

**ELECTRONIC APPLICATION FOR PALESTINE
EMBASSY IN MALAYSIA**

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ELECTRONIC APPLICATION FOR PALESTINE EMBASSY IN MALAYSIA

A project submitted to Dean of Awang Had Salleh Graduate
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ABSTRACT

In a twentieth century, we have observed a large-scale growth of internet-based services in our every sphere of life. Information technology has been a necessary element using by the government as a necessary communication way for delivering services to its citizen. E-services delivery is progressing in developing countries, but the erudition is still in immaturity level. In addition, the citizens' needs are increasing and they want easy and secure way to reach the government information, services and transactions that will lead to building the trust between government and citizens. This project focuses on investigating the existing techniques and to come out with a proper solution to make electronic-Embassy more participation and empowerment, then developing A web-application to allow users to benefit from embassy services any time anywhere. In addition, focus in automate the most common consular transactions that using from residents that are registration and authenticate documents transactions.

DEDICATION

*I humbly thank **Allah** Almighty, the Merciful and the Beneficent, who gave me health, thoughts and co-operative people to enable me achieve this goal.*

*I wish to dedicate this work to **Holy Prophet Muhammad** (Peace be upon him) and his companions who laid the foundations of Modern civilization and paved the way for social, moral, political, economical, cultural and physical revolution.*

*I send my success to my father spirit (**shaheed: Basheer Al Madhoun**) who pushed me to progress in my academic life, my Dear and Lovely Mother **Um Adham** for her constant support and prayers, my Dear fiancée Esraa, all My brothers and my sisters for their understanding & endless love through the duration of my study.*

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LIST OF ACRONYMS

IT	Information Technology
ICT	Information and Communication Technology
G2G	Government to Government
G2C	Government to Citizen
G2B	Government to Business
SMS	Short Message Service
GDS	Government Delivery Services
IS	Information Systems
DS	Design Science
PHP	Personal Home Page
UML	Unified Modeling Language
HTML	Hyper Text Markup Language
CSUQ	Computer System Usability Questionnaire
GUI	Graphical User Interface
UUM	Universiti Utara Malaysia
IBM	International Business Machines
URL	Uniform Resource Locator

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CHAPTER ONE

INTRODUCTION

1.1 Background

E-government is known as a way for governments to use the latest information and communication technologies, especially web-based internet applications to provide better service for its citizen (West, 2000). Web Based e-government services as the information and services that provided to the public on government Websites (Wang, Bretschneider, & Gant, 2005). Web-based internet application is come instead of the manual system to request government services and transactions for citizen and users online, especially those living outside of the country. The internet is rapidly coming to be preformed contrivance for governments to deliver services to the citizen in an efficient way without wasting a lot of governmental resources, efforts and time (Kushchu & Kuscu, 2003).

Information and communication technology play important role in the realm of Consular Services development. Nowadays, the governments are moving towards to develop a mechanism to help their citizens who are abroad to take advantage of its services electronically. The governments now has the duty to provide citizen and companies with the required services and need to improve the e-services especially a online transactions like transportation, medical and trade transactions to transfuse

confidence in citizen in the use of these online transactions (Tan, Benbasat, & Cenfetelli, 2008).

One party that deals and manages citizens living abroad is the embassy. In practice, the embassy is structured under the Ministry of Foreign Affairs. Currently, it provides citizens with a lot of services and information's that citizen need such as renewal passport, authentication certificates and visa. So, the best way to let citizen takes the benefit from government services is to automate all services provided by the embassy. Developing a web application for an embassy will help citizen to benefit from embassy services as it consumes less computational effort.

Electronic government, especially government portals enhances the relation between government and citizen (G to C), and government and business (G to B) it also improves the internal relationships between government agencies itself and between government and it employee (G to G) (Fang, 2002). This project focuses on G to C relation, specifically on the embassy of Palestine in Malaysia. Embassy of Palestine is structured under the Palestinian Foreign Affairs Ministry. It is responsible for Palestinian residents needs. The embassy web site should offer several online services that often used by Palestinian residents, for Instance online registration and Authentication of documents.

1.2 Problem Statement

A Palestinian overwhelming desire to adopt IT was enhanced by the yearning of the Palestinian government to introduce IT to be utilized by the public sector

organizations. Ministry of Telecommunications and Interior have started to employ information communication and technology (ICT) but the gap still exist in many ministries, especially in Ministry of Foreign Affairs (Ahmed, 2005). The Palestinian embassy in Malaysia is 1:still practicing the traditional procedure such as applications of services are performed manually (via hardcopy forms).2: Adoption of ICT is only in the use of Microsoft Word, information and documents exchange via telephone and fax.

In addition, existing practice in the embassy limits the dissemination of information. This requires effort, time and money from the users. Palestine embassy also has a small number of staff there are only three persons who currently work in the embassy. As there are a large number of applications submitted by the residents of Palestine, the lacking of staff further creates a bottleneck problem in processing the applications.

1.3 Research Questions

This study carries the following questions:

- What are the user requirements to develop an online system for embassy?
- What are the functional and non functional requirements needed to design in order to develop this project?
- What is the best way to develop the system?

1.4 Research Objectives

The prime objective of this study is to develop online system for Palestine embassy in Malaysia. This can be achieved through by the following:

- To identify the functional and nonfunctional requirements.

- To develop a prototype that capable of serving the Palestinian residents to do their transactions.
- To validate prototype that can help users to do their transactions in easy way.

1.5 Research Scope

This research focuses on online services for Palestinian government, in particular the consular services that are offering by Palestine embassy to those stay in Malaysia. There are many of services such as renewal passport, authenticate documents, visa and extract license. This study automates two services for embassy, the first service is online registration that the users fill forms through website and the second service is authentication documents or certificate. Any user can read the information that provided through the website, but the registration and authentication services need more security due to, it needs a user to fill-in his name, passport number, mobile number, email and other personal information. The authentication services need to login before making the transaction.

1.6 Research Significance

Information and communication technology is the best way for governments to make the citizen more participate for its services. It's important for embassies to know how to get in touch with citizen .This research will offer a web-based system that allows Palestinian in Malaysia to do their transactions and benefit from the embassy services online with less computational effort. The system allows users to make registration online and authenticate their certificates.

1.7 Content of the Report

The contents of the rest of this research are summarized as follows:

Chapter Two: The chapter clarifies the concept, importance and benefits of e-Government, and strategy. Furthermore, a set of comparative studies on e-Government and e-Embassy framework for different countries.

Chapter Three: This chapter outlines the methodology followed in the study.

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Chapter Four: This chapter illustrates the analysis and designs of the prototype using UML Rational Rose; draw the use cases diagram, Activity diagram, sequence diagram, Collaboration diagram and class diagram of the prototype. Finally; present the interfaces of the prototype in details.

Chapter Five: This chapter presents the testing and evaluation of the prototype and discusses the analysis of questionnaires.

Chapter Six: This chapter presents the study's summary, conclusions, limitations and recommendations.

1.8 Summary

This chapter gives a brief description about study, problem statement; objectives, scope and significance of the study were presented. As well, it provides a clear picture about the solution for developing a system for Palestine embassy that helps users to find consular services and transactions by easy way.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Now days, the world is completely linked to information technology to facilitate work and use of time in completing many processes. Also, ensure that they receive at the time to ease the burden on staff. The importance increment in the availability and use of government information and services online is an evidence to the importance of e-government (Muir & Oppenheim, 2002). Most of the governments are focusing on applying modern ICT to deliver services that better meet the needs, demands and satisfaction of users and to empower citizens to participate more completely in the development and delivery of services (Ubaldi, 2010). E-Government has been adopted in order to make the governmental services around the world, at both the national and municipal levels, better, faster, cheaper, more convenient, more transparent, more efficient, more accountable, and more accessible to their beneficiaries; the citizens and businesses.

2.2 Palestine government:

The Palestine government seeks to achieve the modern technologies that serve the electronic government through provided many projects and initiatives. The need for electronic government made the cabinet issued decisions for implementing e-government

initiatives (Directorate, 2009). The government put four principles that must follow through develop the process for the services (Jaber, 2011):

- **The centrality of the citizens:** the goal of the e-government is less the burden on the citizen and provides the services in easy way.
- **Connecting the society:** support the infrastructure of networks to increase the proficiency of government that can guarantee delivering the government services to the citizens.
- **Encouraging and helping citizens:** support the civil community to raise the opportunities of having communication with others.
- **Enhancing the value and the public benefits:** strengthening the relation between government and citizen by improve the government performance.

2.2.1 The current situation for the Palestine e-Government

In the last decade, the Palestine government have not any plans or strategies on the information and communication technology, because there was not a clear vision for the importance of ICT (Saidam, 2010). In 2003 the initiatives started to use the information communication technology in the ministries. Most of the ministries have ICT departments which are not used in the right way. In addition, some of these ministries have one or more home page in the internet (Abd Al-Atei, 2005).

2.2.2 E-Palestine project initiative

One of the initiatives considered the best to build good e-government environment, it is E-Palestine project which mentioned to implement in 2011-2013.E-

Palestine project included (e-Government, smart card, the National institute for Telecommunication and Information Technology, the Techno Parks, and many others).

2.2.2.1 The E-Palestine project goals

The E-Palestine project includes many projects that are a significant for establishing strong infrastructure for electronic government. This project aims to building the organizational structure for the General Directorate of e-Government Project which includes provide the needed departments and units with require specialists in ICT domain and required technical for implement e-government.

As well as, rehabilitating the infrastructure project to develop and increase the efficiency of the governmental network, improve the internet speed, add new services and connect different governorates between the main centers in Ramallah and Gaza (Khouri, 2006). In addition, collecting the governmental services applications and forms, and information about systems used project, which will be achieved by:

- Designing a special form to determine governmental transactions and services.
- Designing a special guidebook for filling and completing the transactions.
- Designing and developing automated system to insert all data for citizen transactions and services.

2.3 E-Government:

E-Government is defined as a generic term for web-based services from agencies of local, state and federal governments. In e-Government, the government uses information

technology and particularly the Internet to support government operations, engage citizens, and provide government services (Palvia & Sharma, 2007).

As well, it improves the characteristic of the services and to supply greater occasions to engage in democratic organization and process by use the mainly innovative information and communication technologies, especially web-based internet applications (Guo, 2010).

Cook et al. (2002) defined the Electronic Government as "e-Government has four dimensions in relation to major functions and activities of governments: (e-Service) which is the delivery of government information electronically, (e-Management) which is the use of ICTs to improve management and communication within and outside government structures, (e-Democracy) use of ICTs to enhance the citizens participation in democratic activities and (e-Commerce) online transaction of goods and services".

Another perspective was introduced by Bhatnagar (2002) that the Electronic Government is the participation and offering services to the citizens in order to increase the sense of responsibility and decrease the corruption.

While governments keep on develop ICT infrastructure, they are also working to support the infrastructure within the public sector in order to best share information, internally and externally, and to deliver integrated services. So, successful E-Government should be able to:

- Attract people who connect to the internet on the use of electronic services.
- Move people online who are not already there.

E-government should deliver public services in ways that citizen and businesses want them, using the internet and other technologies as enabler (Reffat, 2003).

European commission defined the objective of E-government is to improve public services and democratic processes and strengthen support to public policies should be use Information and Communication Technologies in public administration combined with organizational change and acquisition new skills (Corradini, Hinkelmann, Polini, Polzonetti, & Re, 2009).

2.3.1 E-government Levels

One of the most goals of e-government is find a best way to make citizens and business closer to their government. E-government has many relationships with several levels and collaborated with these stages by many ways. Firstly, the government has a relationship with citizens (G to C) which are manifested through delivering services to the individual. Secondly, a relation between government and government (G to G) this is an online non-commercial interaction between government organization, departments, authorities and another government organization. Thirdly, a relation linked government to business (G to B) , the government agencies communicate with the services from business (Hahamis, Iles, & Healy, 2005). The next table shows the relations with government more clearly.

Table 2.1 Stages of e-government growth and type of government relationship (Reddick, 2004)

Type of government relationship	Stages of e-government growth	
	Stage I: Cataloguing	Stage II: Transactions
G2C	View information about the activities of the government and citizens on the Internet	Support the online transaction for citizen by use online services and forms.
	Example: News and information about transactions and services	Example: renewal passport
G2G	View information for government levels and its employees online.	Support online transaction for government level and employees by using online service, forms and databases.
	Example: Intranet with benefits information	Example: Provide online training
G2B	View information for businesses about government online.	Services and forms online and databases to support businesses transactions with government
	Example: Online product review of office supplies	Example: Make purchases of office supplies online

The successful implementation of e-government is that it takes into account the technical as well as social and political aspects of the adoption of technology (Maheshwari, Kumar, Kumar, & Sharan, 2007). Digital government contains huge benefits. Government serves all parts of society, and grants the legal, political, and economic infrastructure to encouragement other parts, besides that it brings to bear extreme impact on the social factors that embody to their development. (Lam, 2005).

Some researchers explain these aspects as obstacles and challenges face e-governments application design. There are many obstacles make the electronic

governments weekly to serve all citizen parts like digital divide which lead to put gap between government and citizen and the government need to IT laws that allow to transfer all transactions and services electronically. Figure 2.1 explain the challenges and obstacles that face the electronic government with more clearly.

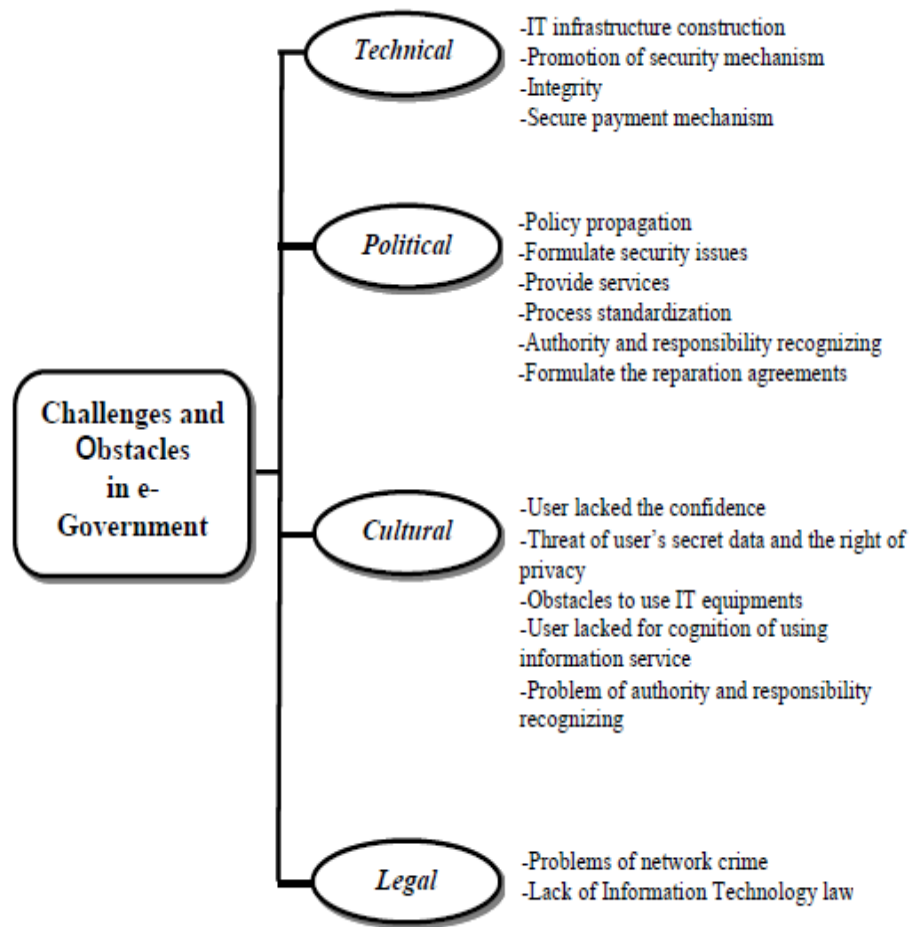


Figure 2.1 Challenges and Obstacles in e-Government

Source : (HWANG, LI, SHEN, & CHU, 2005).

2.3.2 Government in Saudi Arabia

One of the most important projects in Saudi Arabia is Al-Madina Almunwara E-Government project. It offers many services for citizens and business. One of the services

included in this portal is the Omrah project. The main goal for Omrah project is extracts Omrah visas electronically. The flow of execution the Omrah visas as follows:

- The Omrah agents abroad were submitted visa application via internet.
- The ministry of Hajj, Foreign Affairs and Interior handled the application.
- The visa will issue through 24 hours.

In this project, they use two types of services; the first is providing information or form print-outs. There are no any security considerations for this type, the user be able to read the information or fill out forms that will does submit in-a person. The second type of services takes into account the security aspects, for instance: retrieval of driving license, it needs the personal information for driver. This service makes passage of the private data in the request form. The record of citations sent back via email or SMS (Gamlo & Bamasak, 2009). This portal implements most basics of e government structure. It built trust between government and citizen by used notifications. Many government agencies can validate citizen's forms through this portal.

2.4 E-Services:

Electronic Government transforms the delivery of public services from standing in line to online: anytime, anywhere and in interactive mode. The services affected include general information and regulations, education and culture. The modern delivery mechanisms provide the opportunity to enable citizen participate in government, by force the citizen to contributes significantly in the political issues, specific projects, service delivery problem and cases of corruption (Administration & Africa, 2011).

E-Service is a fast-growing field that is taking a lot of attention and significance. Citizens request that government should provide e-service with high quality, quantity, and availability 24/7 (Bruecher, Klischewski, & Scholl, 2004). For the deployment of e-services, governments are seeking for developing information system and electronic services to be able meeting the ongoing needs of the citizens (Parial, Rahman, & Hossain, 2011).

E-Service considered a Web-based software which is part of the government web system whose aim is to automate support or partly automate an administrative operation. This operation can be shown by an order from a citizen (UNU-SAFP, 2011).

2.4.1 E-Services Types

Governments provides many electronic services to citizens through e-Government, these services are divide into the following phases:

- **Informational:** Most of the governments have developed a web presence, and it has provided many of the initiatives to be more advanced (Silcock, 2001). This stage is easier than other stages; it only works to provide the necessary information. The quality, usability and currency of the content determine the value of this phase of e-Government (Ali, 2008).
- **Interactive:** E government put different security levels for online interaction. For example, any citizen can fill registration application online and enter complaints. These transactions do not consider a secure transaction like financial or authenticate document's transactions that need a high level of authorization and validation.

- **Transactional:** This phase is a critical phase, it provide a secure transactions with high degree of authorization. The main characteristic of this phase is enabling e-Citizen to complete tasks online.

Citizens now can make application for passport online, visa, NICs (National Identify Cards) and make payments online. So, it needs a high level of security and strong infrastructure for secure transaction.

- **Collaborative:** This phase illustrates the significant of collaboration between citizen, business and government projects. So, it is important to bring suppliers, end users and the government in one network for increasing value creation (Parial, et al., 2011).

2.4.2 E-Services Delivery:

Nowadays, the information and communication technology is a mainly enabler for delivery of services to the citizens in the government's applications. The government should have an understanding IT value and identify the user's requirements before starting in e-government. In addition to that the new opportunities given by the usage of ICT technologies is very important to get better service delivery process.

The government must do evaluation about it services and validate if their citizens take better output in terms of the quantity and quality of traditional results and provide equal access to government services, better information and quality of services . This will enable government to increased productivity, cost effectiveness and improved the service delivery.



Figure 2.2 IT Value

Source: (Administration & Africa, 2011).

So, delivering an e-service it is significant to keep in mind that access to a web site does not grant per se the same level of trust. Too many things remain hidden in perception of the citizen. It is important to change the process in order to initiate mechanisms that can help to increase citizen trust (Corradini, et al., 2009).

2.4.3 Frame work for e-government services in Italy

Region Marche is one of the Italian region located in East-central part of Italy. There are survey for what concerns transactional services where two-way interaction are supported and complex services like taxes, fees, postal services are available in this case (Corradini, et al., 2009).

The results of the survey show that in small municipalities, the current implementations of Government Delivery Services are not used by access log files of e-service delivery systems. Region Marche municipalities guaranteed shared registry data in line with the regulation of National Registry Office Index. It is not valued as it should be and registry updating is just a time-consuming activity due to lack of integration in e-service delivery. The scenario is not so different in big municipalities where internal

competencies try to support the promotion of e-government actions and the definition of the service delivery process with poor results due to there is less coordination with the citizen.

This case indicates to the weakness of notification service (for public utility services) that be supposed to start using different processes to provide a solution to the problem informed by a citizen. The existing implementation of the service introduces a web form where citizens write down the case, so after the submission the administration manually manages it without implementing any kind of coordination, control, sharing and transparency.

2.5 Electronic Embassy

Now, most of the embassies in the world have homes on the internet; the electronic embassy is easy way for citizen to access their services now the information that's they need. The embassies followed the government agencies in linked with Information communication Technology to increase the quality of services. This seek to use ICT came due to the elimination of paperwork and to reform its public administration with citizen with find easy way to offer services for citizens and execute the transactions quite quickly.

2.5.1 United State Embassy in Australia

The US embassy in Austria recognized the importance of an integrated approach to electronic service delivery. It offers multiple services and therefore provides many sectors for business and citizens, the website offers citizens many interactive services ranging from ordering birth certificate to renew passport. It give a choice of two way to

send services application one by mail or go by self to embassy. The website is easy to use the user can find the services in easy way. The website depend on one way to interactive with users, the user download the application and fill it after that send by mail (Austria, 2011).

Use on way in the provision of services will reduce the presence of citizens in the use of the website and lose confidence between citizen and government. Time response to citizens request is fundamental to create trust; so it need two-way road i.e. use notification that mean “service agility” (Parial, et al., 2011).

The next table view and explain many cases of embassies and explain the work flow for transactions.

Table 2.2 Electronic Embassies Services

No.	Embassies website	Services	Service Description
1.	Australia Embassy in Cambodia (Cambodia, 2011)	Visa	The Australian Embassy offers easy steps to find visa and request visa for going to Australia. To apply visa the citizen can visit visa wizard link that included inside embassy page. Visa wizard help the users to find the suitable visa by fill their information in the visa wizard. After that the users make an appointment the appointment is needed to lodge the visa application at the embassy. Finally, the users do not

No.	Embassies website	Services	Service Description
			need to come into the embassy for collecting an application form due to its available through embassy website.
		Registration	All Australians traveling or residing overseas can register online without going to embassy.
		Passport	The passport form can be found online, but, all applications must be lodged in person at the embassy. The citizen can report a lost or stolen passport online or in person at the embassy.
2.	Malaysia Embassy in China-Beijing (Beijing, 2011)	Visa	The embassy website included the user's visa application form. The users fill the form out and send it to embassy.
		Registration	The citizen can download the registration form from website and print it out to fill it.
		Passport	The website gives full description about how to renew the passport. It includes a link for Malaysian Immigration Department to download the passport application form from it. There are two options to achieve an application: 1) the user can download the application form

No.	Embassies website	Services	Service Description
			from immigration website. Or 2) at the immigration counter at the Embassy. The application must be lodged in person at the Embassy.
3.	UK Embassy in Malaysia (Malaysia, 2011)	Visa	<p>The website view UK Border Agency link for applying visa. This page explains all things and information that does require for applying visa. The steps for applying visa as follow:</p> <ul style="list-style-type: none"> - The user should submit visa application online. - Print the form out and sign the complete form. - Send it by mail or by embassy counter. - Paying for visa application fee by cashiers order, by cash in any alliance bank or by online fund transfer.
		Registration	In the website there is no online registration or registration form.
		Passport	The website give citizen full description about passport transactions (renewal, stolen, lost passport). In the UK case the citizen can download the passport application form and

No.	Embassies website	Services	Service Description
			fill it out, the embassy but a secure way for sending the application form; the user can send it by DHL and passport fees can pay by credit card.

In these different embassies web sites there are different work flow for executing transactions work flow, every embassy has own policy for it transactions and offering services, the main control in using full requirement for e-transaction and e-services is the government policy.

In fact, implement full functions for E-government depends on government progress and the integration between government departments. These differences make us to find appropriate model for offering services but this model is suit with government policies and are satisfactory to the citizens.

2.6 Electronic Transactions

Electronic Transactions are technically described as the processing and transmission of digitized information associated to products and services (Ministry of Commerce, 2003).

According to Gamlo & Bamasak (2009), electronic transactions are come under e-government. Transactions are depicted to be an agreement, communication, or movement carried out between different entities or objects, often involving the exchange of items of value, such as information, services and money. In the case of e-transactions, the items

exchanged are data travelling across networks as part of given e-government services. Securing travelling data is a main part of the e-government security obstacle.

2.6.1 E-Transactions Security

The main security requirements that needed for protecting E-transactions:

- **Authentication and non-repudiation services:** Audit a system user identity, a consequence to that reject allowing a user to counter a valid transaction user taken part in.
- **Integrity service:** Make sure the information is correct during storage; by deny unauthorized deletion or alterations.
- **Confidentiality service:** where information is only disclosed to authorize trust sides.
- **Availability:** The services are available when it's needed until spend time and money.

These requirements are very important in e-transactions security to grant the fundamental Security services needed. As well, this is confirmed by Lofstedt, who said that e-government security efforts must follow the following security services of availability, confidentiality, integrity, and accountability (Löfstedt, 2005).

2.7 Summary

This chapter discussed and reviewed many related studies that correlated with the problems. It is worth noting, that this study gives the reader full description and information about the latest ways used in e-government. This chapter explain the electronic government and the obstacles that's faces it, electronic services and its types, electronic embassy and electronic transactions.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

To achieve the research questions must be follow organized way for completing research this way is a research methodology; the research methodology content of set of methods and techniques like instrument, data collection and data processing techniques which help researcher to build his research in right way. Hence, the explanation and details of the description phases of the methodology carried out in this research has been discussed in this chapter.

3.2 Research Methodology Design

In recent years many researchers were able to follow the research design in the Information Systems Research field, successfully making the case for the validity and value of design science (DS) as an IS research paradigm and in reality integrating design as a main component of research (Peffer, Tuunanen, Rothenberger, & Chatterjee, 2007).

Designed science paradigm looks for create new techniques that clarify the ideas, practices, technical skills, and products during the stages of analysis, design, implementation and management. Furthermore, use of information systems can be efficiently and proficiently accomplished. (Hevner, March, Park, & Ram, 2004). It

addresses research during the structure and evaluation of artifacts designed to achieve the business requires picked out through behavioral research, and is the kernel of any IS design science research methodology (Kuechler, Vaishnavi, & Kuechler Sr, 2007). The IS methodology that has used in this study is an agreeable approach, wonderfully selected, illustrated and approved among the specialists in Information System Research Design. The research consists of several steps. The following figure exhibits the main steps of the design research methodology (Vaishnavi & Kuechler, 2007).

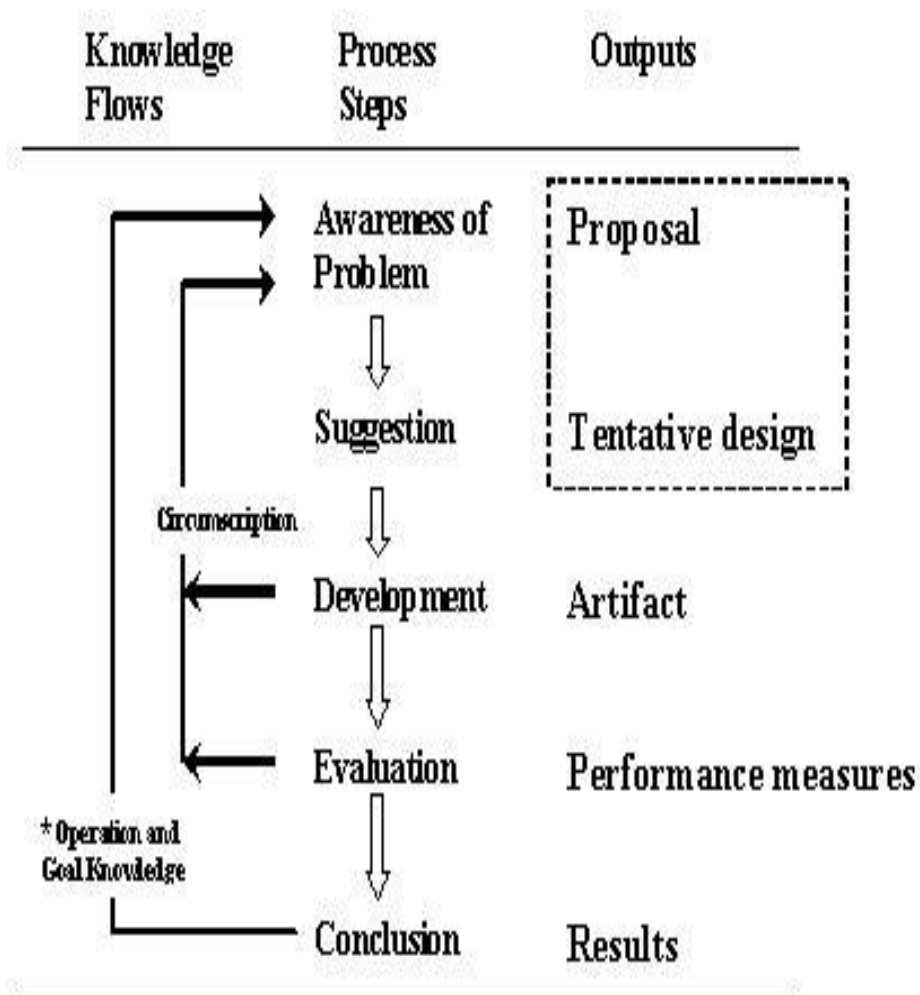


Figure 3.1 The Methodology of Design Science Research

Source: (Vaishnavi & Kuechler, 2007)

3.2.1 Awareness of problem

Awareness of problem is the first phase in IS methodology, whereby it has a high priority significant. It is to determine problem first, state the domain of the research and the expected output of the research and understand the objectives of this study. The domain and predictable output round up during an interview with Palestine Embassy staff and reading-related ideas and reviews.

Data collected from Palestine embassy and from other E-Government applications for many countries that follow ICT to offer its transactions and services. As well, data collection is the main part in awareness of problem phase. The data in this research has been collected from many governments' cases and from different researchers through interviews, the embassies websites and related ideas and reviews. This research focuses on the consular services for Palestine embassy that are offering to those stay in Malaysia. Especially, it focuses on find best way to authenticate documents through internet and allow Palestinian residents to register their information online.

3.2.2 Suggestion

Based on the problem the suggested system is developing e-government application for Palestine embassy by use many technologies and tools. The prototype will allow users to assign the transactions using internet technology and users can access to the system at any time anywhere. It will provide also the information of terms and condition of consular transactions process.

Hypertext processor (PHP) and MySQL are the world's best mixture for designing data-driven sites. PHP is a general-purpose server-side scripting language originally

designed for web development to create dynamic web pages (Merrall, 2005). In addition to that Apache Tomcat web server and Mysql database have been used. The output of this phase is the tentative design that embodies the Unified Modeling Language (UML) Diagrams.

3.2.3 Development

This phase content from two sub phases as follow:

3.2.3.1 System design

In fact, the data base tables and the relations between its has been designed. As well, using Unified Modeling Language (UML) as a graphical language for visualization, it is a best way to construct, document and specify the artifacts of a software intensive system. This step has been explained deeply in chapter four (Booch, Rumbaugh, & Jacobson, 2005).

3.2.3.2 System developments point

This study has used many technologies and tools to develop a prototype these are as follow:

3.2.3.2.1 Development Technologies

The technologies that are used through system development process as follow:

- Hypertext processor (PHP) was used to implement the presentation layer of the system.
- Hypertext Markup Language (HTML) was used in the presentation layer appearance.

3.2.3.2.2 Development Tools

The main tools that are used through system development process as follow:

- *Apache Tomcat* server was used as the web server for the system.
- *Dreamweaver IDE* was used to develop the PHP pages.
- *MySQL* database was used to build the system database.
- Rational Rose software used to sketch and analyze all operation and methods.

The system has totally used PHP technology with Mysql database to store the data. As well as, Rational Rose software will be used to analyze all operation and methods.

3.2.4 Evaluation

Evaluation is behaved to ensure that the prototype functions and operations are fulfilled the project requirements and execute the user's satisfactions. So, firstly prototype functions should be tested to guarantee they are free of errors. Secondly, evaluate the users' satisfaction with the project; a questionnaire will be distributed among the Palestinian residents and Palestine embassy staff to check their satisfaction with the proposed system.

This research used IBM's questionnaire through evaluation to measure user's satisfactions about a developed system. Thus, the Computer System Usability Questionnaire (CSUQ) has been adopted in this phase (Lewis, 1995). So, the project will be evaluated in many aspects. The evaluation process and its outputs discussed in particular in chapter 5.

3.2.5 Conclusion

Once the project tests successfully, the users can use it and see the services and all transaction of Palestine embassy.

3.3 Summary

To sum up, this chapter defined the methodology that being used for this study. The General Methodology Design Research is being chosen as this methodology is accepted among the experts in Information System Research Design.

CHAPTER FOUR

SYSTEM ANALYSIS AND DESIGN

4.1 Introduction

This chapter discussed the Embassy Web Based Site functions. As well as, it defined the functional requirements and non functional requirements. The system requirements are extracted through an interview with embassy staff. The interview process had been discussed in the first stage in the General Methodology Research Design.

4.2 Domain Understanding

A significant goal of this study is to develop a Web Based System for Palestine Embassy. All Palestinian residents and embassy staff can use the system and make the transactions that have been inserted electronically. The prototype functional and nonfunctional requirements are briefly discussed in part 4.2.1.

4.2.1 List of Requirements

A clear requirements lead to a successful system. System requirements itemize what we require and need from the system. The functional requirement is what we desire the system to do but the non-functional requirements are the constraints on the forms of solution that will encounter the functional requirements (Coley, 2007).

4.2.1.1 Functional Requirements

The functional requirements of the system are specified in the table 4.1. There are five requirements that have been specified.

Table 4.1 Functional Requirements

Requirements	Description
Requirement 1	The system shall be accessible by all users.
Requirement 2	The system shall be able to submit documents.
Requirement 3	The system shall be protected by username and password when user request transaction.
Requirement 4	The system shall be listing all available services to users.
Requirement 5	The system has allow users to register online.

4.2.1.2 Non-Functional Requirement

The Non-Functional requirements of the system are specified in the table 4.2. There are five requirements that have been specified.

Table 4.2 Non-Functional Requirement

Requirement	Description
Operational requirement	1- The system operates efficiently on different platforms.
	2- The system works over web environment.

Usability	3- The system is available for the user within 24 hours. 4- User interface must be excellent GUI.
Security requirements	5- The different level of security must be implementing for different users.

4.2.1.3 Software Requirements

The main Software requirements that used in this study are as follow:

1. Macromedia Dreamweaver 8
2. PHP 5.2.5
3. MySql for Database
4. Apache as Personal Web Server
5. Rational Rose for UML model and design

4.3 System Design

Development A web Based System for Palestine Embassy is designed and sketched by UML diagrams based on the requirement that have been applied before. It's necessary to satisfy the defined requirements. In addition, it is necessary to achieve the objectives to provision the defined requirement based on efficiency, cost, flexibility and security. UML includes many of relationships to trace content from one model to another and provides use case model and object model (Artim & Harmelen, 1998).

4.3.1 UML Diagrams

Unified Modeling Language (UML) is approved by Object Management Group as the best way to model object oriented programs. There are several types of diagrams that

included by UML, for instance, Use Case, Sequence Diagram and Activity Diagram. UML is a standard language for visualizing, specifying, constructing and documenting the artifacts of software project. Also, UML support project group to communicate and explore potential designs (Braun, Sivils, Shapiro, & Versteegh, 2001).

4.3.1.1 Use Case Diagram

Using use case diagram is a significant for modeling the functionality of the system by using actors and use cases. This diagram explains and shows the relations among use cases and actors. The use case diagram for Palestine Embassy Web Based System is shown below in the figure 4.1

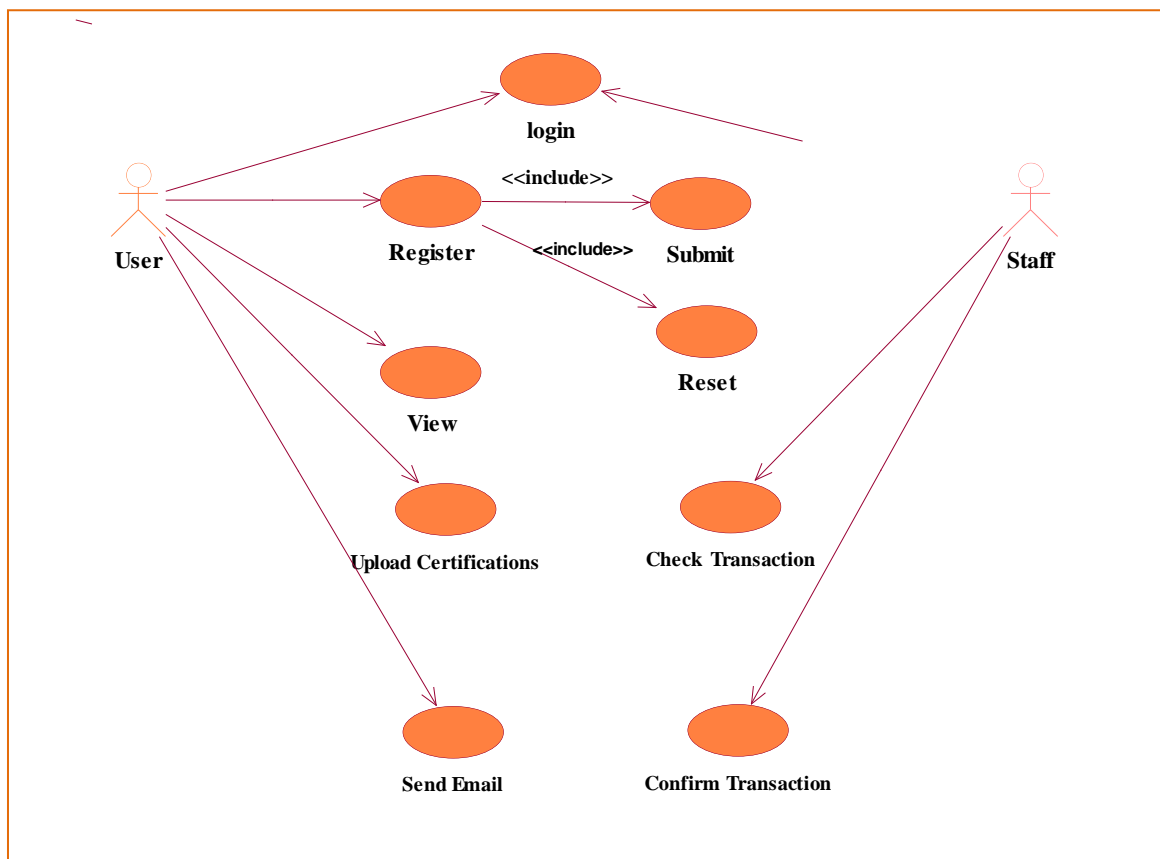


Figure 4.1 Use Case Diagram for Palestine Embassy Web Based System

There are eleven use cases and two actors, the user can register online, and upload his certificates that are need authenticate from embassy and send email through the website. The staff actor is able to check and confirm transactions.

4.3.1.2 Activity Diagram

Activity diagram is a logical model which describes system functions that are modeled by a use case. It is a very applicable to represent business activities in the early phases of a project and represent a set of actions. Activity diagram be able to show activities that are conditional or parallel (Chaudron, Van Hee & Somers, 2003). The Activity diagram for Palestine Embassy Web Based System is shown below in the figure 4.2.

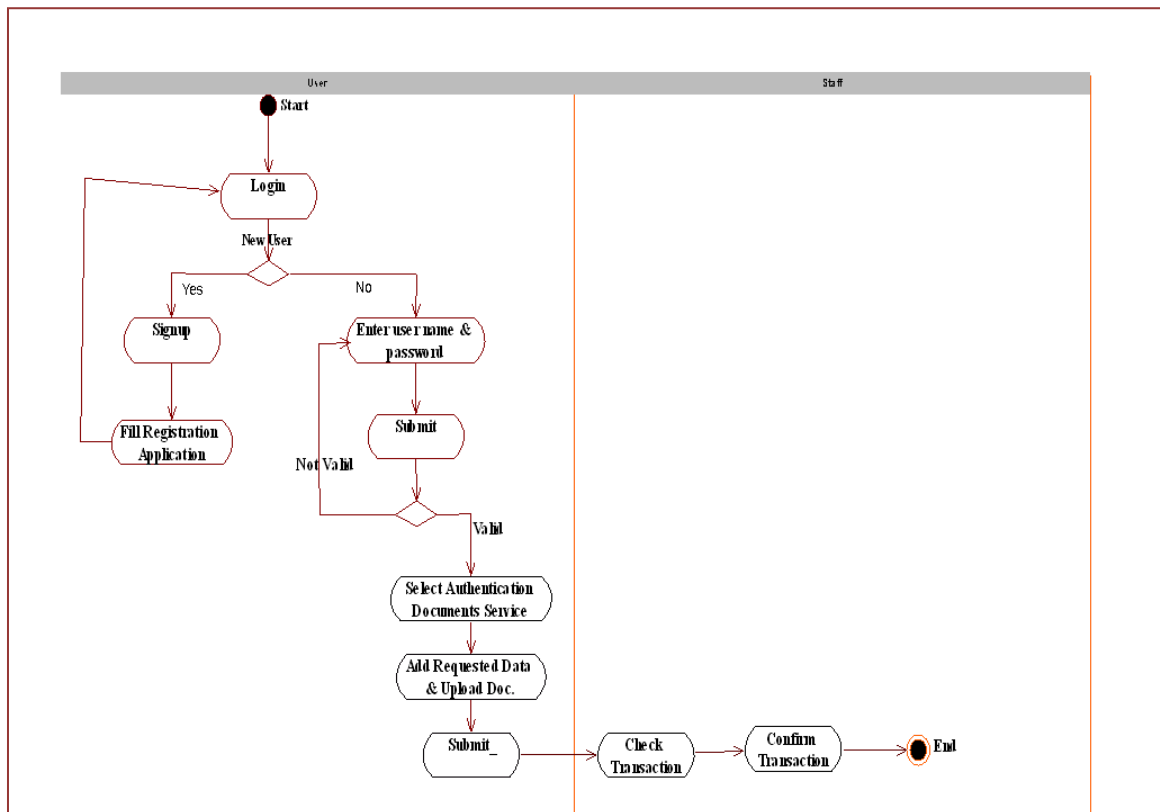


Figure 4.2 Activity Diagram for Palestine Embassy Web Based System

The diagram shows the flow of the service request from the beginning. The user start the process from system login until take permission to make his transactions. If the user is new must be fill the registration form after that he can continue for requesting his transactions. When the user choose the authentication documents he must be fill the require fields and upload the necessary documents. Then the second sector a staff checks the transaction and confirms it.

4.3.1.3 Sequence Diagram

Sequence diagram is an interaction diagram that used to describe the object interaction. It is the most common UML artifact for dynamic modeling that focuses on identifying the reaction within a system. Sequence diagram use to illustrate the logic of method that can be used to explorer the difficult operation, procedure or functions (Obrenovic & Starcevic, 2004).

In addition, sequence diagram use to model the logic of services, a service is efficiently a high-level method, often one that can be invoked by a large kind of clients. This provides web-services as well as business transactions implemented by many of the technologies.

4.3.1.3.1 Sequence Diagram for System Login

The sequence diagram for System Login is shown in Figure 4.3 below. This figure shows how to login into system by users (Staff, Residents) through clear steps. The user is login into system by his email and password that entered before in the registration form.

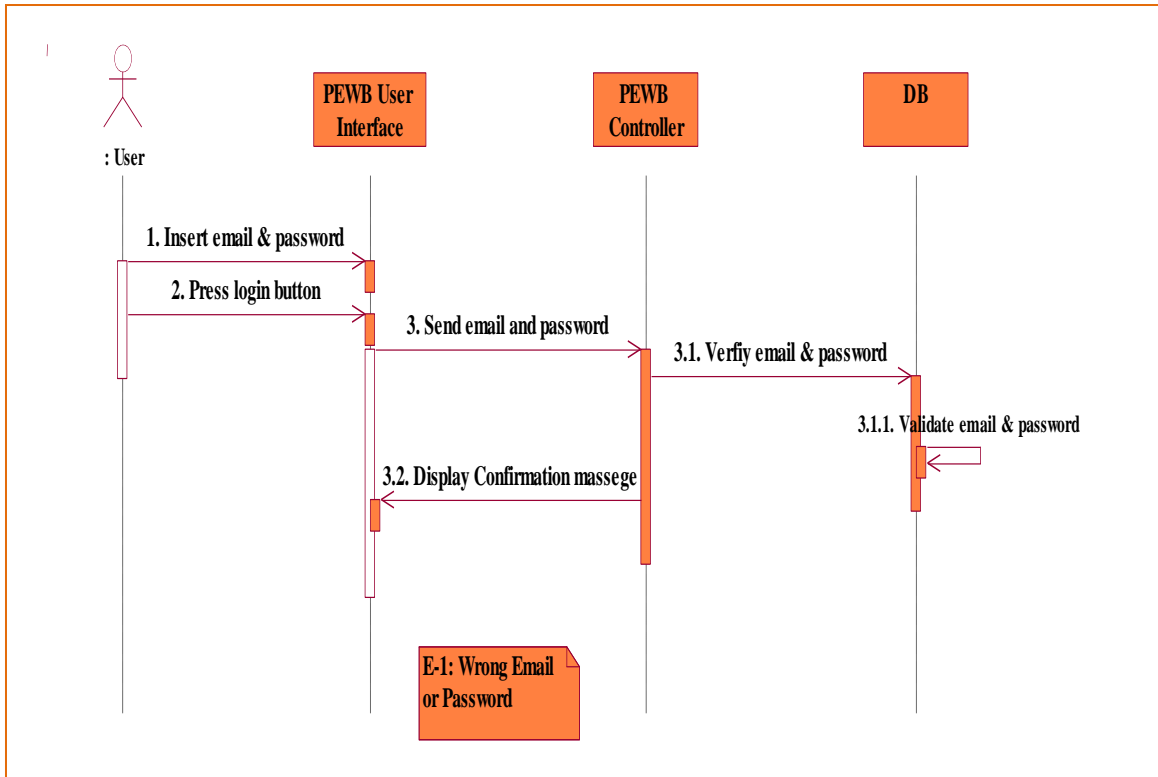


Figure 4.3 Sequence Diagram for System Login

4.3.1.3.2 Sequence Diagram for Online Registration

The sequence diagram for Online Registration is shown in Figure 4.4 below. This figure shows how the user registers his information online. In addition the figure shows the alternatives process for reset the form and the exceptions for incomplete process.

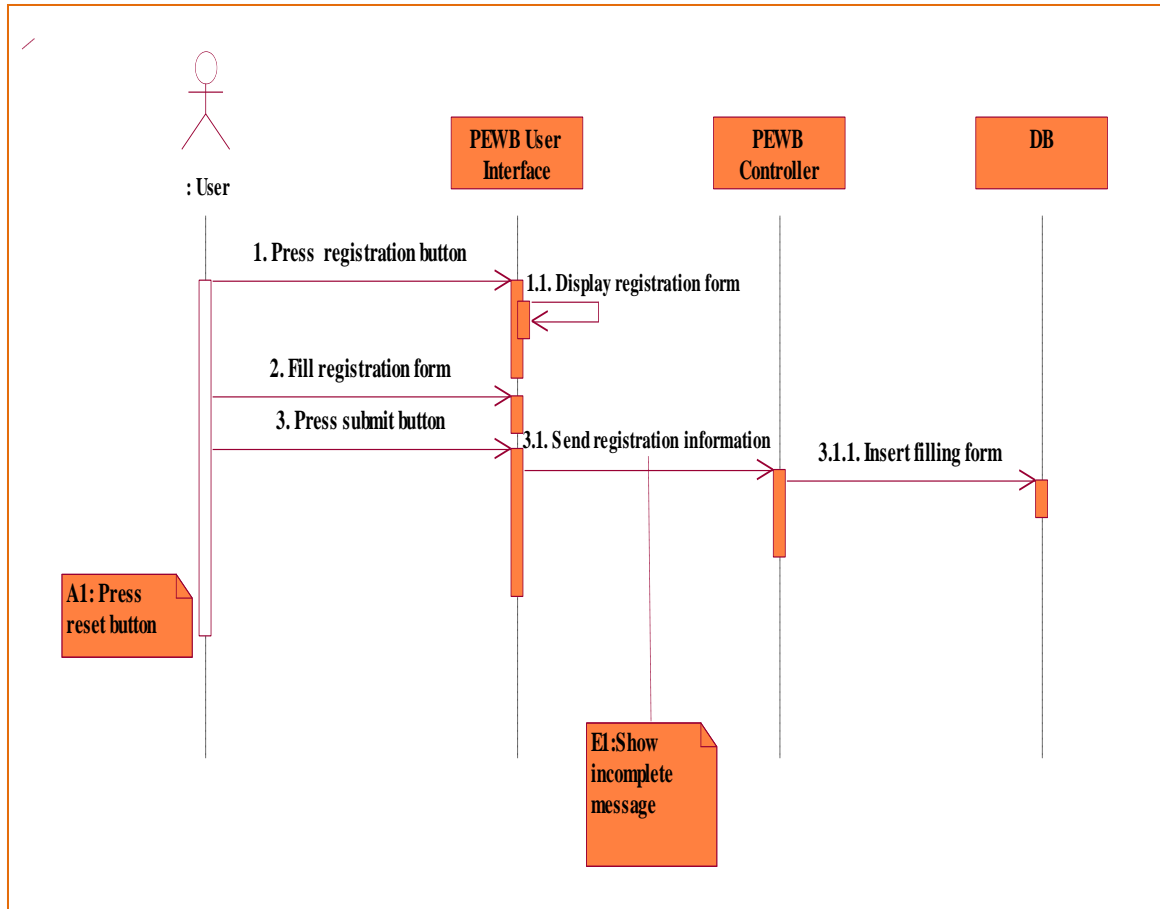


Figure 4.4 Sequence Diagram for Online Registration

4.3.1.3.3 Sequence Diagram for Authentication Transaction

The sequence diagram for Authentication Transaction is shown in Figure 4.5 below. This sequence diagram illustrates the main steps to upload the documents that need authenticate through a system. It also shows how the system replies and how the transaction inserted into database.

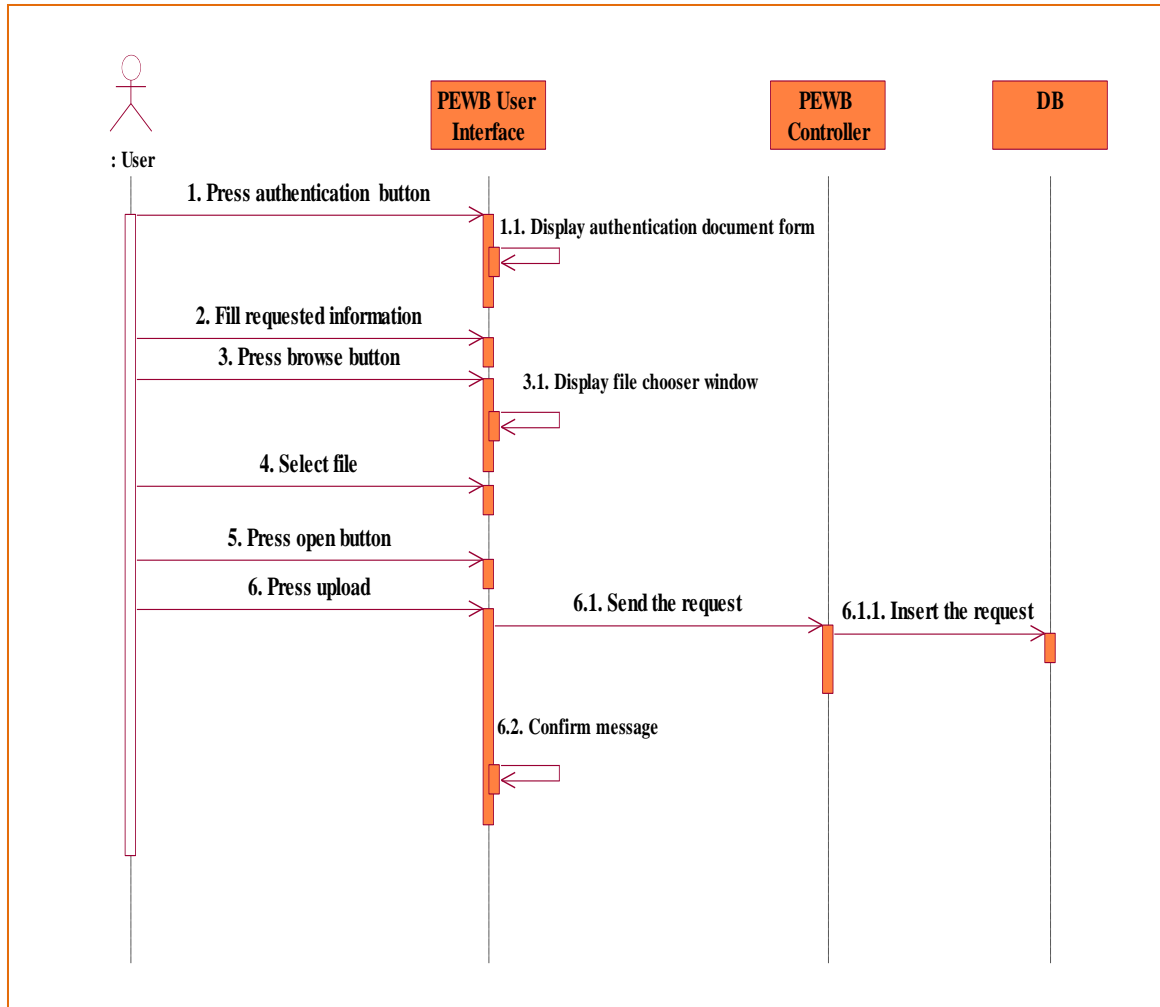


Figure 4.5 Sequence Diagram for Authentication Transaction

4.1.3.4 Collaboration Diagrams

Collaboration diagrams (Interaction Diagrams) explain the interaction among system objects. It shows the message that being sent through classes and objects (instances). The elements of a collaboration diagram are fundamentally the same of a sequence diagram (Johansson, 2009).

4.1.3.4.1 Collaboration Diagram for System Login

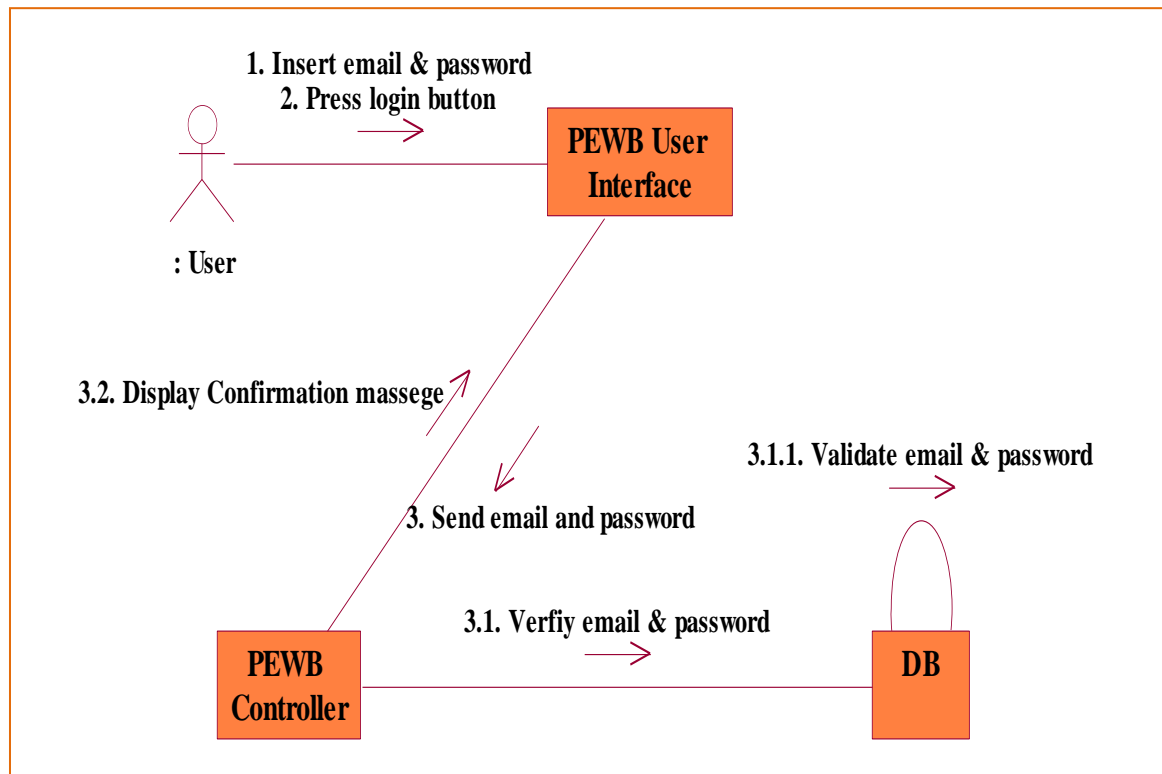


Figure 4.6 Collaboration Diagram for System Login

4.1.3.4.2 Collaboration Diagram for Online Registration

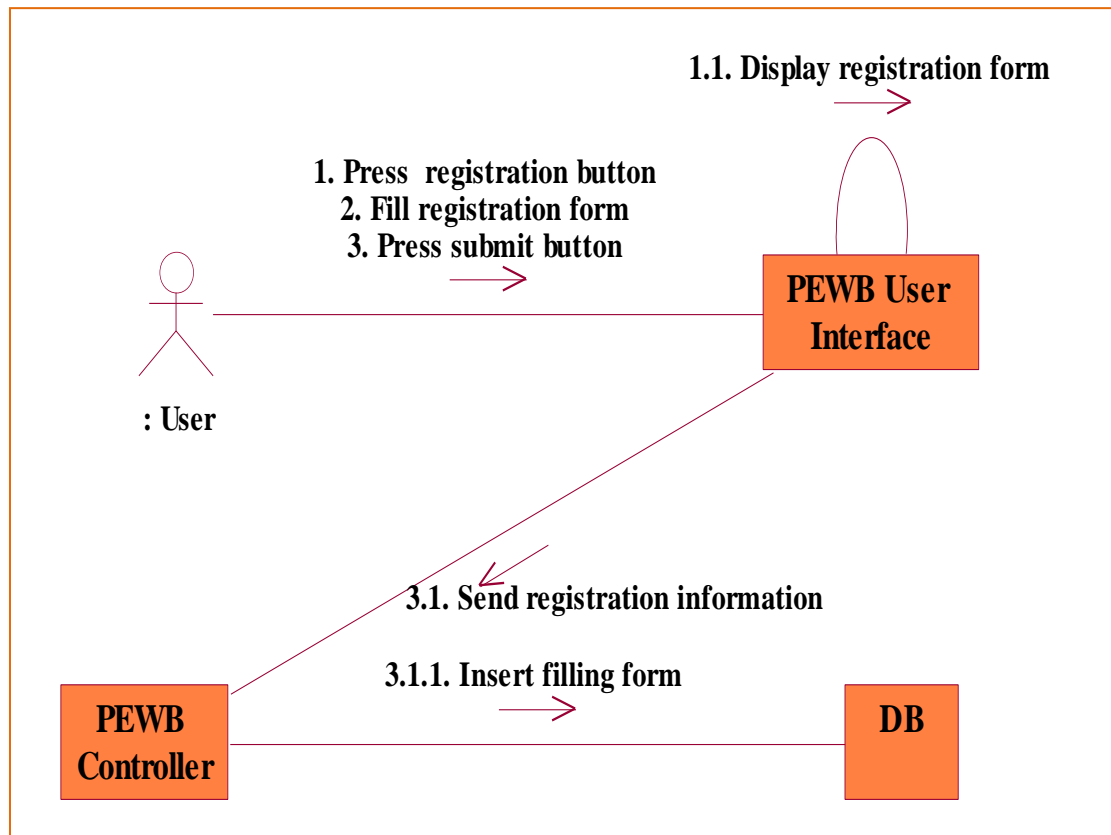


Figure 4.7 Collaboration Diagram for Online Registration

4.1.3.4.2 Collaboration Diagram for Authentication Transaction

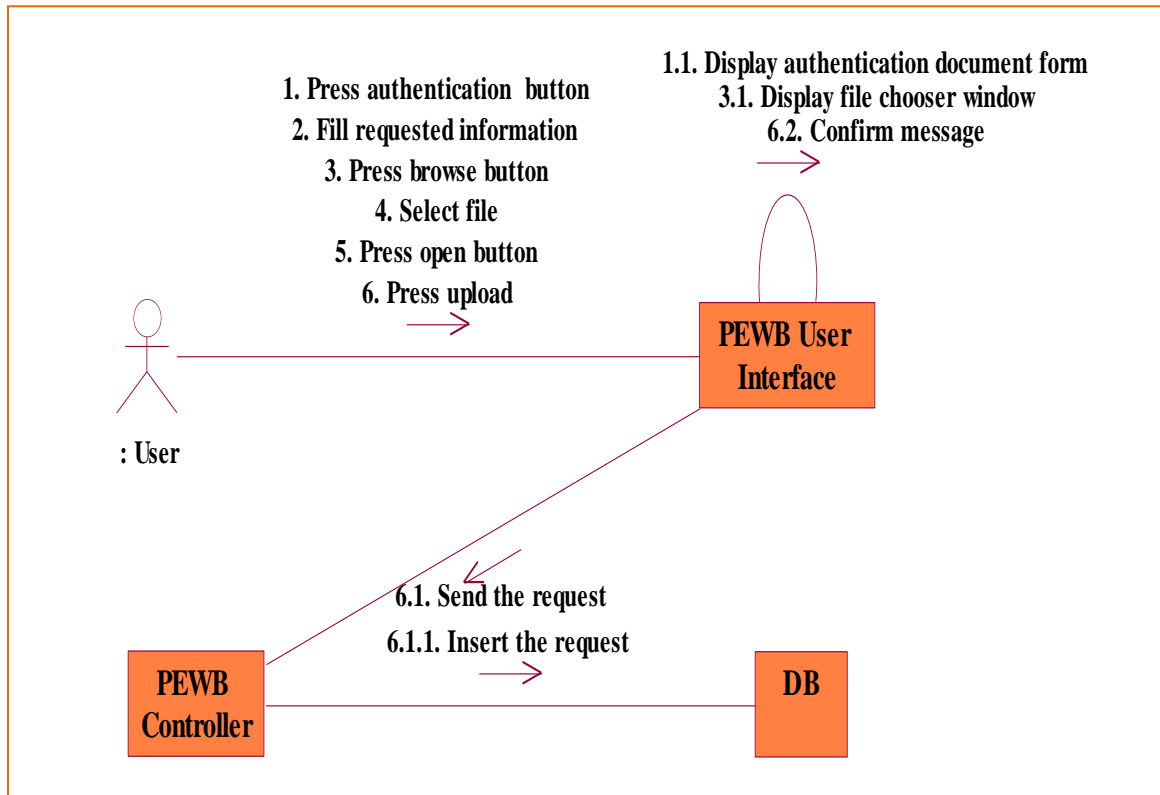


Figure 4.8 Collaboration Diagram for Authentication Transaction

4.1.3.5 Class Diagram

Class diagrams illustrate the fixed structure of the system. It is the mainstay of the object-oriented method including UML. It models class structure and contents using design elements like classes, packages and objects (Oestereich, 2002). In addition, class diagram display the main relationships for instance containment, inheritance, aggregation, composition and associations.

The class diagram for the embassy website is shown in Figure 4.9 below. This class diagram illustrates the main classes in the prototype. It also shows the relations between classes and the main class attributes, operations.

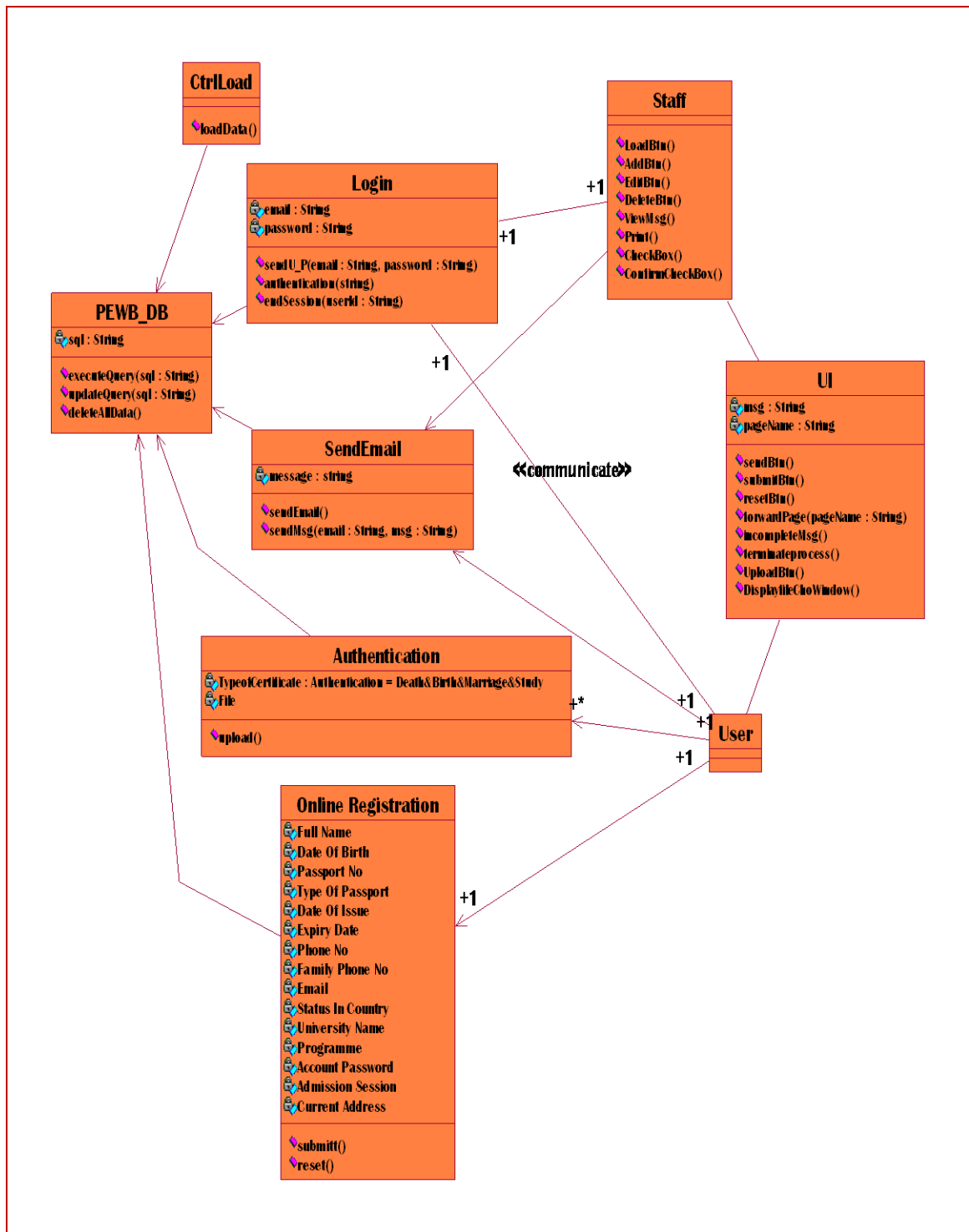


Figure 4.9 Class Diagram for Palestine Embassy Web Based System

4.3.2 Palestine Embassy Web-Based Prototype Interfaces Design

The Palestine Embassy Web-Based Prototype interfaces design is illustrate briefly in section 4.3.2.1 until 4.3.2.4 below.

4.3.2.1 Main Page

This page is a main page for website; everyone has permission to see it and used it. This page is content of menu that shown in the figure. The menu content of five buttons for homepage, about Palestine, login to the system, registration and about us that has information about embassy address.

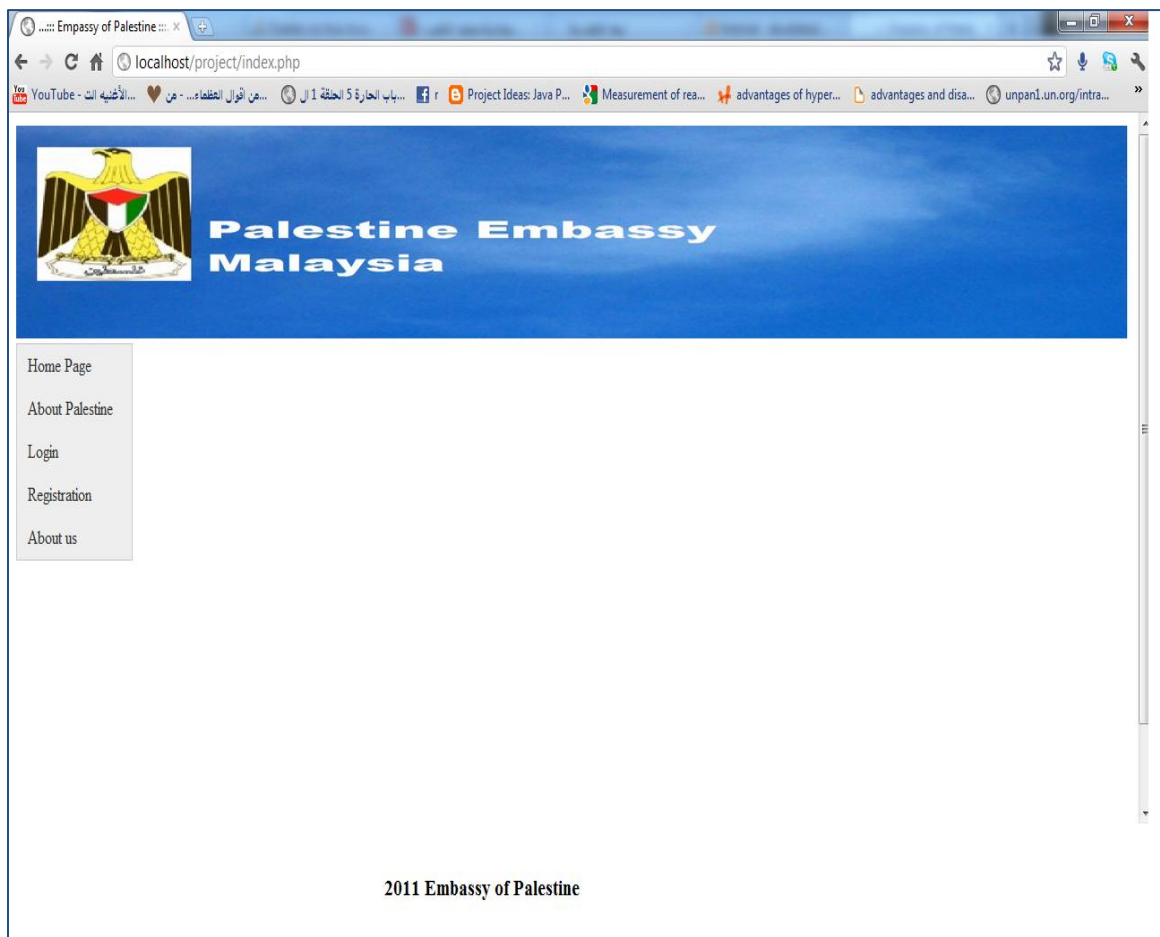


Figure 4.10 Main Page

4.3.2.2 Login Page

The users use this page for login; he must be register before by fill online registration form and he can login by his email and password. The login page makes the user able to use the transactions that included in the site like authentication documents service.

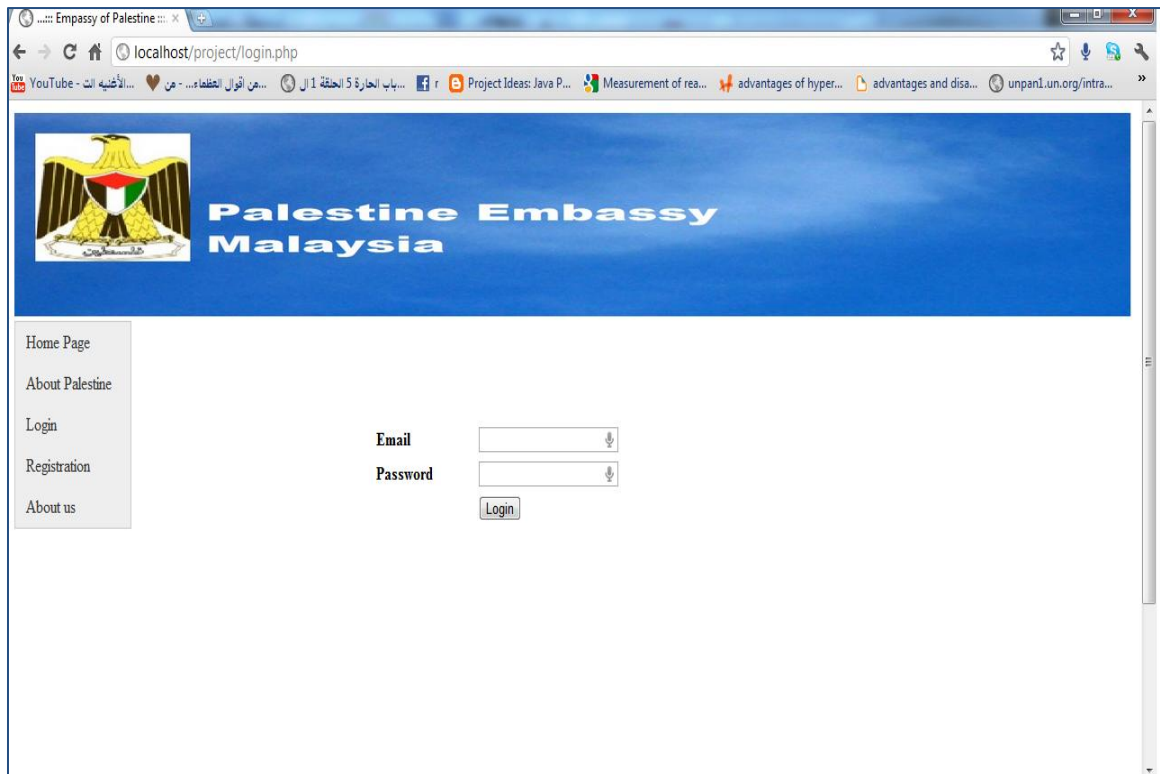


Figure 4.11 Login Page

4.3.2.3 Registration Page

This page is used by residents to fill their personal information. The page display the require information for registration after fill these fields the user can press submit to save his information into database or reset the fields. Figure 4.12 show the interface design for online registration

Figure 4.12 Online Registration Page

4.3.2.4 Authentication Page

This page used by residents to authenticate their documents. This page display is very clear and simple, the user need only identify the type of certificate (Birth, Death, Marriage or Study) and upload the require documents. After that the user press upload button to save the transaction in the database. Figure 4.13 show the interface design for Authentication.

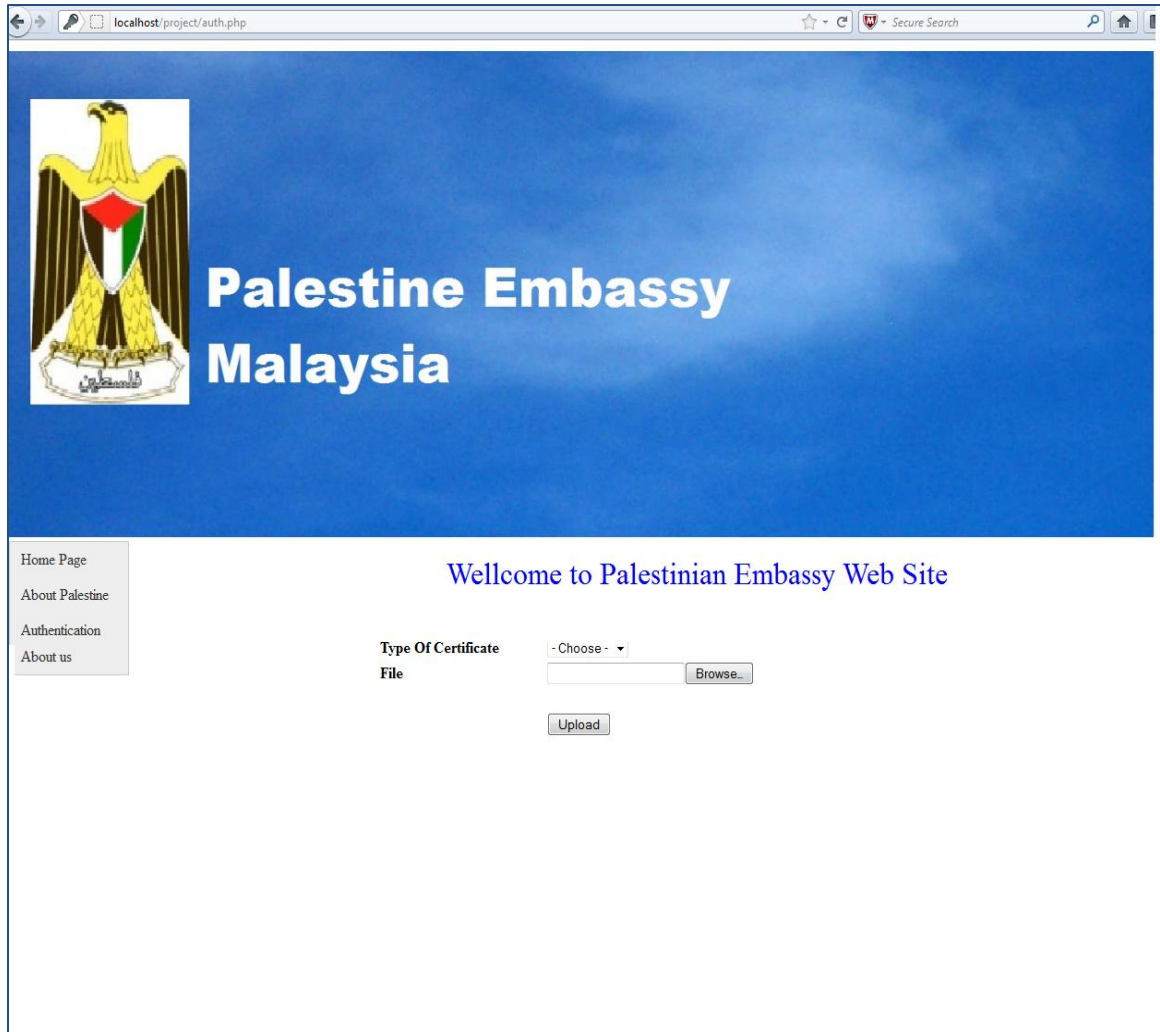


Figure 4.13 Authentication Page

4.3.2.5 About Palestine

This page displays the information about Palestine issues, last news and government news. Any person can view this page that shown in figure 4.14.



Figure 4.14 About Palestine Page

4.4 Summary

The prototype has been developed to simplify the embassy transactions process. Accessing to the included transactions is very simple, and no more complexity occurred while the users fill in the forms. In addition, the users can entry to the system at any time and at anywhere. This will also make the embassy services more efficient.

CHAPTER FIVE

FINDINGS

5.1 Introduction

This chapter will discuss on the prototype evaluation. The prototype has been tested and evaluated to prove that the system meets the declared requirements. A testing usability is present as one of the main methods in usability evaluation, which need to take the satisfaction of end users when using a specific system.

5.2 Evaluation Technique

Evaluation task is judgment and observe all aspects of the project and how the system perform in terms of usefulness and operability. The data are measures of participants' opinions or attitudes concerning their perception of usability. The data are also measures of participants' performance (such as scenario completion time and successful scenario completion rate). This research use a questionnaire to test it, a questionnaire was distributed among the twenty five Palestinian Postgraduate students in University Utara Malaysia (UUM) and Palestine embassy staff to check their satisfaction with the proposed system, the sample was content to 25 respondents exactly because the time limitation. The respondents took a free time to discover the prototype, after used it, they provided brief comments of the prototype functionality. Then they answered the questionnaire questions that shown in Appendix A and responses sent via email. The main goal of a questionnaire was to measure the extent of user's satisfaction and perception of the proposed system.

5.3 The Computer System Usability Questionnaire (CSUQ)

There are many different questionnaire techniques that's used to measure usability. One of widespread questionnaires is IBM Computer System Usability Questionnaires (CSUQ) (Lewis, 1995), that adopted in this study. The CSUQ items are appropriate for a field testing situation it content from four parts:

- The overall satisfaction factor (OVERALL) provides an indication of the overall satisfaction score.
- The system usefulness (SYSUSE) provides an indication of the system's usefulness.
- The information quality (INFOQUAL) provides the score for information quality.
- The interface quality (INTERQUAL) provides the score for interface quality.

The CSUQ used data from a mail survey so this consistency provides strong evidence of reliability of results and wide applicability of the questionnaire. Five-points rating scales (strongly disagree = 1, disagree = 2, natural = 3, agree = 4, and strongly agree = 5) is identified for scaling the questions.

Table 5.1 CSUQ Factors and Its Items

No.	Factor Name	Factor's Items
1.	OVERALL	Items 1 through 19
2.	SYSUSE	Items 1 through 8
3.	INFOQUAL	Items 9 through 15
4.	INTERQUAL	Items 16 through 18

5.4 Demography

The questionnaire distributed among 25 Palestinian residents in Malaysia. 22 of the respondents are UUM students, while the other 3 are from Palestine embassy. The respondents are postgraduate students from UUM.

5.5 Data Analysis

At this stage through questionnaire process the data and response has been analyzed by Microsoft Office Excel 2007. Pair of different techniques were present the descriptive statistics and reliability. In addition, the questionnaire content from 19 questions that's act four aspects as mentioned above and twenty five respondents have been answered the questionnaire questions.

5.5.1 Descriptive Statistics of Usefulness

There are eight questions from Q1 to Q8 which acts the usefulness factor. The following table 5.2 illustrates the descriptive statics of the usefulness factor and accurately displays the results for respondents' answers.

Table 5.2 Descriptive Statistics (Usefulness)

Questions	Number of respondents	*Mean	Percentage
Q1	25	4.44	88.80%
Q2	25	4.44	88.80%
Q3	25	4.36	87.20%
Q4	25	4.04	80.80%
Q5	25	4.20	84.00%

Q6	25	4.32	86.40%
Q7	25	4.44	88.80%
Q8	25	4.00	80.00%

*Average of Mean 4.28 (85.6%)

The first column act the questions from 1 to 8 after that the column act the number of respondents who answered the questions then, the column Mean act the values finally, this column is a percentage value of Mean. The average of mean for all items in the usefulness part is 4.28 (85.6%) that the prototype is useful, ease of use and satisfy their need. Next figure 5.1 show the usefulness factor questions percentages value of Mean.

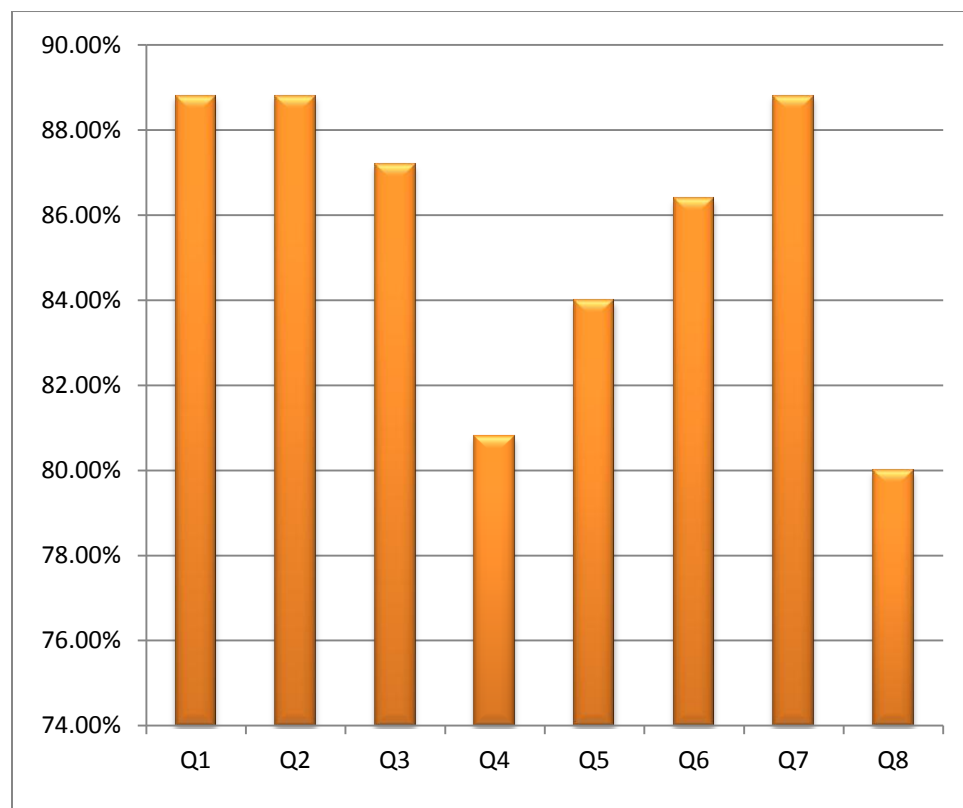


Figure 5.1 Descriptive Statistics Mean for Usefulness

All sections of questionnaire have been represented by diagrams and tables as before. It will be show as follow.

5.5.2 Descriptive Statistics of Information Quality

The descriptive statistics of information quality factor is show in table 5.3. This part consists of seven questions.

Table 5.3 Descriptive Statistics of (Information Quality)

Questions	Number of respondents	*Mean	Percentage
Q9	25	3.76	75.20%
Q10	25	3.96	79.20%
Q11	25	4.24	84.80%
Q12	25	4.52	90.40%
Q13	25	4.20	84.00%
Q14	25	4.28	85.60%
Q15	25	4.20	84.00%

*Average of Mean 4.17 (83.3%)

As shown in the table 5.3 the average of mean for all items in the information quality part is 4.17 (83.3%). Next figure 5.1 shows the percentages value of Mean for information quality questions.

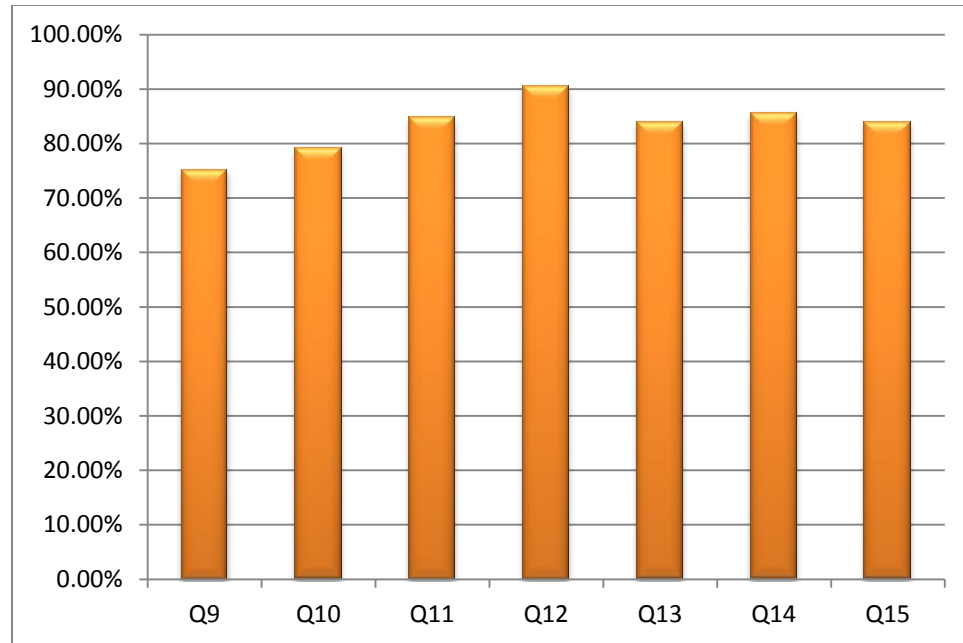


Figure 5.2 Descriptive Statistics Mean for Information Quality

5.5.3 Descriptive Statistics of Interface Quality

The descriptive statistics of interface quality factor is show in table 5.4. This part consists of three questions

Table 5.4 Descriptive Statistics of (Interface Quality)

Questions	Number of respondents	*Mean	Percentage
Q16	20	4.24	84.80%
Q17	20	4.24	84.80%
Q18	20	4.24	84.80%

*Average of Mean 4.24 (84.8%)

As shown in the table 5.4 the average of mean for all items in the interface quality part is 4.24 (84.8%). Next figure 5.3 shows the percentages value of Mean for interface quality questions.

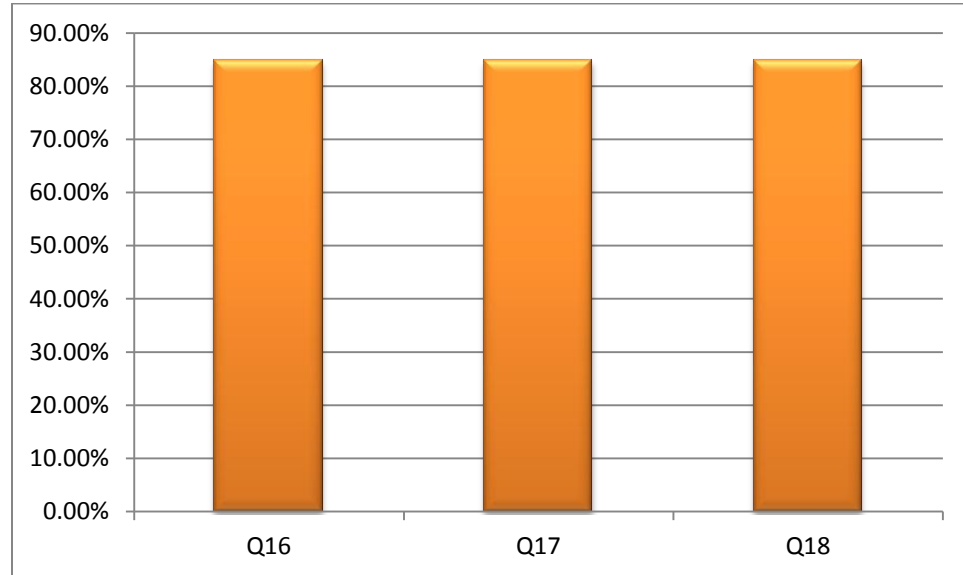


Figure 5.3 Descriptive Statistics Mean for Interface Quality

5.5.4 Descriptive Statistics of Overall Satisfaction Factor

The descriptive statistics of Overall Satisfaction Factor is show in table 5.5. This part consists of nineteen questions.

Table 5.5 Descriptive Statistics of (Overall Satisfaction Factor)

Questions	Number of respondents	*Mean	Percentage
Q1	25	4.44	88.80%
Q2	25	4.44	88.80%
Q3	25	4.36	87.20%
Q4	25	4.04	80.80%

Q5	25	4.20	84.00%
Q6	25	4.32	86.40%
Q7	25	4.44	88.80%
Q8	25	4.00	80.00%
Q9	25	3.76	75.20%
Q10	25	3.96	79.20%
Q11	25	4.24	84.80%
Q12	25	4.52	90.40%
Q13	25	4.20	84.00%
Q14	25	4.28	85.60%
Q15	25	4.20	84.00%
Q16	25	4.24	84.80%
Q17	25	4.24	84.80%
Q18	25	4.24	84.80%
Q19	25	4.72	94.40%

*Average of Mean 4.25 (85.1%)

As shown in the table 5.5 the average of mean for all items in the Overall Satisfaction part is Mean 4.25 (85.1%). Next figure 5.4 shows the percentages value of Mean for Overall Satisfaction questions.

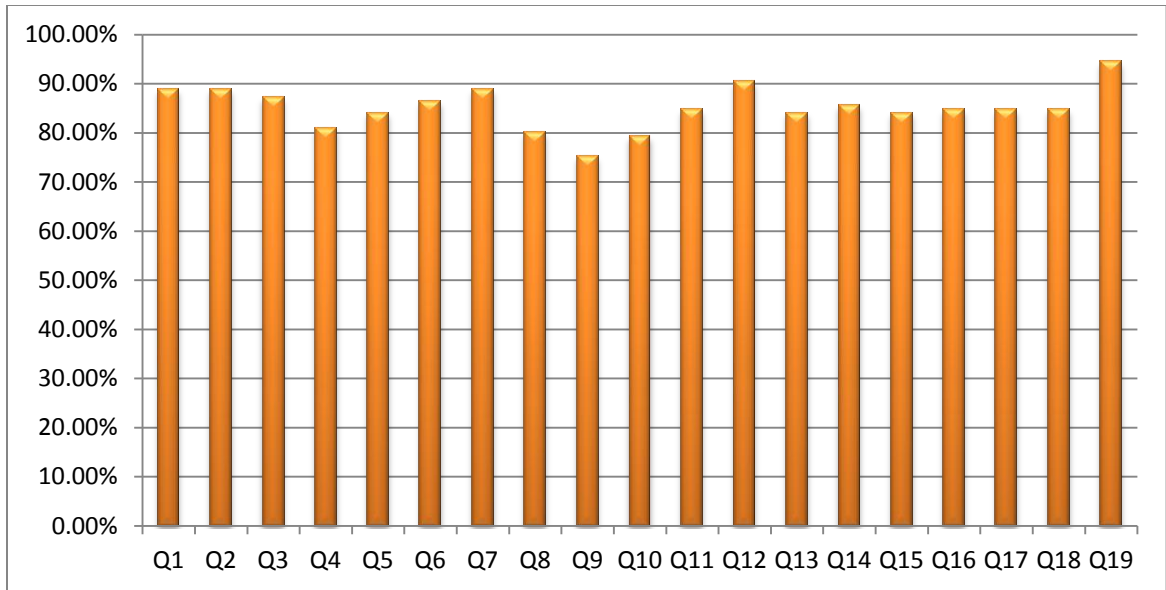


Figure 5.4 Descriptive Statistics Mean for Overall Satisfaction Factor

5.5.5 Descriptive Statistics of Questionnaires Factors

The result of the questionnaires factors are show in figure 5.5. This figure views the percentage for every section in the questionnaires.

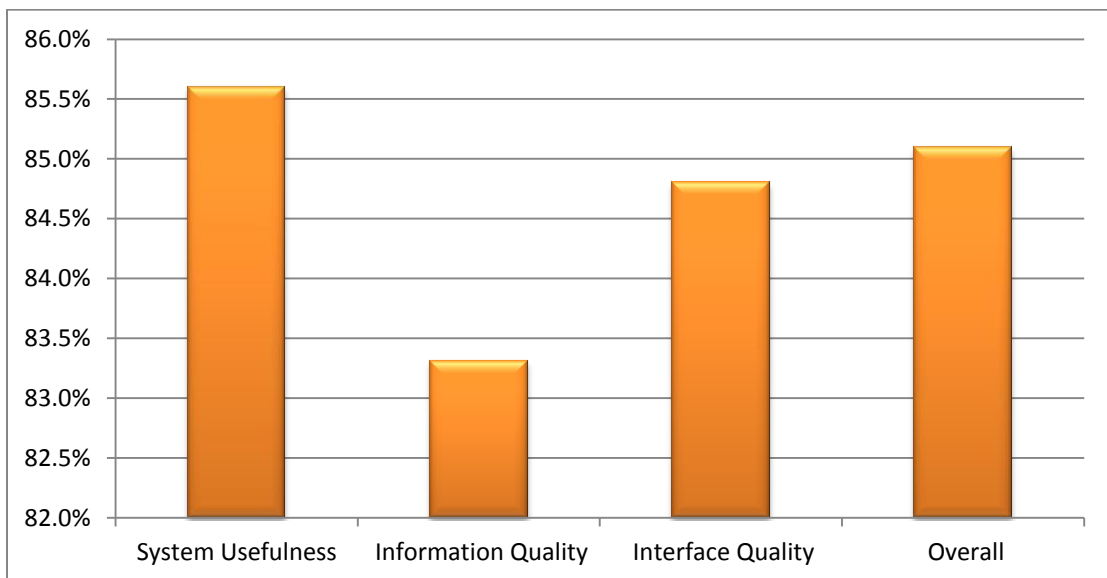


Figure 5.5 Questionnaire's Factors Percentages

5.6 Questionnaires Factors Result

This section discussed all result of questionnaires factors (system usefulness, information quality, interface quality, Overall) depend on the last values.

5.6.1 System Usefulness

The respondents answered in this section the questions that are related on the prototype benefits, ease of use and satisfaction. The respondents have agreed around 85.6% that the prototype is useful, ease of use and satisfy their demands.

5.6.2 Information Quality

Questions in this section describe the clarity of the system. The respondents have accepted around 83.3 % that the information that included in the system is clear.

5.6.3 Interface Quality

In this section the respondents have agreed around 84.8% that the interfaces of the system are simple and comfortable.

5.6.4 Overall Satisfaction

This section explains the satisfaction of a system. Around 85.1 % from respondents satisfied from the system.

5.7 System Testing

This section discusses the testing of electronic embassy system which has been developed in this research. The main goal of the test is to know the level of functionality and operability of the system and see that the system fulfills the requirements and users needs.

5.7.1 System Requirement Testing Result

All system functions was tested and ensured that it's free of errors and bug. This testing is finished based on the requirements that are included in chapter 4. Hence, the requirements have been completed successfully in the system through system development stage. The results of testing are illustrated in table 5.6.

Table 5.6 Prototype's Requirements Testing Result

Requirements	Description	System Performance
Requirement 1	The system shall be accessible by all users.	Function is working correctly and completely.
Requirement 2	The system shall be able to submit documents.	Function is working correctly and completely.
Requirement 3	The system shall be protected by username and password when user request transaction.	Function is working correctly and completely.
Requirement 4	The system shall be listing all available services to users.	Function is working correctly and completely.
Requirement 5	The system has allows users to register online.	Function is working correctly and completely.

5.8 Conclusion

Analysis of the data that have been taken through the questionnaire largely explained in this chapter. Also, in this chapter was discussed the respondent's point of view that talked about the developed prototype. To sum up, the evaluation show that most the respondents are satisfied with the developed system. Also, the prototype test shows that the prototype fulfilled the required requirements.

CHAPTER SIX

CONCLUSION

6.1 Introduction

This chapter gives a brief description about the study and illustrates the limitation that faced a study stages. Also, talked about the proposed recommendations that's may be help researchers in this field.

6.2 Summary

This thesis has addressed a major challenge of achieving e-Government and illustrated many e-government cases deeply. Many of the e-Government definitions from different perspectives have been introduced. Several comparative studies for e-Government at the national levels and Palestinian initiatives have been surveyed. Common requirements and critical success factors for e-Government have been identified.

In addition, this study explain the electronic services types that offer through an internet and give a description about how to get better services delivery process. The main part in this study is the electronic embassy which is a heart of this research. In this section there are many cases of electronic embassies attached for many countries. Also, it has been explained the work of flow for embassy functions.

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6.3 Result Discussion

The study demonstrated the importance of linking all transactions, services and information Consulate with information and communication technology. And also showed how important the automation of services and transactions in the involvement of the citizen to be more attendance and interactive with the activities of the Embassy.

The development of a computerized system rather than traditional paper-based system in the provision of consular services at the embassy increases the work efficiency and facilitates the communication process. As shown in questionnaire results it was confirmed that using of the system can facilitate the process of collecting data and information on the Palestinian community in Malaysia, from the registration form in order to facilitate the communication process.

The prototype evaluation process has been done in chapter 5. This research used the IBM questionnaire to evaluate the developed prototype, the result show questionnaire factors has around 85%. This indicates that all respondents satisfied with the system. In addition, the system has successfully the needed requirements.

6.4 Limitations

Through the course of this research several obstacles had been faced the research which summarized as follow:

- The time is the main constraint faced the developing and evaluation the prototype.
- Lack of the available information and data on the research topic.
- Difficulty in converting some of the services to electronic services.

6.5 Recommendations

Through build this study many suggestions are recommended for future works to be more efficient as following:

- Use of Web Services that is more secure for transferring data and implement the requests due to its high flexibility and availability.
- Linked the embassy system with the foreign affairs ministry system by using E-Government Web Services.
- Work on find laws that allow to automate all consular transactions.

6.6 Conclusion

E-Government is considered as one of the most significant field to research and performs research on. The aim of this study is develop application for Palestine embassy. Developing and implementation electronic embassy solutions face many constraints. In despite of these constraints this study finds the legal framework that needed to work and deliver services in a trusted and secure environment. Developing a legal framework required for guaranteeing that information and services have to be available and securely protected, in order for everyone to have trust in the material being corrected and reliable.

After interviewed the Palestine embassy staff for many times we found a way to automate certain transactions without affecting on the confidentiality and legal transactions. The developed website make the user able to register online without go to embassy and authenticate his document or certificates for marriage, death, birth and study in a simple way. Also, the prototype is very useful for embassy staff, it will less

computational efforts in the work, organize the transactions and keep it in a secure storage.

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APPENDIX A

QUESTIONNAIRE

Palestine Embassy Web-based System

The aim's of this questionnaire is to evaluate your satisfaction of the website that you have used for the **Palestine Embassy Website** and measures usefulness and ease of use.

Please check the answer for the following questions using the scale below.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Question Number	Questions	Evaluation Rate				
System Usefulness		1	2	3	4	5
1.	Overall, I am satisfied with how easy it is to use Palestine Embassy prototype.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	It was simple to use Palestine Embassy prototype.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	I can effectively complete my work using Palestine Embassy prototype.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	I am able to complete my work quickly using Palestine Embassy prototype.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	I am able to efficiently complete my work using Palestine Embassy prototype.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6.	I feel comfortable using Palestine Embassy prototype.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
7.	It was easy to learn to use Palestine Embassy prototype.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8.	I believe I became productive quickly using Palestine Embassy prototype.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Information Quality		1 2 3 4 5
9.	The system gives error messages that clearly tell me how to fix problems	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
10.	Whenever I make a mistake using the system, I recover easily and quickly.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
11.	The information (such as online help, on-screen messages, and other documentation) provided with Palestine Embassy prototype is clear.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
12.	It is easy to find the information I needed.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
13.	The information provided for the prototype is easy to Understand	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
14.	The information is effective in helping me complete the tasks and scenarios	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
15.	The organization of information on the prototype screens is clear.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Interface Quality		
16.	The interface of Palestine Embassy prototype is pleasant.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
17.	I like using the interface of Palestine Embassy prototype.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
18.	Palestine Embassy prototype has all the functions and capabilities I expect it to have.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
19.	Overall, I am satisfied with Palestine Embassy prototype.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>