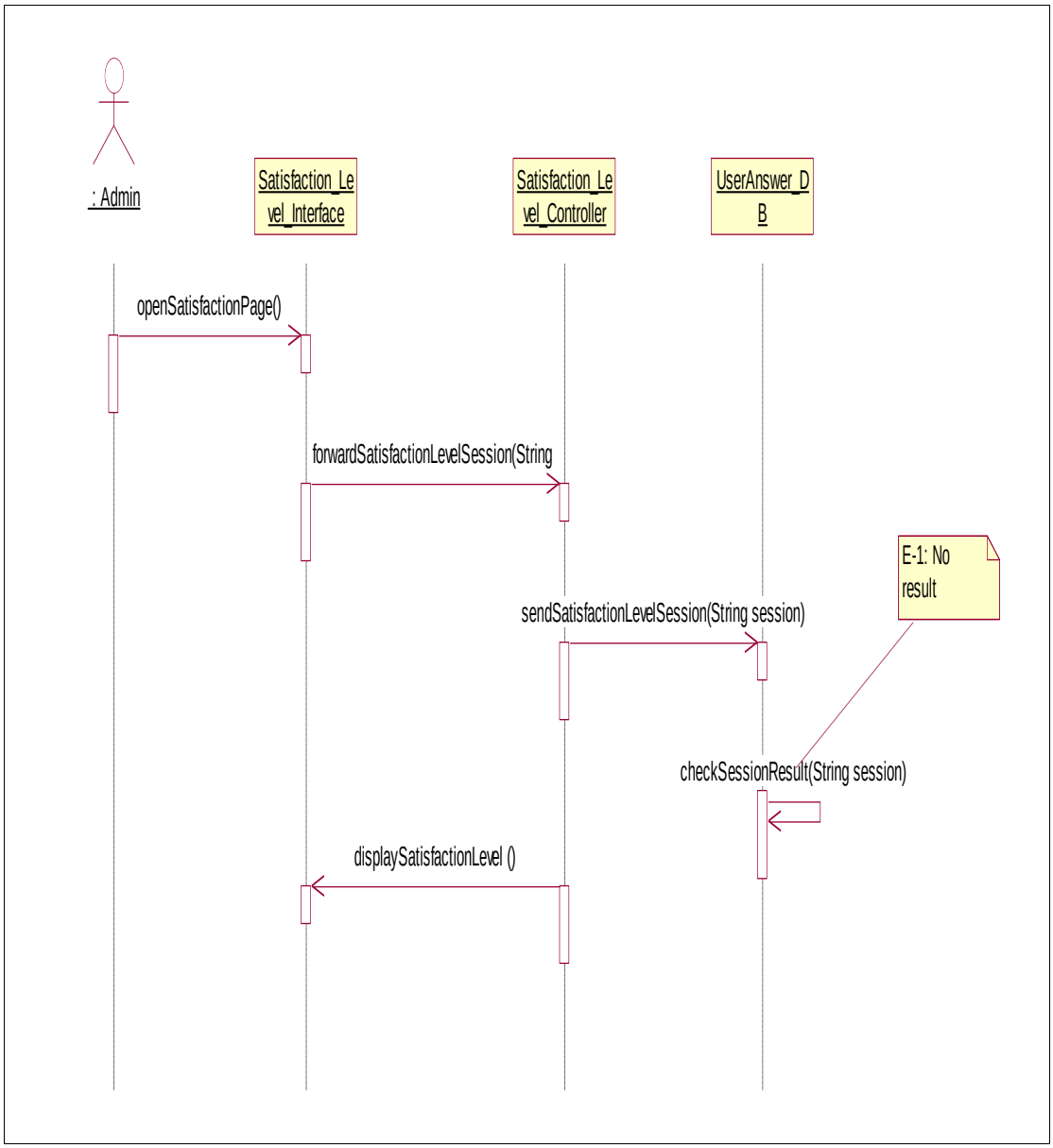


E-2: Survey Already Taken [CSFS_10_04]

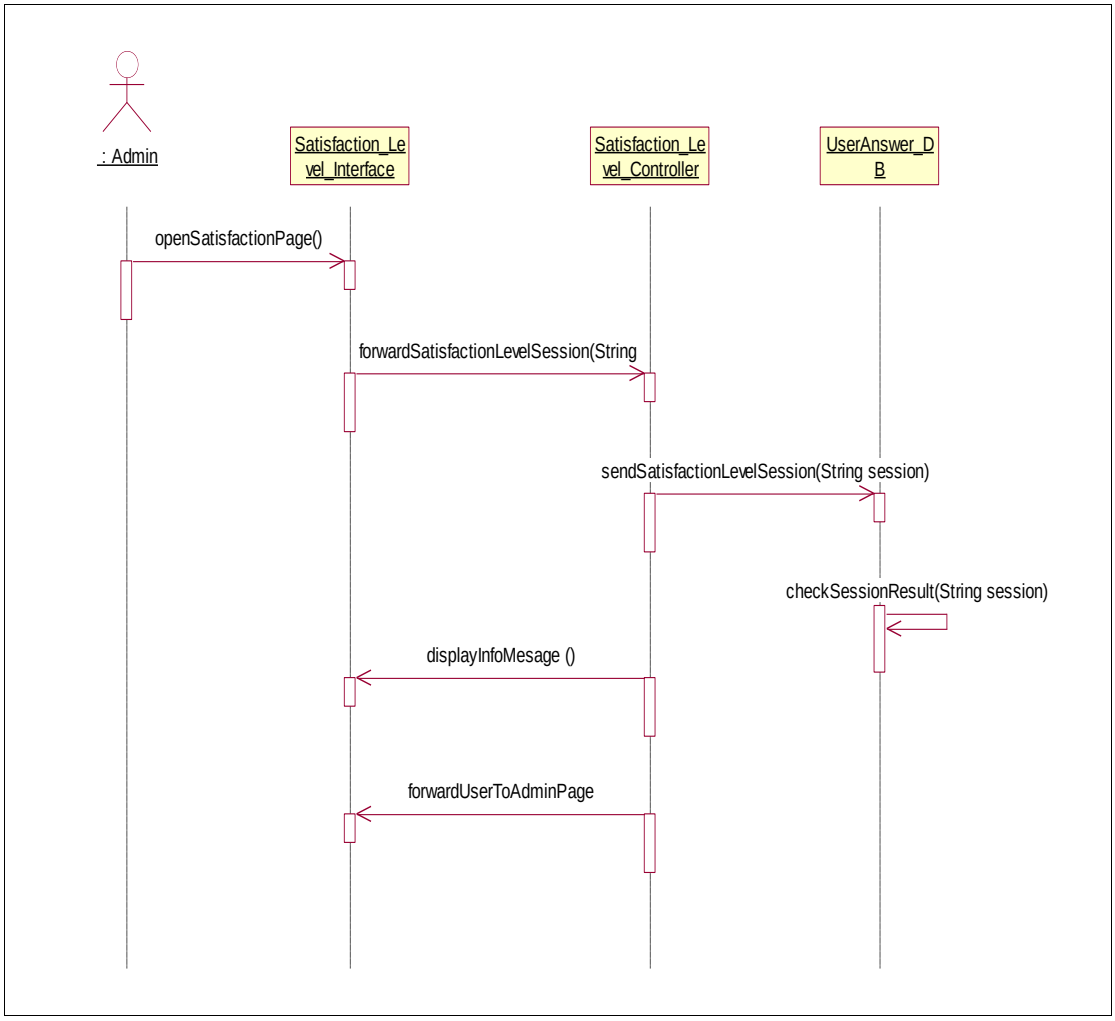


Use Case: Show Satisfaction Level [CSFS_11]

Normal Flow [CSFS_11_01]

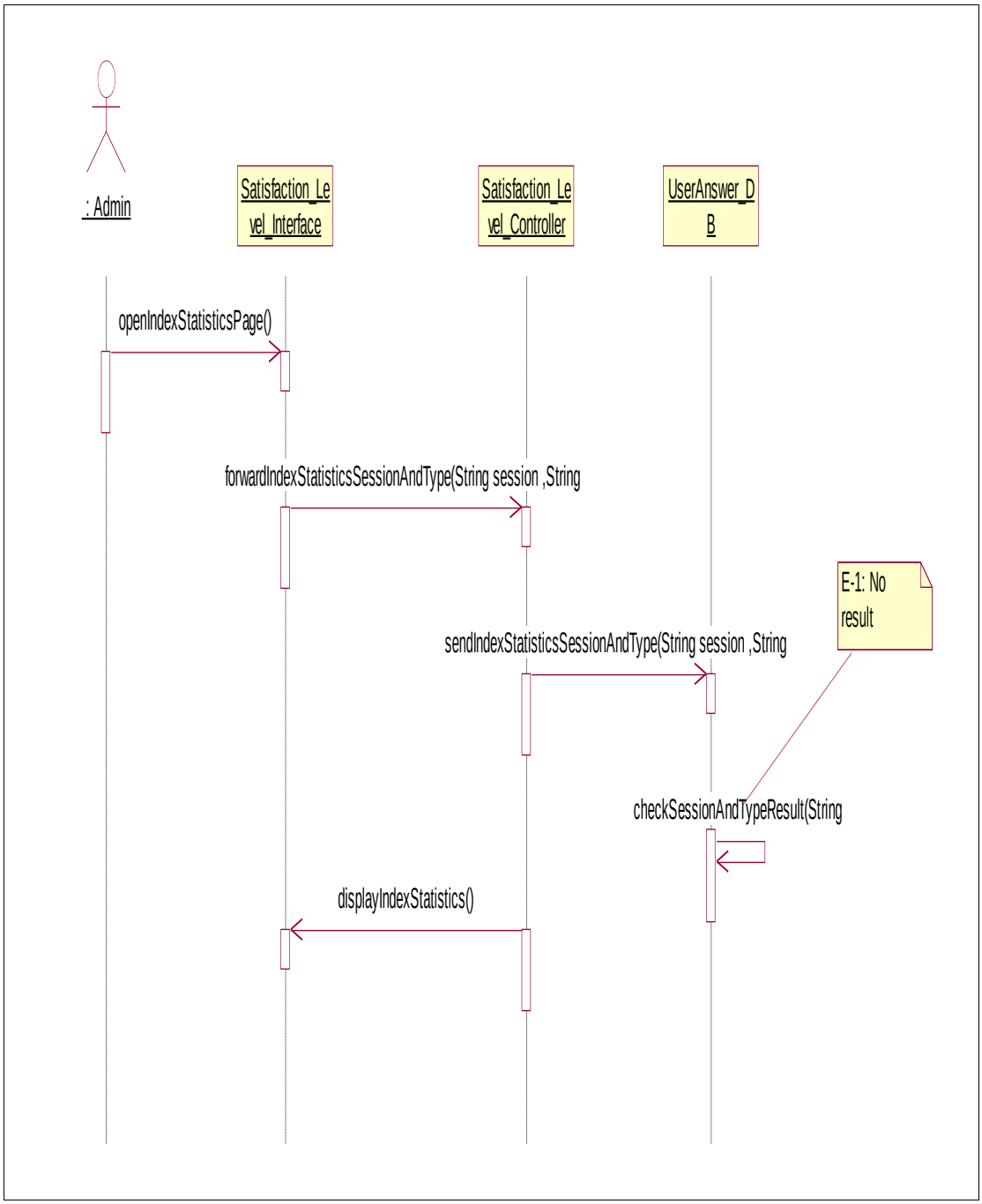


E-1: No result [CSFS_11_02]

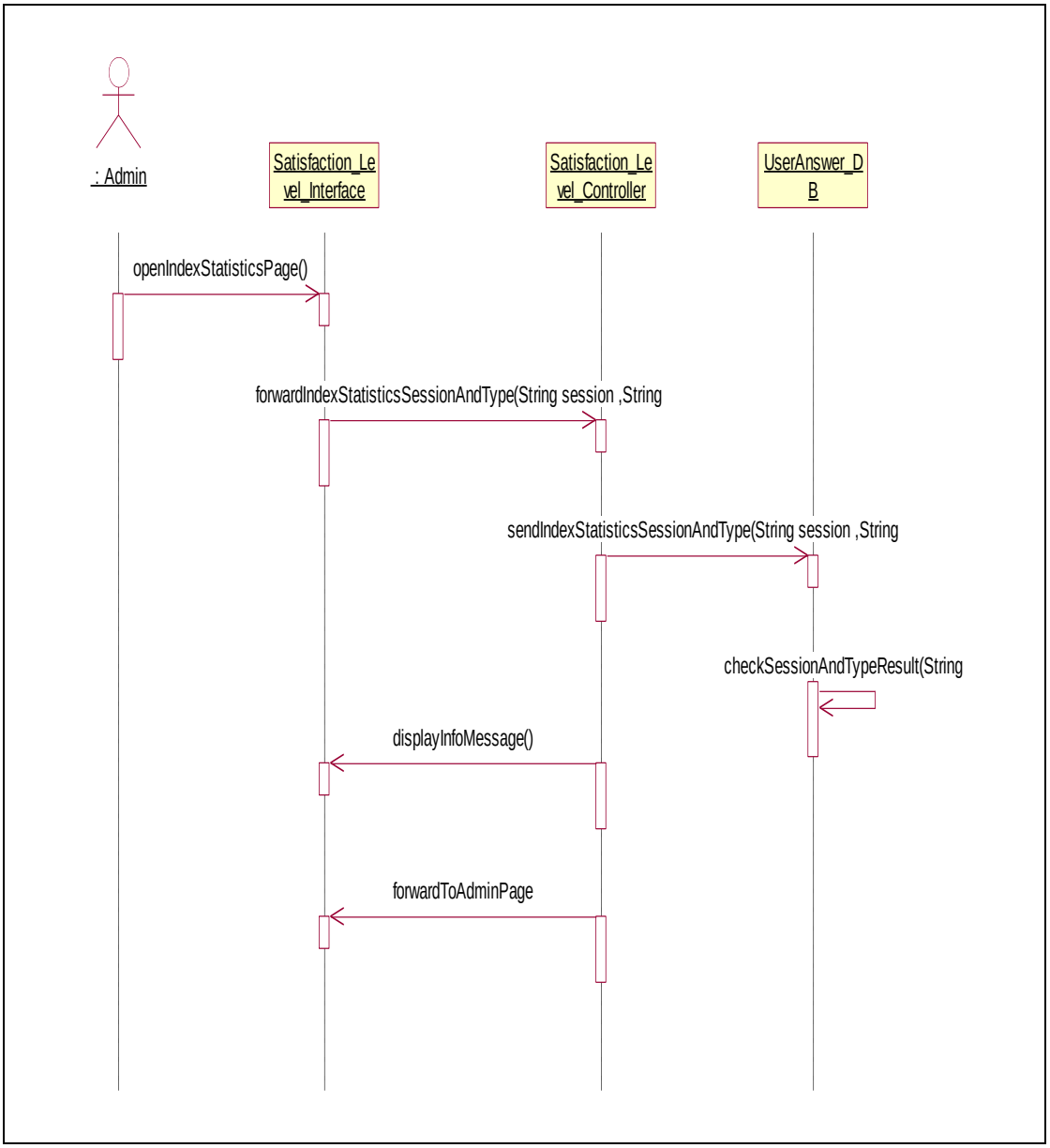


Use Case: Show Index Statistics [CSFS_12]

Normal Flow [CSFS_12_01]

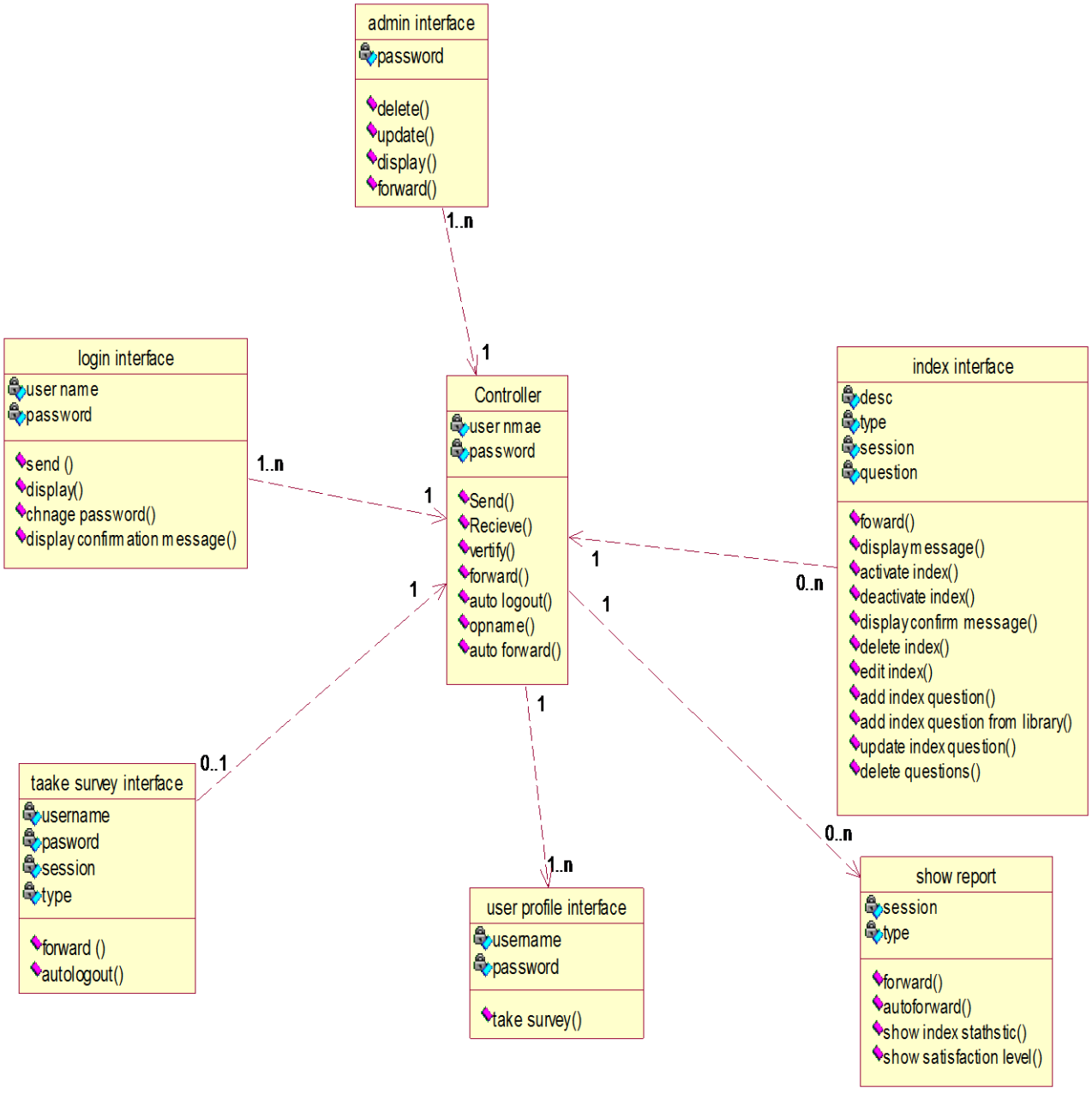


E-1: No result [CSFS_12_02]

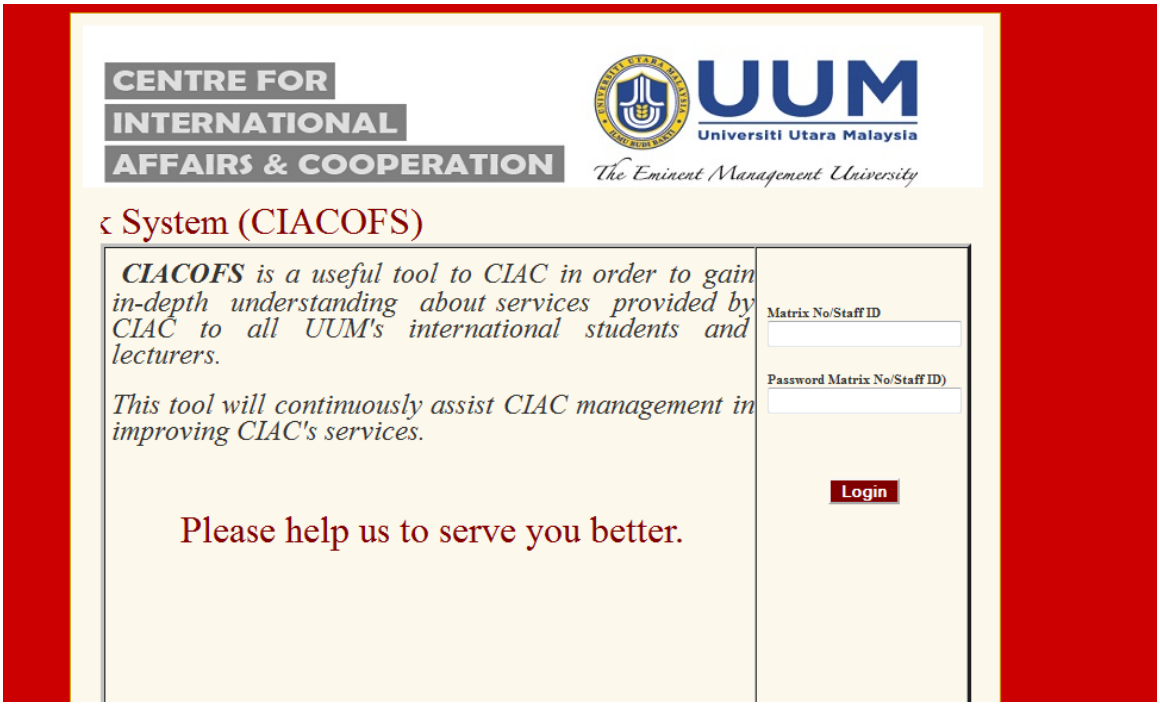


APPENDIX B

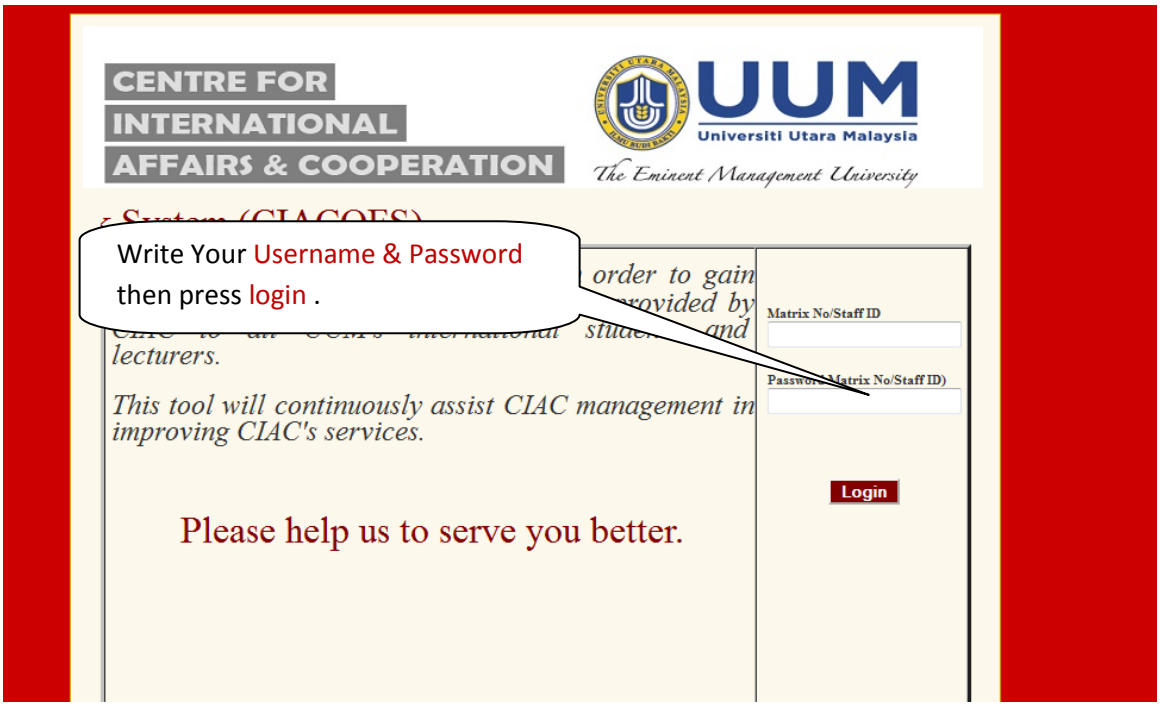
Class Diagram


admin interface
password
delete()
update()
display()
forward()
1..n
1
login interface
user name
password
send ()
display()
chnage password()
display confirmation message()
1..n
1
Controller
user nmae
password
Send()
Recieve()
vertify()
forward()
auto logout()
opname()
auto forward()
1
1
index interface
desc
type
session
question
foward()
displaymessage()
activate index()
deactivate index()
displayconfirm message()
delete index()
edit index()
add index question()
add index question from library()
update index question()
delete questions()
0..n
1
1
0..1
taake survey interface
username
pasword
session
type
forward ()
autologout()
1
1..n
user profile interface
username
password
take survey()
0..n
show report
session
type
forward()
autoforward()
show index stathstic()
show satisfaction level()

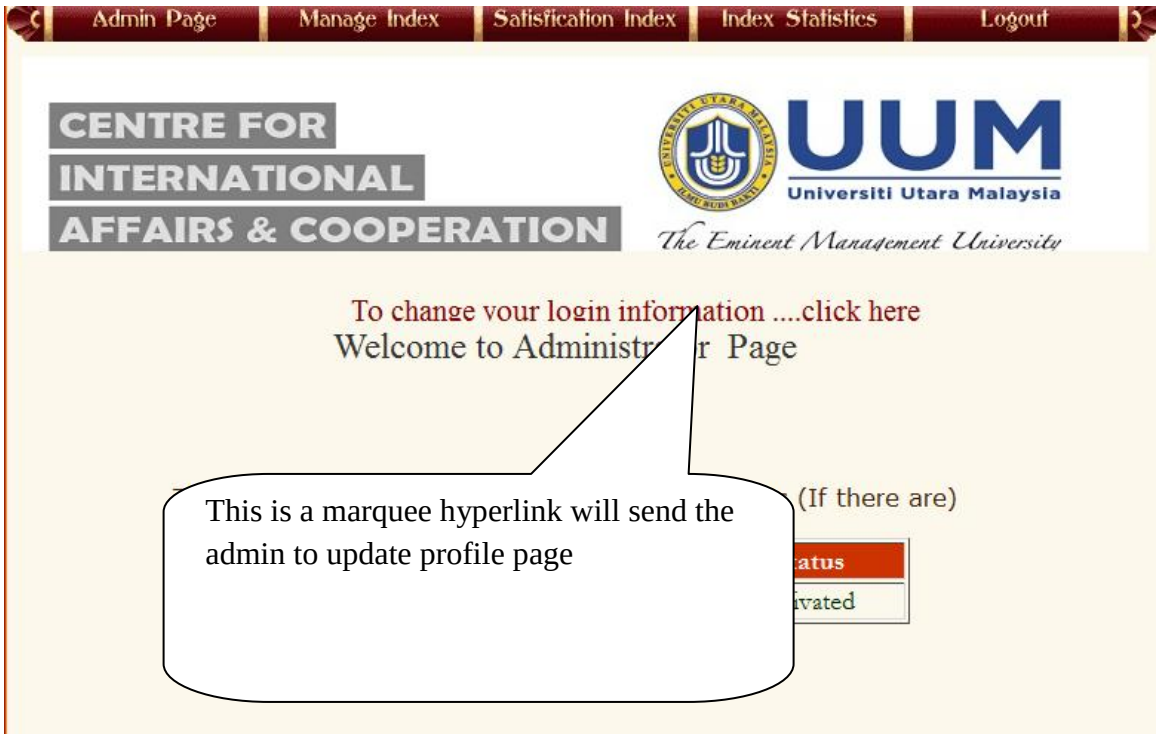
APPENDIX C



Login



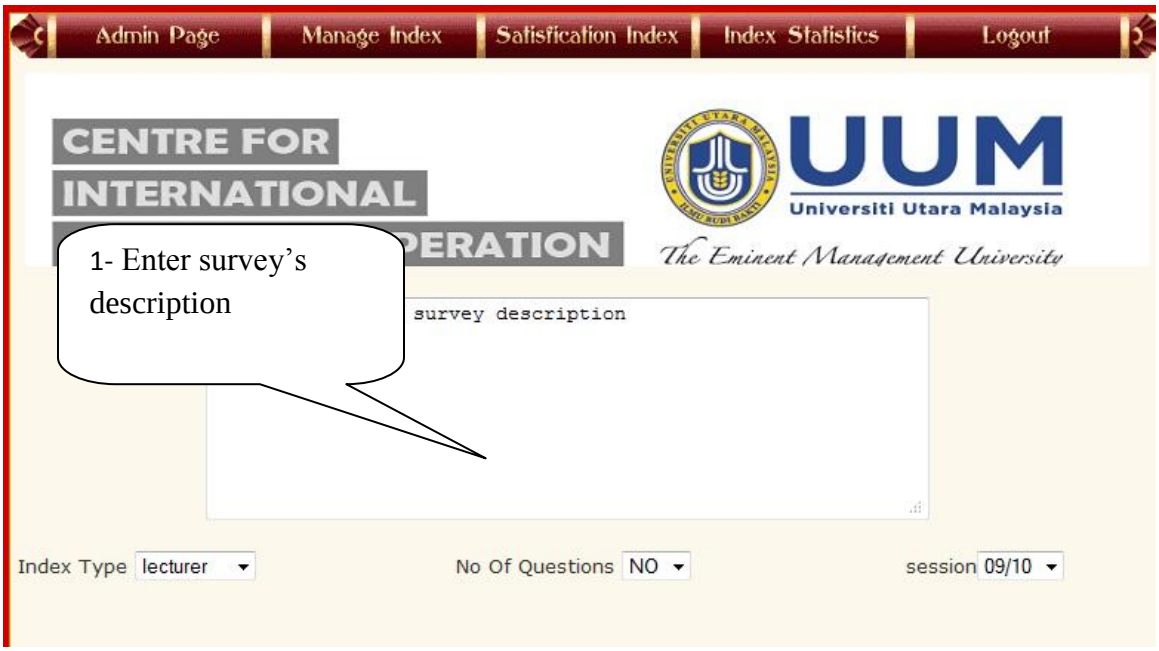
Change Administrator's Password

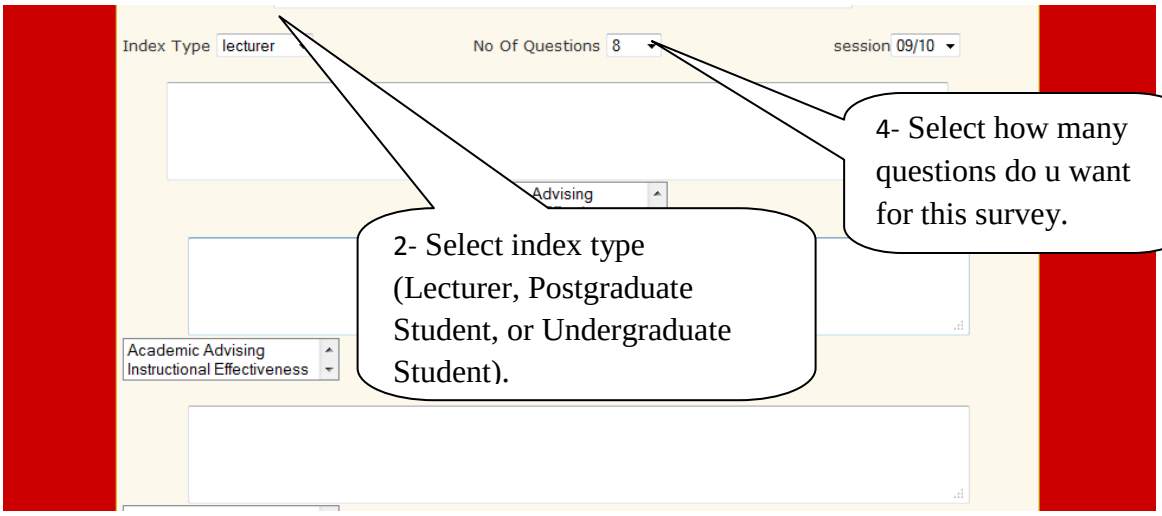


After the administrator click update button, it will display the following page

Create Index

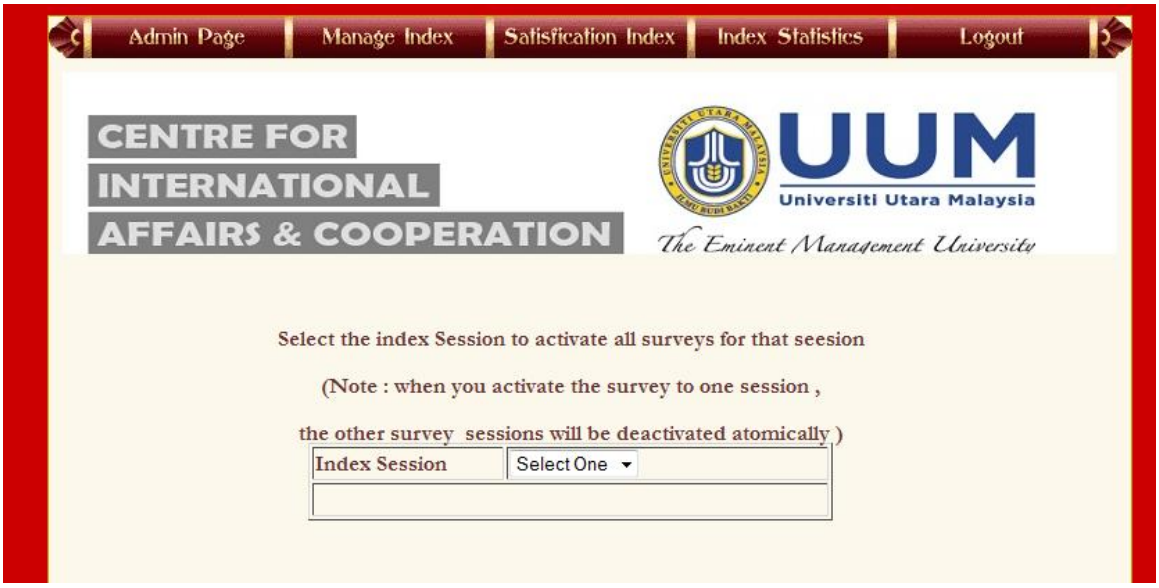
When the administrator has logged into his/her account, the first window system will display is the administrator's Homepage. The he can creat new index as shown below


Admin Page
Manage Index
Satisfication Index
Index Statistics
Logout
CENTRE FOR
INTERNATIONAL
PERATION
UUM
Universiti Utara Malaysia
The Eminent Management University
1- Enter survey's description
survey description
Index Type lecturer
No Of Questions NO
session 09/10


Index Type lecturer
No Of Questions 8
session 09/10
Advising
Academic Advising
Instructional Effectiveness
2- Select index type (Lecturer, Postgraduate Student, or Undergraduate Student).
4- Select how many questions do u want for this survey.

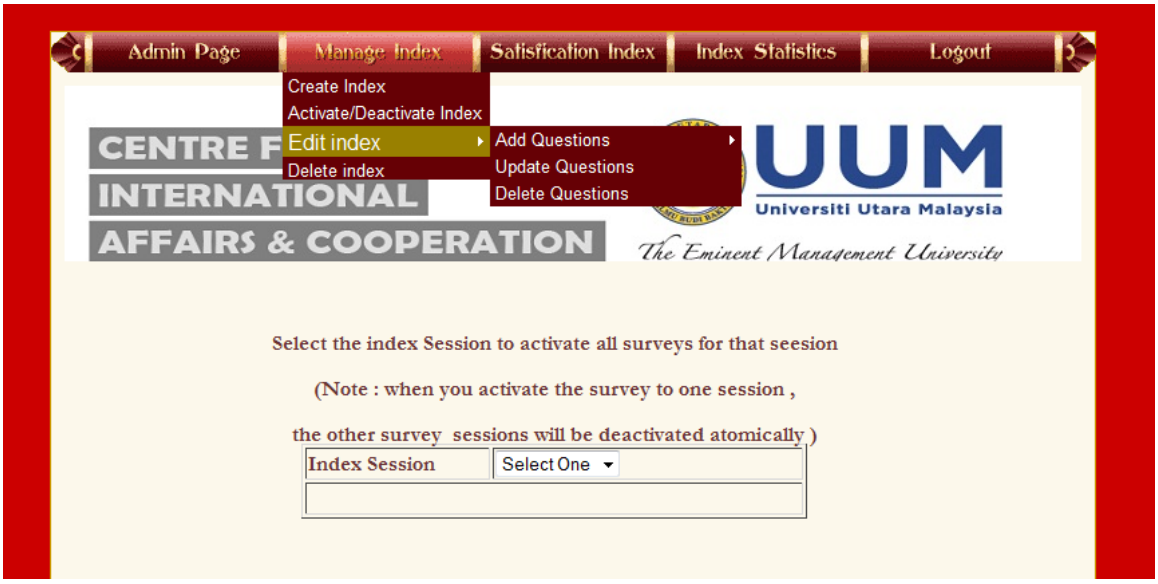
Activate Index

Activate Index Choice is used to allow the administrator to control the time of activating or deactivating specific surveys. Indeed when the administrator finished creating the survey, the survey will not be displayed for participants until the administrator activate that survey



Edit Index

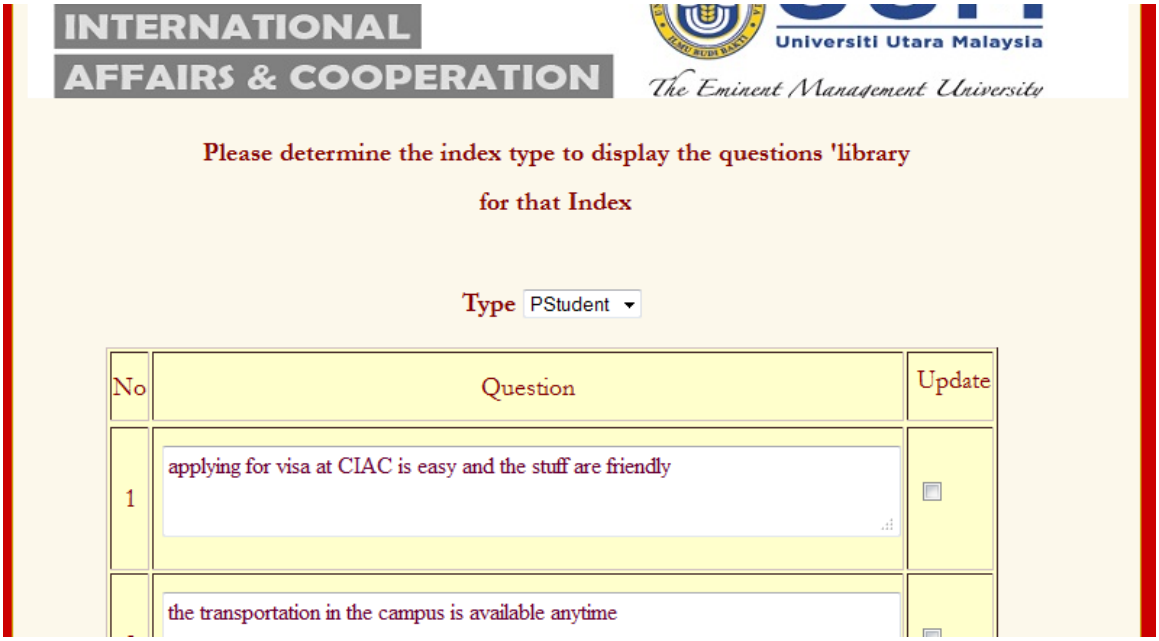
Edit Index Choice is used to allow the administrator to add, update, or delete survey's questions.



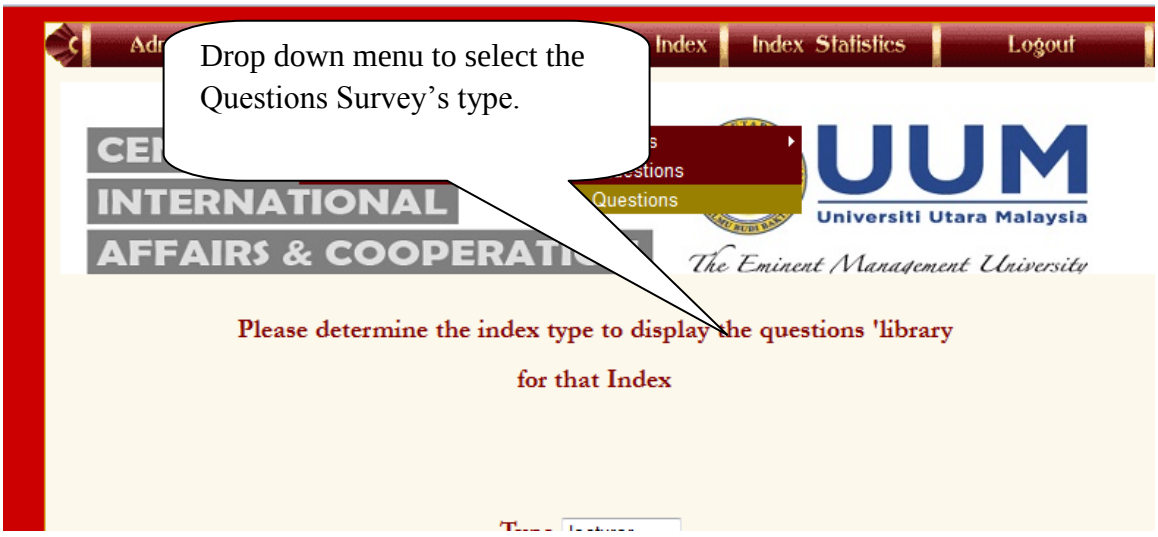
Add New Questions

When the administrator select New Questions option the following Page will be displayed:

Update Questions

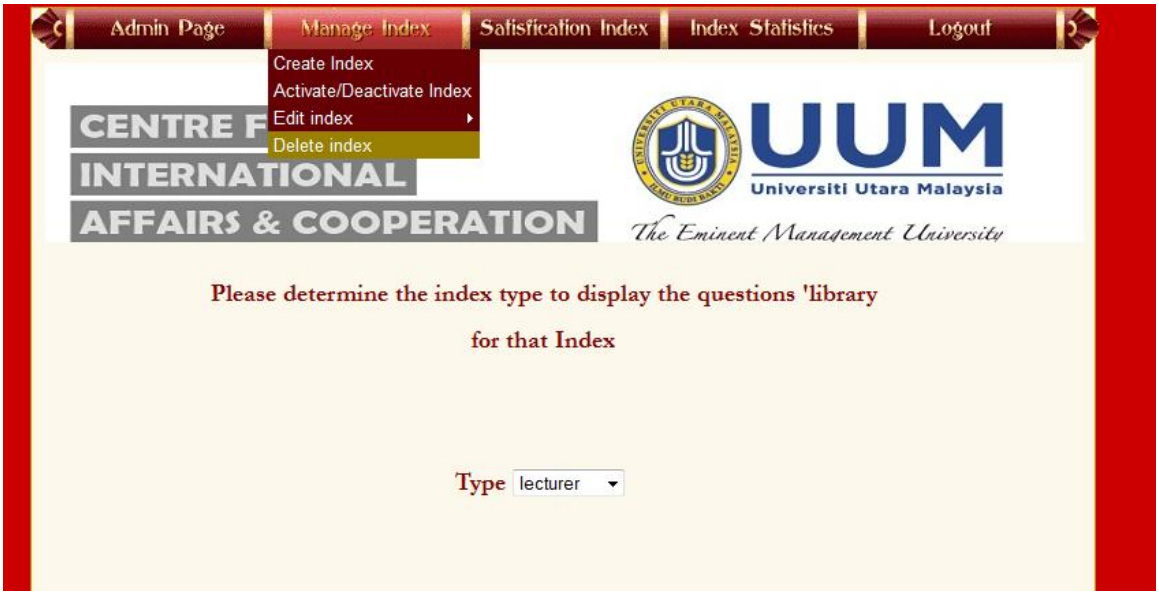


Delete Questions



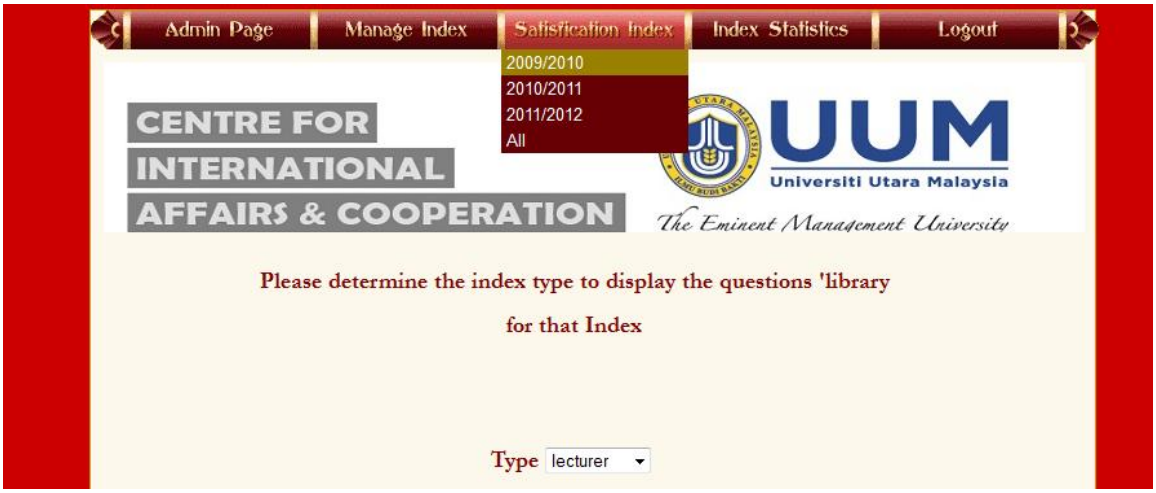
Delete Index

Delete Index Choice is used to allow the administrator to delete the whole index's content.



Show Satisfaction Index

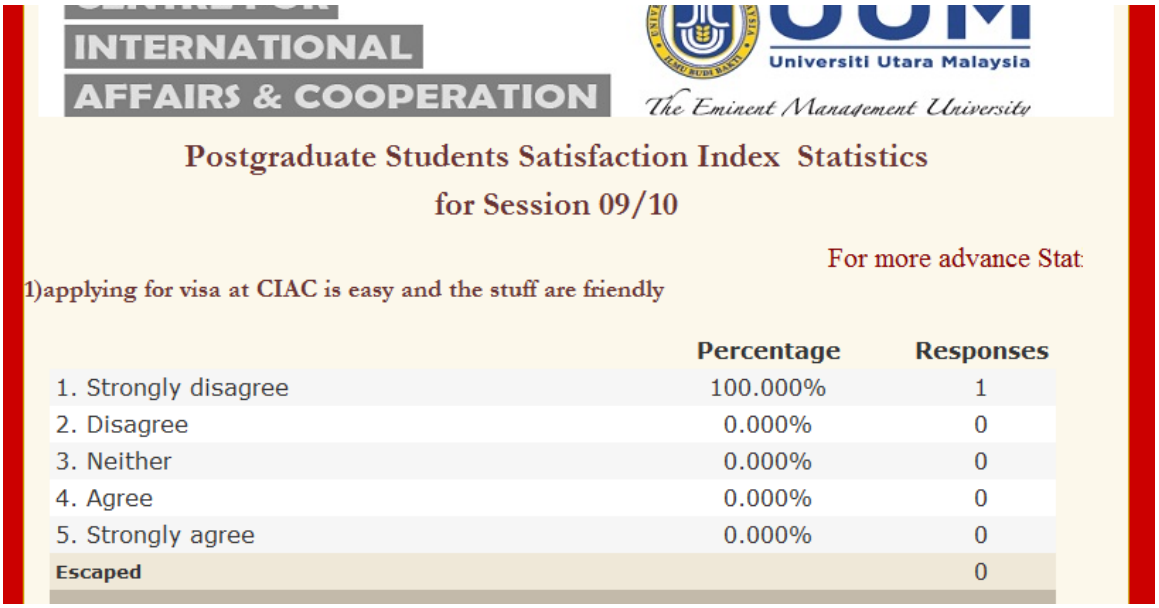
General satisfaction Index choice is used to provide the system administrator with Satisfaction index report by DPP for Students in each session.

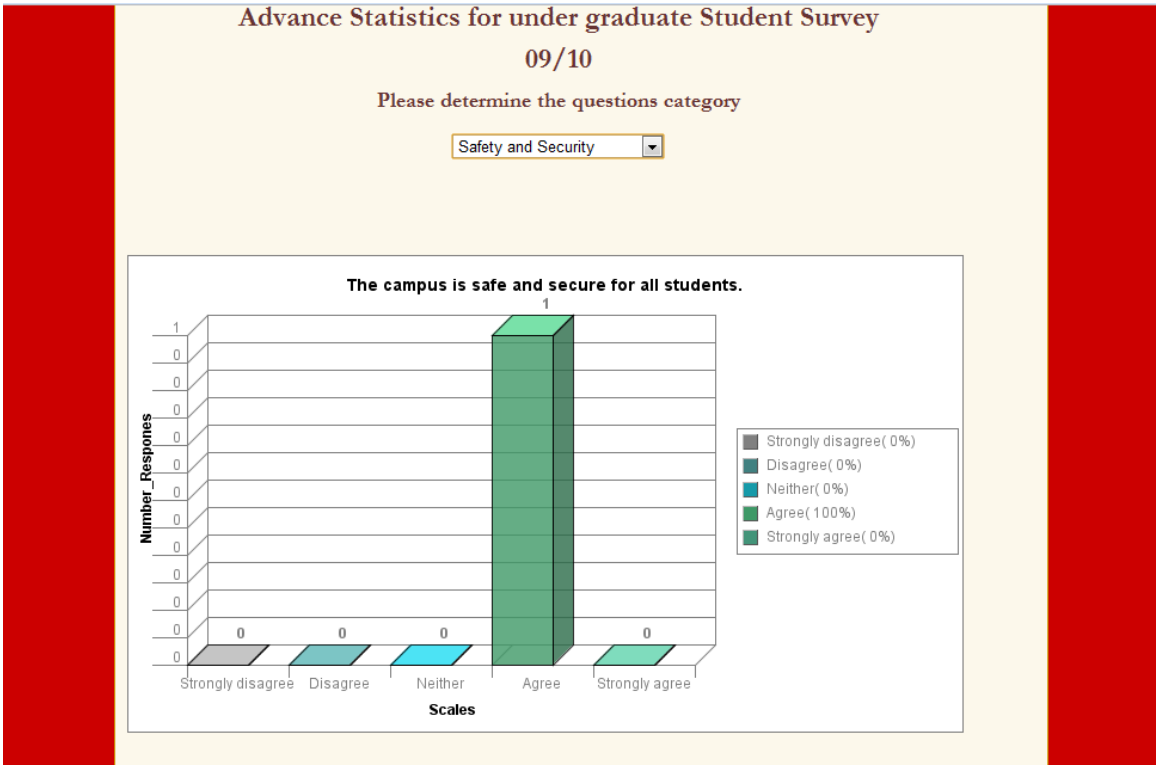


When administrator clicks on option General satisfaction Index and select the session that s/he wants to view its satisfaction index, system will display the following page:

Show Index Statistics

Index Statistics choice is used to provide the administrator with statistical results for each question for specific index type and session.

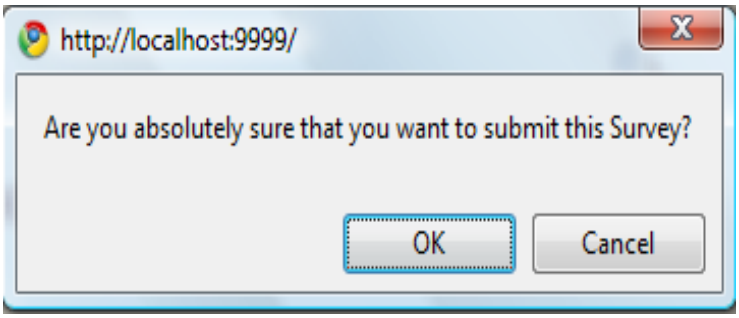




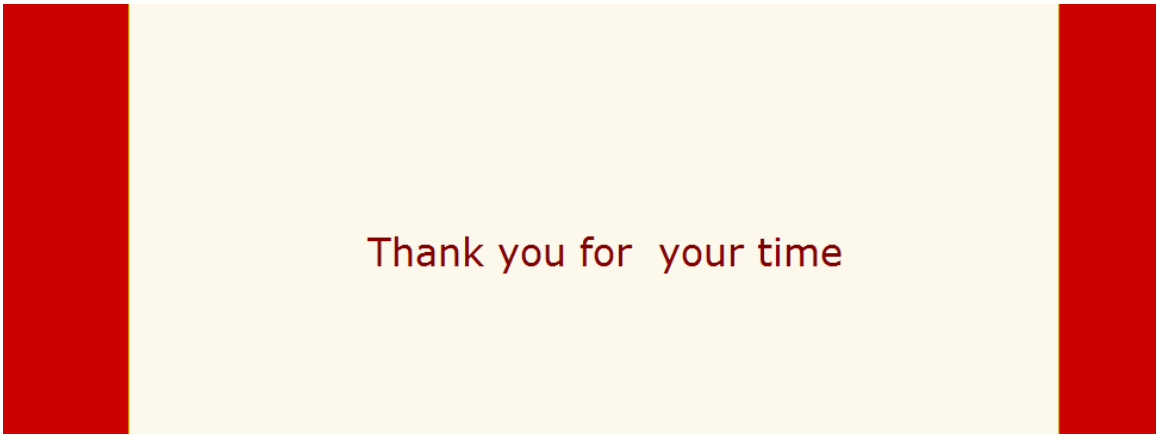
Take Survey

When the participant has logged into his/her account, the first window system will display the following page:

After the participants click submit survey button , the system will show the following confirmation message :



If the participant clicks Cancel, s/she will stay in the same page , if clicks OK the system will display the following page



and the system will log the participant out from his/her account automatically .but If there is no an active survey or the participant is already answered the survey system will display the following page

Sorry , probably you have answered this survey

Or

CIACOFS is not activated at this time