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PEDAGOGICAL MODEL FOR TEACHING ARABIC-MALAY TRANSLITERATION: INTELLIGENT TUTORING SYSTEM (ITS)

A Thesis submitted to the Graduate School in partial fulfilment of the requirements for the degree Master of Science (Intelligent Systems)

Universiti Utara Malaysia



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ABSTRACT

Intelligent Tutoring System (ITS) considered as an important branch of Artificial Intelligent (AI) which can be used to assist in educational processes. Basically, some researchers divided ITS into four modules while others divided it into five modules. One of these modules is pedagogy module which concern in provide the educational processes especially teaching process by the needed knowledge (what to teach) and at the same time by providing some techniques or methods for teaching (how to teach). This project as its name implies concern in pedagogical module which care the process of teaching Arabic-Malay transliteration based on words level. It divided into two main quizzes which are words quiz and special quiz. Actually, both quizzes seen to be the same except that special quiz provides users with a complete transliteration at the end of each Ayah. This study was divided into seven chapters which are introduction, literature review, methodology, system analysis and design, evaluation, findings and results, conclusion and future recommendations.

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DEDICATION

A very special dedication of this piece of myself to the two people who meant the most to me (my great father & my lovely mom).

To my mom, who was so amazed at the way my life turned out.

To my dad, who were my biggest champion and cheerleader.

Who, over the years, modelled compassion and caring for others. Who was always there with the advice when I needed it and sometimes I even took it? Who worked hard, to make sure me had what I needed. But most of all, worked hard to ensure I knew he loved me and supported me, even when he may not have agreed with the directions I took.

I was richly blessed with the two of you in my life. Thanks so much for adopting me and supporting me during my life. Thanks seem so inadequate! "Thanks Mom!" And "Dad, You're Still My Hero!"

Special kudos and thanks to my brothers and my sisters, whom supporting and caring me all the time and never hide any efforts to encourage and consolidate my study.

Special kudos and thanks to my lecturers and friends, without whom this project would still be on the drawing boards.

I am full of gratitude for the investment of so many people in my life and my career.

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"In The Name of Allah the Most Gracious and Most Merciful"

First and foremost, all praises to Allah (SWT), the Almighty, the most gracious and most merciful, without whose divine guidance and blessing, I would not have been able to even begin, let alone complete, such a complex and confounding undertaking.

I would like to express my deepest appreciation to a number of people by giving up their valuable time and energy, and their precious thoughts and comments. I owe my heartfelt thanks to my supervisor's, Mrs. Yusrita Mohd Yusoff and Mr. Mohammad Tarmidi B. Mahli for their invaluable guidance and support. Without them, I would have been certainly lost in completing this project. I feel much honored to extend my thanks to my evaluators during defense for critical ideas and suggestions.

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LIST OF ABBREVIATIONS

UUM Universiti Utara Malaysia HCI Human Computer Interaction ITS Intelligent Tutoring System

AI Artificial Intelligent

ELL English Language Learning

QA Question Answering IR Information Retrieval

NLP Natural Language Processing

VB. NET Visual Basic. NET OOV Out of Vocabulary

AIED Artificial Intelligence in Education

CS Computer System

CSE Computer System Education
CAI Computer Aided Instructor
CBT Computer Based Teaching
TfU Teaching for Understanding

SPSS Statistical Package for Social Science

JAWI An Arabic Alphabet Adapted for Writing the Malay Language PMTAMT Pedagogical Model for Teaching Arabic-Malay Transliteration



CHAPTER 1

INTRODUCTION

1.1 Introduction

The aim of this chapter is to discuss on the project background that mainly involves in teaching processes and educational uses. Rote learning, motivation, problem statement, objectives, significance of the study, scope, summary, and others chapter's overview will be discussed in this chapter.

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Stands on computers for teaching nowadays plays effective and significant roles in learning and teaching fields especially in applying teaching techniques. As computers can help in process massive information effectively, it still responds to its user's with some information more than user's need, because the Human Computer Interaction (HCI) still has some obstacles in exchanging information between user's and computers. One of the most reasons of this is that most of computer systems respond based on its preprogrammed information.

One of the most important systems that utilize the use of computer technologies in serving the educational fields is what it called an Intelligent Tutoring Systems (ITS's).

The contents of the thesis is for internal user only

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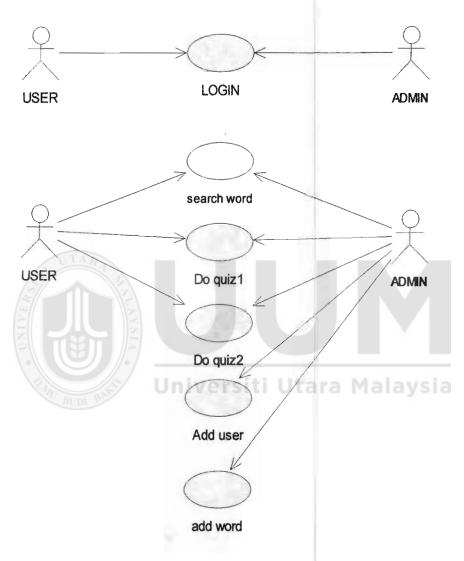
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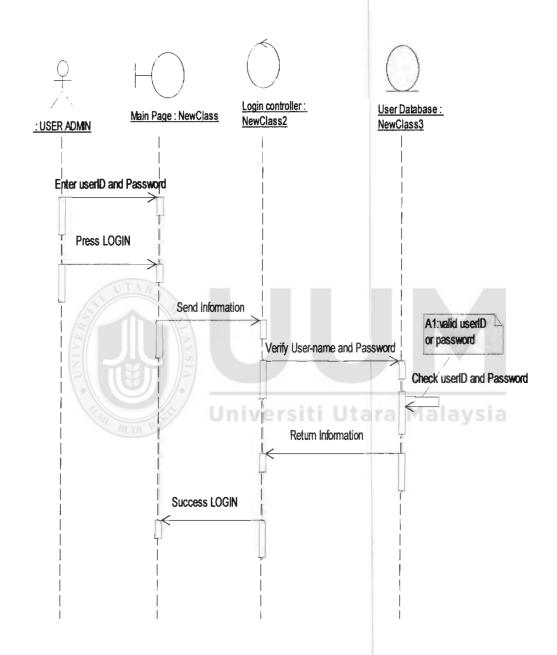
APPENDIX A: USE CASE DIAGRAM

Use Case Diagram

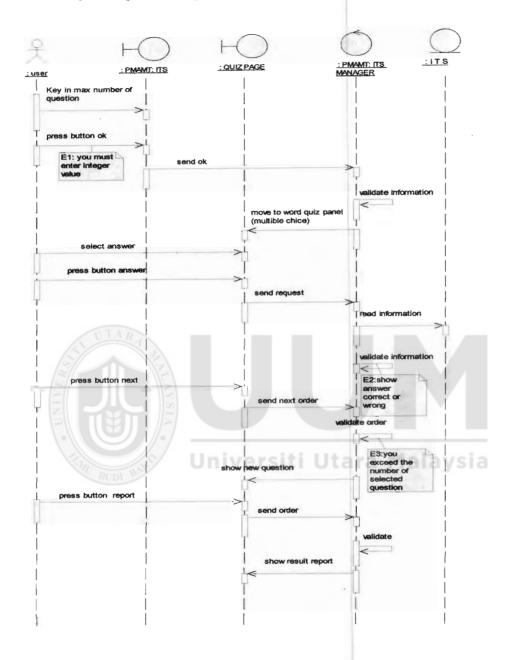


APPENDIX B: SEQUANCE DIAGRAM

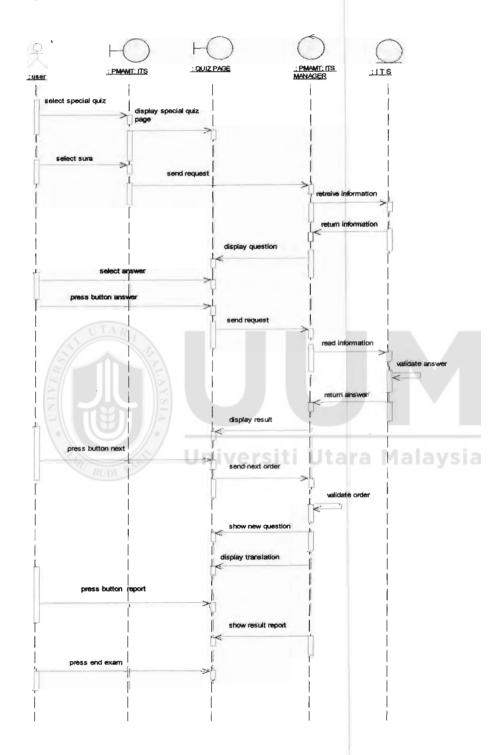
1. Login Sequence Diagram



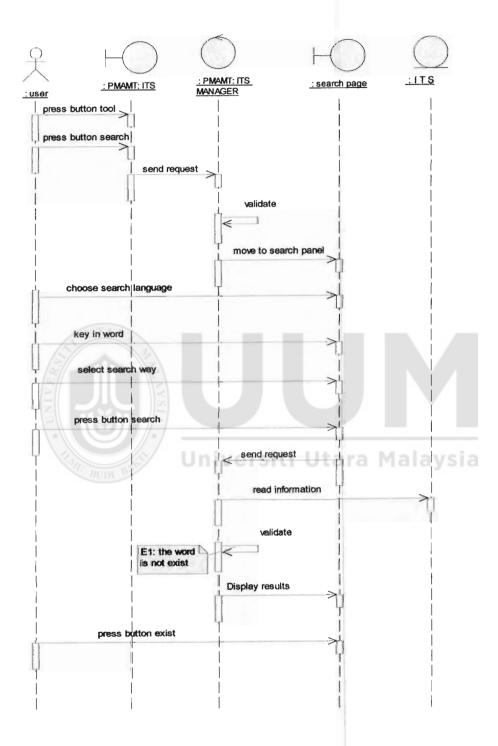
2. Words Quiz Sequence Diagram



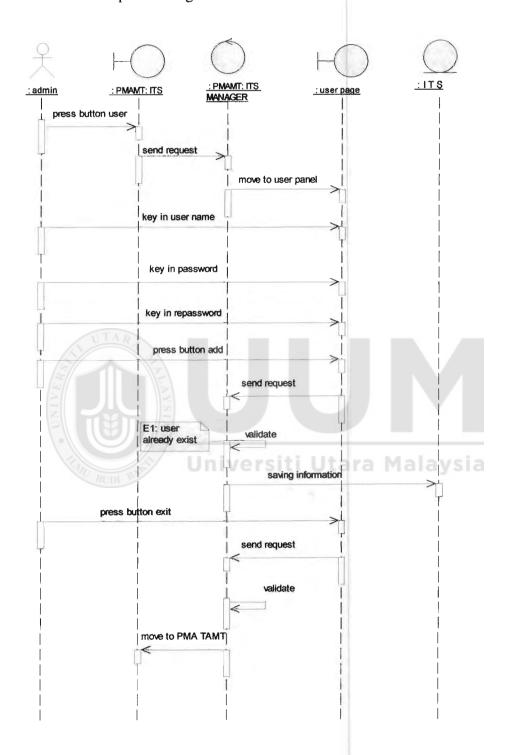
3. Special Quiz Sequence Diagram



4. Search Sequence Diagram



5. Add Users Sequence Diagram



APPENDIX C: QUESTIONNAIRE SCRIPT

Please give ten minutes of your valuable time to answer this simple questionnaire. All Answers are treated as strictly confidential. Thank you in advance.

SECTION A

SECTION				
1. Can yo	u read holy Quran?			
No	I don't knov	v Ye	es	
2. Do you unde	rstand what you read or	heard?		
Very-Poor	Poor	Good Very-g	ood Exce	llent
3. Do you thin holy Quran me	k that you can utilize canings?	the use of such s	ystem to assis	st you understanding
1. Strongly not-	agree 2. Not-agre	e 3. Neutral	4. Agree	5. Strongly-agree
4. In your teaching holy Q		sing such system is	s better than the	e traditional methods in
1. Strongly not-	agree 2. Not-agre	e 3. Neutral	4. Agree	5. Strongly-agree
	vere given a choice to cl ch would you prefer?	hoose between the	following met	hods of obtaining
A. Traditional M	fethod B. I don't	know C	. pedagogical i	model
6. Would y 1. Strongly not-a	you advising your friend agree 2. Not-agree		have such ped 4. Agree	agogy model? 5. Strongly-agree

7. In your opinion, what are the benefits of having such system in your computer? Kindly rank them accordingly:

Criterion	Strongly not- agree	Not-agree	Neutral	Agree	Strongly agree
Study at anytime					
Study anywhere					
Saving of costs					
Study based on your own					
Increase understanding					

8. In your opinion, please evaluate this pedagogy model based on the following criteria's? Kindly rank them accordingly:

Criterion	Strongly not- agree	Not-agree	Neutral	Agree	Strongly agree
User Friendly					
Usable					
Useful					
Ease in use	Univ	/ersiti	Utara	Malaysi	а

^			
9.	In your opinion, do you suppo	ort (in %) having and	using this system?

A: (less than 20%)

B: (20% - 39%)

C: (40% - 59%)

D: (60% - 79'%)

E: (more than 80%)

10. If you have other com	ments, kindly provide here:
*_*_*_*_*_*_*_*_*_*_*_*_*_	*_
SECTION B:	
You are	
	☐ Malay
	☐ Malaysian
	☐ International
You are	☐ Imam
	☐ Teacher
	☐ Students
	Other
Your age	10-18 ersiti Utara Malaysia
	□ 19 – 30
	□ 31 – 40
	☐ 41 above

Thank You

APPENDIX D: CODING

```
Public Class frmLogin
    Private myParent As New frmMain
    Private Sub OK Click(ByVal sender As System.Object, ByVal e As
System. EventArgs) Handles OK. Click
        ALLOW USER()
    End Sub
    Private Sub ALLOW USER()
        Dim EC As New LOGIN(TXT USER NAME.Text, TXT PASSWORD.Text)
        Dim LOGIN STATUS As Nullable (Of Boolean) = Nothing
        LOGIN STATUS = EC.CHECK VALIDATE()
        If LOGIN STATUS. Has Value Then
            If LOGIN STATUS. Value = True Then
                Ιſ
                           Trim (Me.TXT USER NAME.Text).ToLower
"administrator" Then
                    CLEAR CONTROLS()
                    myParent.MenuStrip.Enabled = True
                    myParent.Enable()
                    Me.Close()
                Else
                    CLEAR CONTROLS()
                    myParent.MenuStrip.Enabled = True
                    Me.Close()
                    frmExam. Show()
                    'frmQuestionNumber.Show()
                End If
            Else
                MessageBox.Show("UserName
                                            Or
                                                 Passowrd
"Alert", MessageBoxButtons.OK, MessageBoxIcon.Error)
                CLEAR CONTROLS()
            End If
        Else
            MessageBox.Show("UserName Or Passowrd incorrect", "Alert",
MessageBoxButtons.OK, MessageBoxIcon.Error)
            CLEAR_CONTROLS()
        End If
    End Sub
    Private Sub CLEAR CONTROLS()
        TXT USER NAME.Text = ""
        TXT PASSWORD.Text = ""
    End Sub
    Public Sub SetMyParent (ByVal main As frmMain)
       myParent = main
    End Sub
    Private Sub Cancel Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Cancel.Click
       Application.Exit()
   End Sub
    Private Sub TXT_PASSWORD_TextChanged(ByVal sender As System.Object,
ByVal e As System. EventArgs) Handles TXT_PASSWORD. TextChanged
```

End Sub End Class

Imports System. Windows. Forms

Public Class frmMain

Public Sub Enable()

Me.UsersToolStripMenuItem.Enabled = True

Me.WordsToolStripMenuItem.Enabled = True

End Sub

Private Sub frmMain_FormClosed(ByVal sender As Object, ByVal e As System.Windows.FormS.FormClosedEventArgs) Handles Me.FormClosed

End

End Sub

Private Sub frmMain_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles Me.Load

Dim frmLogin As New frmLogin

frmLogin.SetMyParent(Me)

frmLogin.MdiParent = Me

frmLogin.Show()

End Sub

Private Sub ExitToolsStripMenuItem_Click(ByVal sender As Object, ByVal e As EventArgs) Handles ExitToolStripMenuItem.Click
Global.System.Windows.Forms.Application.Exit()

End Sub

Private Sub ToolBarToolStripMenuItem_Click(ByVal sender As Object, ByVal e As EventArgs) Handles ToolBarToolStripMenuItem.Click

Me.ToolStrip.Visible = Me.ToolBarToolStripMenuItem.Checked
End Sub

Private Sub StatusBarToolStripMenuItem_Click(ByVal sender As Object, ByVal e As EventArgs) Handles StatusBarToolStripMenuItem.Click

Me.StatusStrip.Visible = Me.StatusBarToolStripMenuItem.Checked

End Sub

Private Sub CascadeToolStripMenuItem_Click(ByVal sender As Object, ByVal e As EventArgs) Handles CascadeToolStripMenuItem.Click
Me.LayoutMdi(MdiLayout.Cascade)

End Sub

Private Sub TileVerticleToolStripMenuItem_Click(ByVal sender As Object, ByVal e As EventArgs) Handles TileVerticalToolStripMenuItem.Click

Me.LayoutMdi(MdiLayout.TileVertical)

End Sub

Private Sub TileHorizontalToolStripMenuItem_Click(ByVal sender As Object, ByVal e As EventArgs) Handles TileHorizontalToolStripMenuItem.Click

Me.LayoutMdi (MdiLayout.TileHorizontal)

End Sub

```
Sub ArrangeIconsToolStripMenuItem Click(ByVal
    Private
                                                               sender
                                                                   Handles
               ByVal
Object,
                            е
                                                EventArgs)
                                      As
ArrangeIconsToolStripMenuItem.Click
        Me.LayoutMdi(MdiLayout.ArrangeIcons)
    End Sub
    Private Sub CloseAllToolStripMenuItem_Click(ByVal sender As Object,
ByVal e As EventArgs) Handles CloseAllToolStripMenuItem.Click
         ' Close all child forms of the parent.
        For Each ChildForm As Form In Me.MdiChildren
            ChildForm.Close()
        Next
    End Sub
    Private m ChildFormNumber As Integer = 0
                     OptionsToolStripMenuItem Click(ByVal
    Private
               Sub
                                                              sender
                                                                       As
                                           System. EventArgs)
System.Object,
                   BvVal
                              е
                                    As
                                                                  Handles
OptionsToolStripMenuItem.Click
        Dim frmSearch As New frmSearch
        frmSearch.MdiParent = Me
        frmSearch.Show()
    End Sub
    Private/
               Sub
                       ExamToolStripMenuItem Click(ByVal
                                                            sender
System.Object,
                   ByVal
                              е
                                    As
                                           System.EventArgs)
                                                                  Handles
ExamToolStripMenuItem.Click
        Dim frmExam As New frmExam
        frmExam.MdiParent = Me
        frmExam.Show()
    End Sub
                            Universiti Utara Malavsia
               Sub UsersToolStripMenuItem Click(ByVal
    Private
                                                             sender
                                           System.EventArgs)
System.Object,
                   ByVal
                                    As
UsersToolStripMenuItem.Click
        Dim frmUsers As New frmUsers
        frmUsers.MdiParent = Me
        frmUsers.Show()
    End Sub
                      WordsToolStripMenuItem Click(ByVal
    Private
               Sub
                                                             sender
                                                                       As
System.Object,
                                           System. EventArgs)
                   ByVal
                                                                  Handles
                                    As
WordsToolStripMenuItem.Click
        Dim frmWords As New frmWords
        frmWords.MdiParent = Me
        frmWords.Show()
    End Sub
                      AboutToolStripMenuItem Click(ByVal
    Private
                                                             sender
                                                                       As
System.Object,
                   ByVal
                                    As
                                           System. EventArgs)
AboutToolStripMenuItem.Click
        Dim frmAbout As New frmAbout
        frmAbout.MdiParent = Me
        frmAbout.Show()
    End Sub
```

```
Private Sub SpecialExamAlfathaToolStripMenuItem Click(ByVal sender
      System.Object,
                        ByVal
                                 е
                                      As
                                            System.EventArgs)
                                                                  Handles
SpecialExamAlfathaToolStripMenuItem.Click
        Dim frmalfathaExam As New frmAlfathaExam
        frmalfathaExam.MdiParent = Me
        frmalfathaExam.Show()
    End Sub
End Class
<Global.Microsoft.VisualBasic.CompilerServices.DesignerGenerated()>
Partial Class frmMain
    Inherits System.Windows.Forms.Form
    'Form overrides dispose to clean up the component list.
    <System.Diagnostics.DebuggerNonUserCode()>
    Protected Overrides Sub Dispose (ByVal disposing As Boolean)
        If disposing AndAlso components IsNot Nothing Then
            components.Dispose()
        End If
        MyBase.Dispose (disposing)
    End Sub
    'Required by the Windows Form Designer
    Private components As System.ComponentModel.IContainer
    'NOTE: The following procedure is required by the Windows
                                                                    Form
Designer
    'It can be modified using the Windows Form Designer.
    'Do not modify it using the code editor.
    <System.Diagnostics.DebuggerStepThrough()>
    Private Sub InitializeComponent()
        Me.components = New System.ComponentModel.Container
        Dim resources As System.ComponentModel.ComponentResourceManager
= New System.ComponentModel.ComponentResourceManager(GetType(frmMain))
        Me.MenuStrip = New System.Windows.Forms.MenuStrip
        Me.FileMenu = New System.Windows.Forms.ToolStripMenuItem
        Me.ExitToolStripMenuItem
                                                                      New
System.Windows.Forms.ToolStripMenuItem
        Me.ViewMenu = New System.Windows.Forms.ToolStripMenuItem
        Me.ToolBarToolStripMenuItem
                                                                      New
System.Windows.Forms.ToolStripMenuItem
                                                                      New
        Me.StatusBarToolStripMenuItem
System.Windows.Forms.ToolStripMenuItem
        Me.ToolsMenu = New System.Windows.Forms.ToolStripMenuItem
                                                                      New
        Me.OptionsToolStripMenuItem
System.Windows.Forms.ToolStripMenuItem
                                                                      New
        Me.ExamToolStripMenuItem
System.Windows.Forms.ToolStripMenuItem
        Me.SpecialExamAlfathaToolStripMenuItem
                                                                      New
System.Windows.Forms.ToolStripMenuItem
        Me.AdministrationToolStripMenuItem
                                                                      New
System.Windows.Forms.ToolStripMenuItem
                                                                      New
        Me.UsersToolStripMenuItem
System.Windows.Forms.ToolStripMenuItem
```

```
Me.WordsToolStripMenuItem
                                                                      New
System.Windows.Forms.ToolStripMenuItem
        Me.WindowsMenu = New System.Windows.Forms.ToolStripMenuItem
        Me.CascadeToolStripMenuItem
                                                                      New
System.Windows.Forms.ToolStripMenuItem
        Me.TileVerticalToolStripMenuItem
                                                                      New
System.Windows.Forms.ToolStripMenuItem
        Me.TileHorizontalToolStripMenuItem
                                                                      New
System.Windows.Forms.ToolStripMenuItem
        Me.CloseAllToolStripMenuItem
                                                                      New
System.Windows.Forms.ToolStripMenuItem
        Me.ArrangeIconsToolStripMenuItem
                                                                      New
System.Windows.Forms.ToolStripMenuItem
        Me.HelpMenu = New System.Windows.Forms.ToolStripMenuItem
        Me.AboutToolStripMenuItem
                                                                      New
System.Windows.Forms.ToolStripMenuItem
        Me. ToolStrip = New System. Windows. Forms. ToolStrip
                                                                      New
        Me.ToolStripSeparator2
System.Windows.Forms.ToolStripSeparator
        Me.StatusStrip = New System.Windows.Forms.StatusStrip
                                                                      New
        Me.ToolStripStatusLabel
System.Windows.Forms.ToolStripStatusLabel
        Me.ToolTip = New System.Windows.Forms.ToolTip(Me.components)
        Me.MenuStrip.SuspendLayout()
        Me.ToolStrip.SuspendLayout()
        Me.StatusStrip.SuspendLayout()
        Me.SuspendLayout()
        'MenuStrip
        Me.MenuStrip.Enabled = False
        Me.MenuStrip.Items.AddRange(New
System.Windows.Forms.ToolStripItem() {Me.FileMenu, Me.ViewMenu,
               Me.AdministrationToolStripMenuItem,
Me.ToolsMenu,
                                                         Me.WindowsMenu,
Me.HelpMenu})
        Me.MenuStrip.Location = New System.Drawing.Point(0, 0)
        Me.MenuStrip.MdiWindowListItem = Me.WindowsMenu
        Me.MenuStrip.Name = "MenuStrip"
        Me.MenuStrip.Size = New System.Drawing.Size(926, 24)
        Me.MenuStrip.TabIndex = 5
        Me.MenuStrip.Text = "MenuStrip"
        'FileMenu
        Me.FileMenu.DropDownItems.AddRange(New
System.Windows.Forms.ToolStripItem() {Me.ExitToolStripMenuItem})
       Me.FileMenu.ImageTransparentColor
System.Drawing.SystemColors.ActiveBorder
       Me.FileMenu.Name = "FileMenu"
        Me.FileMenu.Size = New System.Drawing.Size(37, 20)
        Me.FileMenu.Text = "&File"
        'ExitToolStripMenuItem
       Me.ExitToolStripMenuItem.Name = "ExitToolStripMenuItem"
       Me.ExitToolStripMenuItem.Size = New System.Drawing.Size(92, 22)
       Me.ExitToolStripMenuItem.Text = "E&xit"
```

```
'ViewMenu
        Me.ViewMenu.DropDownItems.AddRange(New
System.Windows.Forms.ToolStripItem()
                                            {Me.ToolBarToolStripMenuItem,
Me.StatusBarToolStripMenuItem})
        Me.ViewMenu.Name = "ViewMenu"
        Me.ViewMenu.Size = New System.Drawing.Size(44, 20)
        Me.ViewMenu.Text = "&View"
        'ToolBarToolStripMenuItem
        Me.ToolBarToolStripMenuItem.Checked = True
        Me.ToolBarToolStripMenuItem.CheckOnClick = True
        Me.ToolBarToolStripMenuItem.CheckState
System.Windows.Forms.CheckState.Checked
        Me.ToolBarToolStripMenuItem.Name = "ToolBarToolStripMenuItem"
        Me.ToolBarToolStripMenuItem.Size = New System.Drawing.Size(126,
22)
        Me.ToolBarToolStripMenuItem.Text = "&Toolbar"
        'StatusBarToolStripMenuItem
        Me.StatusBarToolStripMenuItem.Checked = True
        Me.StatusBarToolStripMenuItem.CheckOnClick = True
        Me.StatusBarToolStripMenuItem.CheckState
System.Windows.Forms.CheckState.Checked
        Me.StatusBarToolStripMenuItem.Name
"StatusBarToolStripMenuItem"
        Me.StatusBarToolStripMenuItem.Size
                                                                      New
System.Drawing.Size(126, 22)
        Me.StatusBarToolStripMenuItem.Text = "&Status Bar"
                            Universiti Utara Malaysia
        ToolsMenu
        Me.ToolsMenu.DropDownItems.AddRange(New
                                           {Me.OptionsToolStripMenuItem,
System.Windows.Forms.ToolStripItem()
Me.ExamToolStripMenuItem, Me.SpecialExamAlfathaToolStripMenuItem})
        Me.ToolsMenu.Name = "ToolsMenu"
        Me. ToolsMenu. Size = New System. Drawing. Size (48, 20)
        Me.ToolsMenu.Text = "&Tools"
        'OptionsToolStripMenuItem
        Me.OptionsToolStripMenuItem.Name = "OptionsToolStripMenuItem"
        Me.OptionsToolStripMenuItem.Size = New System.Drawing.Size(142,
22)
        Me.OptionsToolStripMenuItem.Text = "&Search"
        'ExamToolStripMenuItem
        Me.ExamToolStripMenuItem.Name = "ExamToolStripMenuItem"
        Me.ExamToolStripMenuItem.Size = New System.Drawing.Size(142,
22)
        Me.ExamToolStripMenuItem.Text = "&Exam"
        'SpecialExamAlfathaToolStripMenuItem
```

```
{\tt Me.SpecialExamAlfathaToolStripMenuItem.Name}
"SpecialExamAlfathaToolStripMenuItem"
        {\tt Me.SpecialExamAlfathaToolStripMenuItem.Size}
                                                                      New
System.Drawing.Size(142, 22)
        Me.SpecialExamAlfathaToolStripMenuItem.Text = "Special Exam"
        \verb|'AdministrationToolStripMenuItem|
        Me.AdministrationToolStripMenuItem.DropDownItems.AddRange(New
System.Windows.Forms.ToolStripItem()
                                             {Me.UsersToolStripMenuItem,
Me.WordsToolStripMenuItem})
        Me.AdministrationToolStripMenuItem.Name
"AdministrationToolStripMenuItem"
        {\tt Me.AdministrationToolStripMenuItem.Size}
                                                                      New
System.Drawing.Size(98, 20)
        Me.AdministrationToolStripMenuItem.Text = "A&dministration"
        'UsersToolStripMenuItem
        Me.UsersToolStripMenuItem.Enabled = False
        Me.UsersToolStripMenuItem.Name = "UsersToolStripMenuItem"
        Me.UsersToolStripMenuItem.Size = New System.Drawing.Size(108,
22)
        Me.UsersToolStripMenuItem.Text = "&Users"
        'WordsToolStripMenuItem
        Me.WordsToolStripMenuItem.Enabled = False
        Me.WordsToolStripMenuItem.Name = "WordsToolStripMenuItem"
        Me.WordsToolStripMenuItem.Size = New System.Drawing.Size(108,
22)
        Me.WordsToolStripMenuItem.Text = "&Words"
        'WindowsMenu
        Me.WindowsMenu.DropDownItems.AddRange(New
System.Windows.Forms.ToolStripItem()
                                           {Me.CascadeToolStripMenuItem,
Me.TileVerticalToolStripMenuItem,
                                    Me.TileHorizontalToolStripMenuItem,
Me.CloseAllToolStripMenuItem, Me.ArrangeIconsToolStripMenuItem})
        Me.WindowsMenu.Name = "WindowsMenu"
        Me.WindowsMenu.Size = New System.Drawing.Size(68, 20)
        Me.WindowsMenu.Text = "&Windows"
        'CascadeToolStripMenuItem
        Me.CascadeToolStripMenuItem.Name = "CascadeToolStripMenuItem"
        Me.CascadeToolStripMenuItem.Size = New System.Drawing.Size(151,
22)
        Me.CascadeToolStripMenuItem.Text = "&Cascade"
        'TileVerticalToolStripMenuItem
        Me.TileVerticalToolStripMenuItem.Name
"TileVerticalToolStripMenuItem"
        Me.TileVerticalToolStripMenuItem.Size
                                                                      New
System.Drawing.Size(151, 22)
```

```
Me.TileVerticalToolStripMenuItem.Text = "Tile &Vertical"
        'TileHorizontalToolStripMenuItem
        Me.TileHorizontalToolStripMenuItem.Name
"TileHorizontalToolStripMenuItem"
        Me.TileHorizontalToolStripMenuItem.Size
                                                                      New
System.Drawing.Size(151, 22)
        Me.TileHorizontalToolStripMenuItem.Text = "Tile &Horizontal"
        'CloseAllToolStripMenuItem
        Me.CloseAllToolStripMenuItem.Name = "CloseAllToolStripMenuItem"
        Me.CloseAllToolStripMenuItem.Size
System.Drawing.Size(151, 22)
        Me.CloseAllToolStripMenuItem.Text = "C&lose All"
        'ArrangeIconsToolStripMenuItem
        Me.ArrangeIconsToolStripMenuItem.Name
"ArrangeIconsToolStripMenuItem"
        Me.ArrangeIconsToolStripMenuItem.Size
                                                                      New
System.Drawing.Size(151, 22)
        Me.ArrangeIconsToolStripMenuItem.Text = "&Arrange Icons"
        'HelpMenu
        Me. HelpMenu. DropDownItems. AddRange (New
System.Windows.Forms.ToolStripItem() {Me.AboutToolStripMenuItem})
        Me.HelpMenu.Name = "HelpMenu"
        Me.HelpMenu.Size = New System.Drawing.Size(44, 20)
        Me. HelpMenu. Text = "&Help"
                            Universiti Utara Malaysia
        'AboutToolStripMenuItem
        Me.AboutToolStripMenuItem.Name = "AboutToolStripMenuItem"
        Me.AboutToolStripMenuItem.Size = New System.Drawing.Size(119,
22)
        Me.AboutToolStripMenuItem.Text = "&About ..."
        'ToolStrip
        Me.ToolStrip.Items.AddRange(New
System.Windows.Forms.ToolStripItem() {Me.ToolStripSeparator2})
        Me. ToolStrip. Location = New System. Drawing. Point (0, 24)
        Me.ToolStrip.Name = "ToolStrip"
        Me.ToolStrip.Size = New System.Drawing.Size(926, 25)
        Me.ToolStrip.TabIndex = 6
        Me.ToolStrip.Text = "ToolStrip"
        'ToolStripSeparator2
       Me.ToolStripSeparator2.Name = "ToolStripSeparator2"
       Me.ToolStripSeparator2.Size = New System.Drawing.Size(6, 25)
        'StatusStrip
```

```
Me.StatusStrip.Items.AddRange(New
System.Windows.Forms.ToolStripItem() {Me.ToolStripStatusLabel})
        Me.StatusStrip.Location = New System.Drawing.Point(0, 542)
        Me.StatusStrip.Name = "StatusStrip"
        Me.StatusStrip.Size = New System.Drawing.Size(926, 22)
        Me.StatusStrip.TabIndex = 7
        Me.StatusStrip.Text = "StatusStrip"
        'ToolStripStatusLabel
        Me.ToolStripStatusLabel.Name = "ToolStripStatusLabel"
        Me.ToolStripStatusLabel.Size = New System.Drawing.Size(39, 17)
        Me.ToolStripStatusLabel.Text = "Status"
        'frmMain
        Me.AutoScaleDimensions = New System.Drawing.SizeF(6.0!, 13.0!)
        Me.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font
        Me.BackColor = System.Drawing.Color.BurlyWood
        Me.BackgroundImage
CType(resources.GetObject("$this.BackgroundImage"),
System.Drawing.Image)
        Me.BackgroundImageLayout
System.Windows.Forms.ImageLayout.Stretch
        Me.ClientSize = New System.Drawing.Size(926, 564)
        Me.Controls.Add (Me.ToolStrip)
        Me.Controls.Add (Me.MenuStrip)
        Me.Controls.Add(Me.StatusStrip)
                                CType(resources.GetObject("$this.Icon"),
        Me.Icon
System.Drawing.Icon)
        Me.IsMdiContainer = True
        Me.MainMenuStrip = Me.MenuStrip
        Me.Name = "frmMain"
        Me.StartPosition
System.Windows.Forms.FormStartPosition.CenterParent
        Me.Text = "PMTAMT"
        Me.WindowState = System.Windows.Formw.FormWindowState.Maximized
        Me.MenuStrip.ResumeLayout(False)
        Me.MenuStrip.PerformLayout()
        Me.ToolStrip.ResumeLayout(False)
        Me.ToolStrip.PerformLayout()
        Me.StatusStrip.ResumeLayout(False)
        Me.StatusStrip.PerformLayout()
       Me.ResumeLayout (False)
       Me.PerformLayout()
   End Sub
   Friend
                       WithEvents
                                               HelpMenu
                                                                     As
System.Windows.Forms.ToolStripMenuItem
                  WithEvents
                                      AboutToolStripMenuItem
                                                                     As
System.Windows.Forms.ToolStripMenuItem
    Friend WithEvents
                                 ArrangeIconsToolStripMenuItem
                                                                     As
System.Windows.Forms.ToolStripMenuItem
                                    CloseAllToolStripMenuItem
    Friend
                 WithEvents
                                                                     As
System.Windows.Forms.ToolStripMenuItem
                                             WindowsMenu
                      WithEvents
                                                                     As
System.Windows.Forms.ToolStripMenuItem
```

Friend	WithEvents	CascadeToolStripMenuItem	As
System.Windows.	.Forms.ToolStrip	MenuItem	
Friend	WithEvents	TileVerticalToolStripMenuItem	As
System. Windows	.Forms.ToolStrip	MenuItem	
Friend	WithEvents	TileHorizontalToolStripMenuItem	As
System.Windows.	.Forms.ToolStrip	MenuItem	
Friend	WithEvents	OptionsToolStripMenuItem	As
System.Windows.	.Forms.ToolStrip	MenuItem	
Friend	WithEvent:	s ToolStripSeparator2	As
System.Windows.	.Forms.ToolStrip	Separator	
Friend With	nEvents ToolTip	As System.Windows.Forms.ToolTip	
Friend	WithEvents	ToolStripStatusLabel	As
System. Windows.	Forms.ToolStrip	StatusLabel	
Friend With	nEvents StatusSt	rip As System.Windows.Forms.StatusStrip	
Friend With	nEvents ToolStri	p As System.Windows.Forms.ToolStrip	
Friend	WithEvents	ExitToolStripMenuItem	As
System.Windows.	.Forms.ToolStrip	MenuItem	
Friend	WithEv	rents FileMenu	As
System.Windows.	Forms.ToolStrip	MenuItem	
Friend With	nEvents MenuStri	p As System.Windows.Forms.MenuStrip	
Friend	WithEv	vents ViewMenu	As
System.Windows.	Forms.ToolStrip	MenuItem	
Friend	WithEvents	ToolBarToolStripMenuItem	As
System. Windows.	Forms.ToolStrip	MenuItem	
		StatusBarToolStripMenuItem	As
System. Windows.	Forms.ToolStrip	MenuItem	
Friend /	WithEv	ents ToolsMenu	As
System. Windows.	Forms. Tool Strip	MenuItem	
Friend	WithEvents	ExamToolStripMenuItem	As
System. Windows.	Forms. Tool Strip	MenuItem	
Friend		AdministrationToolStripMenuItem	As
System. Windows.	Forms.ToolStrip		
		UsersToolStripMenuItem	As
System. Windows.	Forms. ToolStrip		
Friend		WordsToolStripMenuItem	As
System.Windows.	Forms.ToolStrip		
			As
	Forms.ToolStrip	-	

End Class

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