
LIST OF ANNEXES

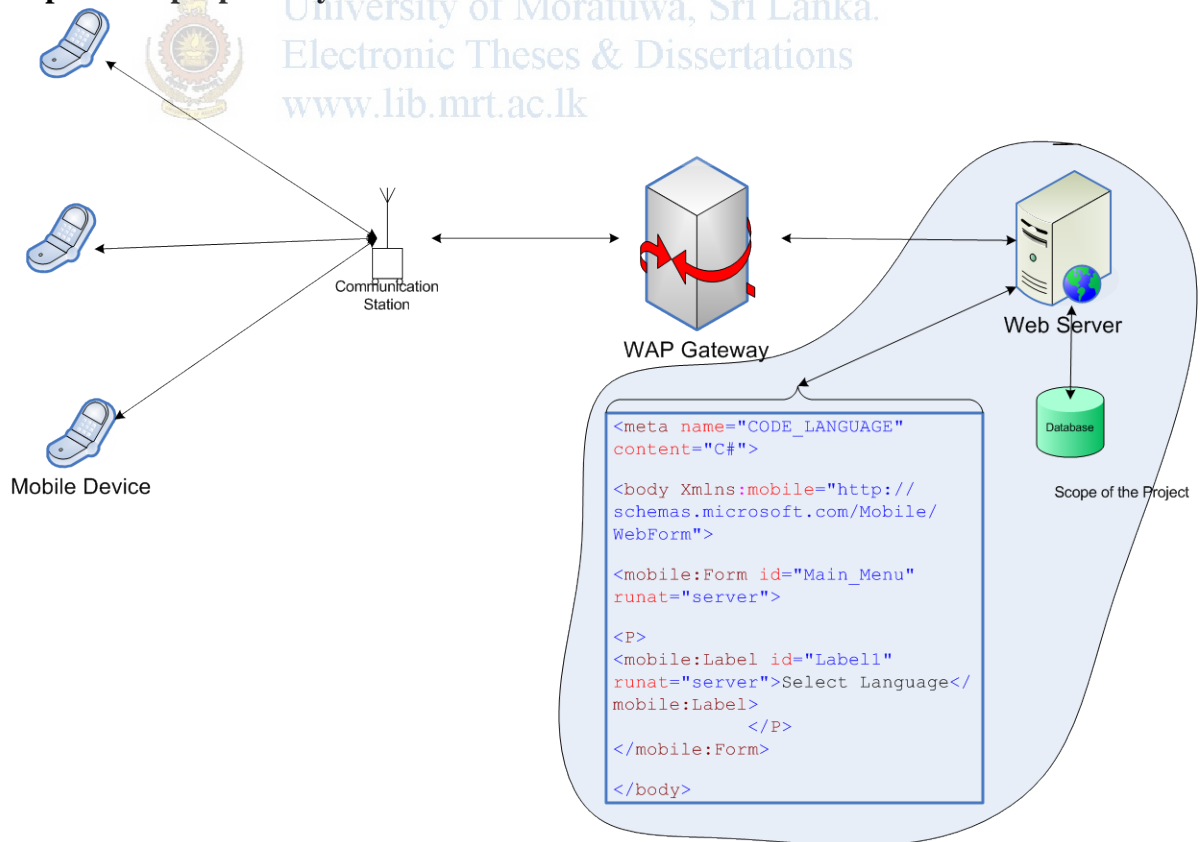
Annex – A

Project Charter								
Name of the Candidate	K.M.K.U. Dasanayake							
Index No.	4/10008							
E-Mail	kumududas@yahoo.com / kumududas@gmail.com							
Title of Project	Mobile Application for Learn Languages							
Executive Summary	<p>Objective of this application is to provide Language learning facility for Mobile users. This will address mobile users those who need to learn foreign languages such as English, French, German ect. Main functionality is to develop WAP (Wireless Application Protocol) enable web site which can access using WAP enable mobile devices using GPRS technology.</p> <p>Technologies Used</p> <ul style="list-style-type: none"> - Microsoft(c) .Net - Microsoft(c) SQL Server - Openwave V7 Simulator 							
Supervisor	<p>Name Dr. Ajith P. Madurapperuma</p> <p>Organization University of Moratuwa – IT Faculty</p> <p>Designation Dean – IT Faculty</p> <p>Address IT Faculty, University of Moratuwa, 100A, DS Senanayake Mawatha, Colombo 08.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Tel</td> <td style="width: 33%;">Fax</td> <td style="width: 33%;">E-Mail</td> </tr> <tr> <td>4619771</td> <td>4619774</td> <td>ajith@itfac.mrt.ac.lk</td> </tr> </table>		Tel	Fax	E-Mail	4619771	4619774	ajith@itfac.mrt.ac.lk
Tel	Fax	E-Mail						
4619771	4619774	ajith@itfac.mrt.ac.lk						
Introduction to the Project	<p>Using the expansion of Mobile technology, mobile has become day today equipment. Learning foreign languages using mobile devices is not a new concept. Subscribers try to find ways to learn things in an easy manner where mobile devices come in to play very handy. Using this application user can learn any foreign language while moving.</p> <p>WAP enable mobile devices with GPRS connection can access site virtually from any where.</p>							

<p>Problem Domain & Motivation</p>	<p>Learning languages becoming an emerging area where people trying to find ways to learn foreign languages. Mobile technology is becoming more flexible and advanced which can used to do many things. To accomplish such thing Time and Cost will be deciding factor and Users will move easily what they can reach.</p> <p>Developing WAP enable web application will fulfill this requirement and Users can browse the application via GPRS connection and select appropriate program and walk thro up to any level.</p>
<p>Project Goals & Objectives</p>	<p>Study a way to provide better service to the society using latest technology, while completing the MSc IT final project.</p>
<p>Similar work & relationship to the Project</p>	<p>BBC UK has collaboration with China's Sina.com to provide better way to learn English using Mobile devices. And BBC is the first International educational content provider to use Mobile technology in China.</p> <p>References http://www.bbc.co.uk/pressoffice/pressreleases/stories/2003/09_september/02/chinese_mobile.shtml</p>
<p>Scope of the Project</p>	<ul style="list-style-type: none"> - Develop an Application on Web Server with WAP enable facility (Including WAP gateway). - Study the WAP technology and how it integrated with Microsoft .Net - Configuration of WAP browser (Simulator) <p>(Please see Annexure)</p>
<p>Deliverables</p>	<ul style="list-style-type: none"> - System Requirement Spec (SRS) - OOAD and Database Design - Develop Prototype Application - Workable Application and Testing - Implementation / Deployment Plan <p>Preparing the Thesis will continue as a parallel activity.</p>
<p>Parameters for the measurement of success</p>	<ul style="list-style-type: none"> - Approval of SRS - Meet the requirements in SRS - Success implementation of the Application

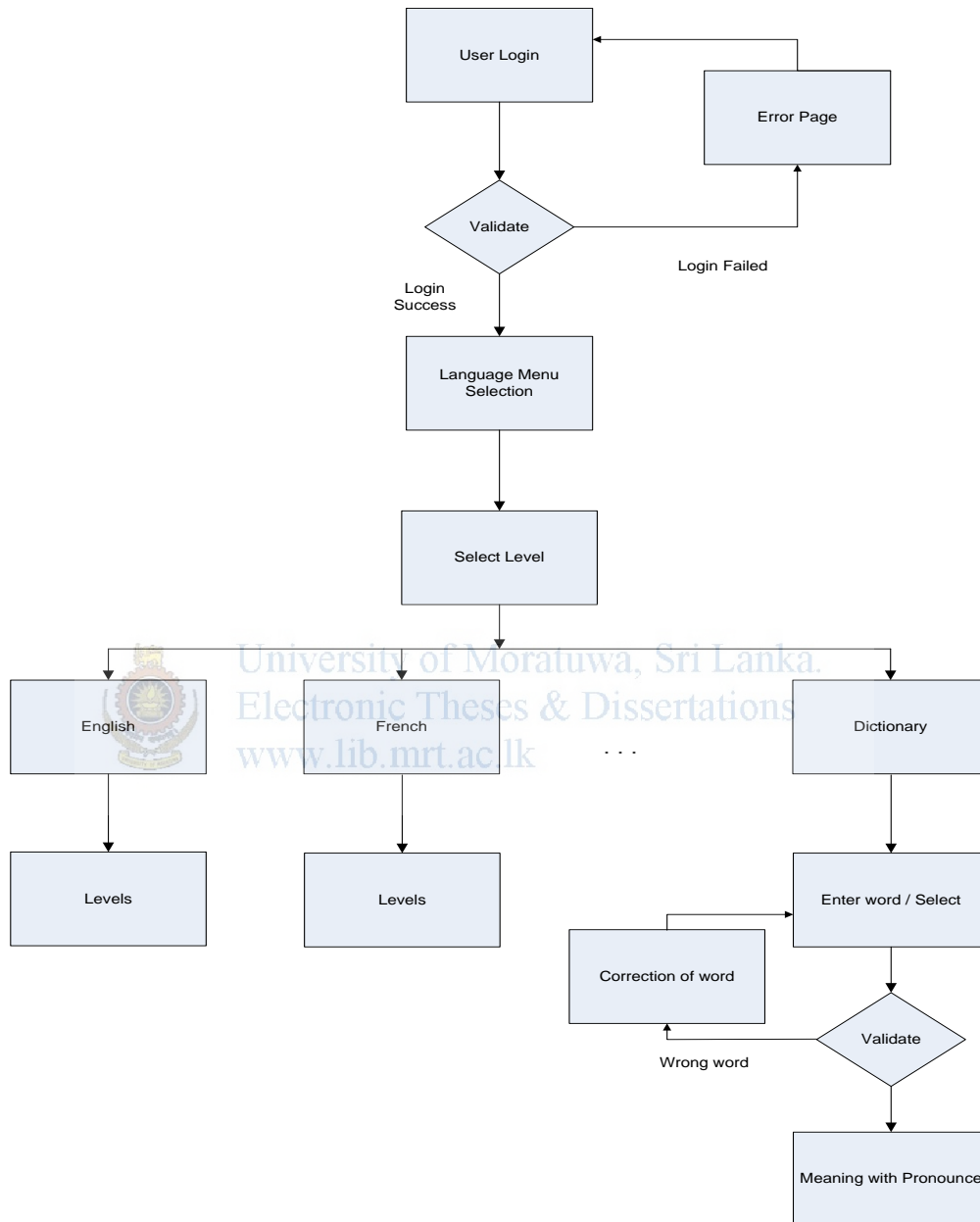
Risks & Risk Mitigation	<p>Risk : Lack of User awareness User resistance Technical risks</p> <p>Mitigation Plan Continues updating User awareness User training Conduct Presentations More user involvement with development Technical Plan</p>		
Client or Sponsor	IT Faculty - University of Moratuwa		
Project Schedule (Attach Gantt Chart)	Please See Annexure		
Student Signature		Supervisor Signature	
Date		Date	

Scope of the proposed system



Annex – B

Process Flow



Annex – C

Logical Design – Database Schema

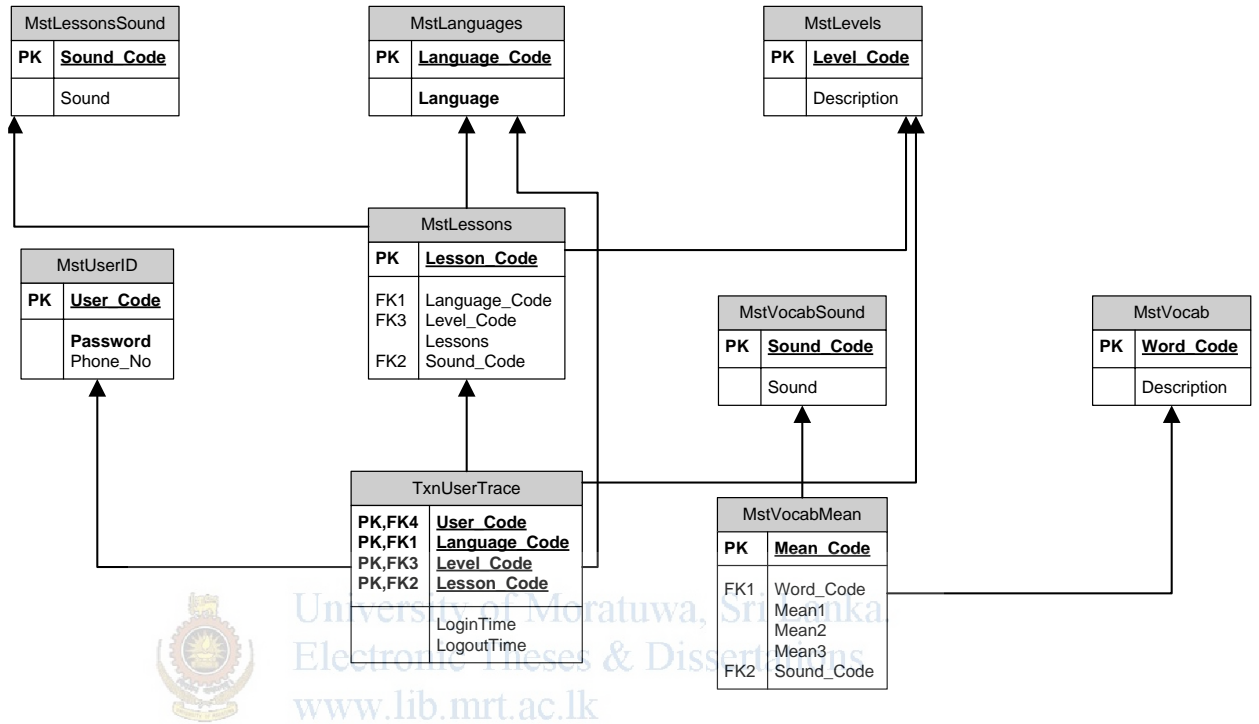


Table Definitions

The table definition includes naming conventions to the database tables and stored procedures.

Table

E.G. XXX



Master (Mst) / Transaction (Txn)

XXXXXXXXXX



Table Name

Example names **MstLanguages**
TxnUserTrace

Stored Procedure

E.G. XXX



System Name

XXXXXXXXXX



Table Name

X



Query Type (S – Select, I

- Insert)

Example names **MLLMstLanguages_S**

Table structures

2. MstLevels									
MstLevels will hold the level that user has to choose.									
<table border="1"> <thead> <tr> <th colspan="2">MstLevels</th> </tr> </thead> <tbody> <tr> <td>PK</td> <td><u>Level Code</u></td> </tr> <tr> <td></td> <td>Description</td> </tr> </tbody> </table>		MstLevels		PK	<u>Level Code</u>		Description	<ul style="list-style-type: none"> • Level_Code – Unique id for a level • Description – The description of level 	
MstLevels									
PK	<u>Level Code</u>								
	Description								
Sample data									
Level Code	0001	0002	0003						
Description	Beginner	Intermediate	Expert						

3. MstLessons																	
MstLessons will hold all the lesson data. This table will maintain relation with Language and Level tables.																	
<table border="1"> <thead> <tr> <th colspan="2">MstLessons</th> </tr> </thead> <tbody> <tr> <td>PK</td> <td><u>Lesson Code</u></td> </tr> <tr> <td>FK1</td> <td>Language_Code</td> </tr> <tr> <td>FK3</td> <td>Level_Code</td> </tr> <tr> <td></td> <td>LessonHead</td> </tr> <tr> <td></td> <td>LessonText</td> </tr> <tr> <td>FK2</td> <td>Sound_Code</td> </tr> </tbody> </table>		MstLessons		PK	<u>Lesson Code</u>	FK1	Language_Code	FK3	Level_Code		LessonHead		LessonText	FK2	Sound_Code	<ul style="list-style-type: none"> • Lesson_Code – Unique id for a lesson • Language_Code – Code from the Language table • Level_Code – Code from the Level table • LessonHead – The header part of the lesson • LessonText – The lesson data • Sound_Code – Sound file code from MstLessonSound table 	
MstLessons																	
PK	<u>Lesson Code</u>																
FK1	Language_Code																
FK3	Level_Code																
	LessonHead																
	LessonText																
FK2	Sound_Code																
Sample data																	
Lesson Code	0001	0002	0003														
Language Code	0001	0001	0001														
Level Code	0001	0001	0001														
LessonHead	Introduction	Subject / Predicate															
LessonText	XXXXXXXXXXXXXX	XXXXXXXXXXXXXX															
Sound Code	0001	0002	0003														

4. MstUserID

MstUserID will hold user id and relevant password. Users who have record on this table can access the site.

MstUserID	
PK	<u>User Code</u>
	Password

- User_Code – Unique id for a User
- Password – User’s relevant password

Sample data

User_Code	A001	A002	A003
Password	Test	Realtest	abctest

5. TxnUserTrace

TxnUserTrace will hold all the user data and what user access. This table will maintain relation with all other tables in the system. This can use for security reasons and future enhancement of the system.

TxnUserTrace	
PK,FK4	<u>User Code</u>
PK,FK1	<u>Language Code</u>
PK,FK3	<u>Level Code</u>
PK,FK2	<u>Lesson Code</u>
	LoginTime LogoutTime

- User_Code – Code from the user table
- Language_Code – Code from the Language table
- Level_Code – Code from the Level table
- Lesson_Code – Code from the lesson table
- LoginTime – The User login time
- LogoutTime – Logout time

Sample data

User_Code	A001	A001	A002
Language_Code	0001	0001	0001
Level_Code	0001	0001	0001
Lesson_Code	0001	0003	
LoginTime	19/06/2006 3:05 PM	20/06/2006 2:55 PM	
LogoutTime	19/06/2006 3:15 PM	20/06/2006 3:10 PM	

6. MstVocabMean

MstVocabMean will hold words with respective meanings (for the moment 3 meanings).

MstVocabMean		<ul style="list-style-type: none"> • Mean_Code – Unique id for word • Word – correct word • Mean1 – Meaning 1 • Mean2 – Meaning 2 • Mean3 – Meaning 3 • Sound_Code – Code will refer the vocabsound table which contain the Word pronounce
PK	Mean_Code	
	Word Mean1 Mean2 Mean3	
FK1	Sound_Code	

Sample data

Mean_Code	0001	0002	0003
Word	Aback	abacus	abandon
Mean1	taken back	frame with balls	giveup
Mean2	disconcerted		careless freedom
Mean3			
Sound_Code	0001	0002	0003



7. MstVocabSound

MstVocabSound will hold sound for the word.

MstVocabSound		<ul style="list-style-type: none"> • Sound_Code – Unique id for a sound file • Sound – Binary data (contain mp3 format)
PK	Sound_Code	
	Sound	

Sample data

Sound_Code	0001	0002	0003
Sound	0101010001101	010101011010101	01010000001010

8. MstLessonSound

MstLessonSound will hold sound for the lesson.

MstLessonsSound	
PK	<u>Sound Code</u>
	Sound

- Sound_Code – Unique id for a sound file
- Sound – Binary data (contain mp3 format)

Sample data

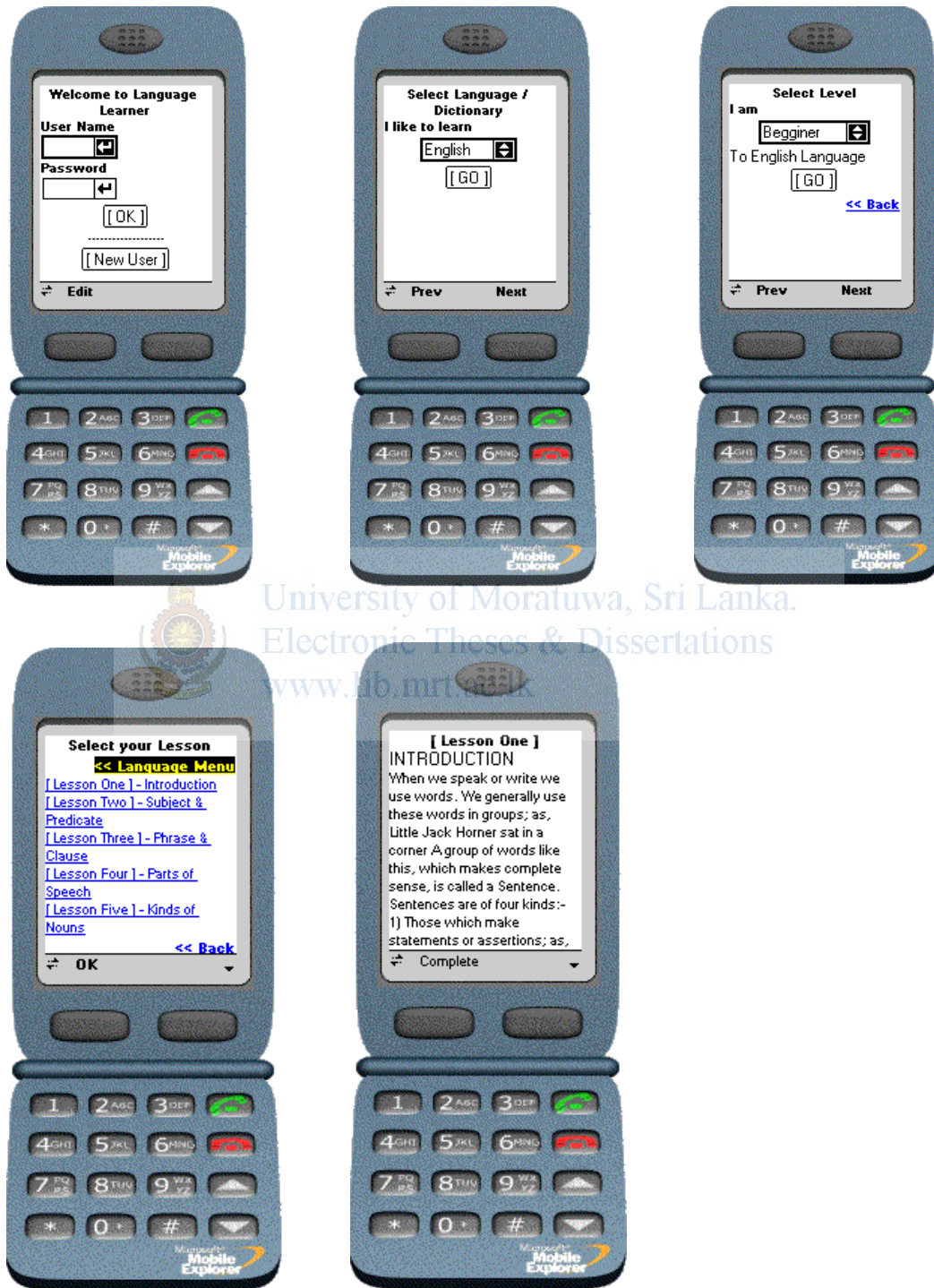
Sound_Code	0001	0002	0003
Sound	0101010001101	010101011010101	010100000001010



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Annex – D

Sample Screen Shots



Admin Process

Menu - Microsoft Internet Explorer

Address: http://localhost/MLLAdmin/Menu.aspx

Main Menu

Add User	Add scriber to the MLL System
Edit User	Edit scriber settings
Delete User	Delete scriber from MLL System
Add Data to MLL	Add Sound and Text data to MLL
Reports	See Reports [Users / Logs]
Logout	Exit

Done

Removable Disk (I:) Doc1.doc - Microsof... MLLAdmin - Microso... Menu - Microsoft ... SQL Server Enterpri... Backup 10:15 PM

AddData - Microsoft Internet Explorer

Address: http://localhost/MLLAdmin/AddData.aspx

Add Data

Language: English

Level: Begginer

Lesson No.: 1

Text

Sound File: Browse

Add

Delete Data

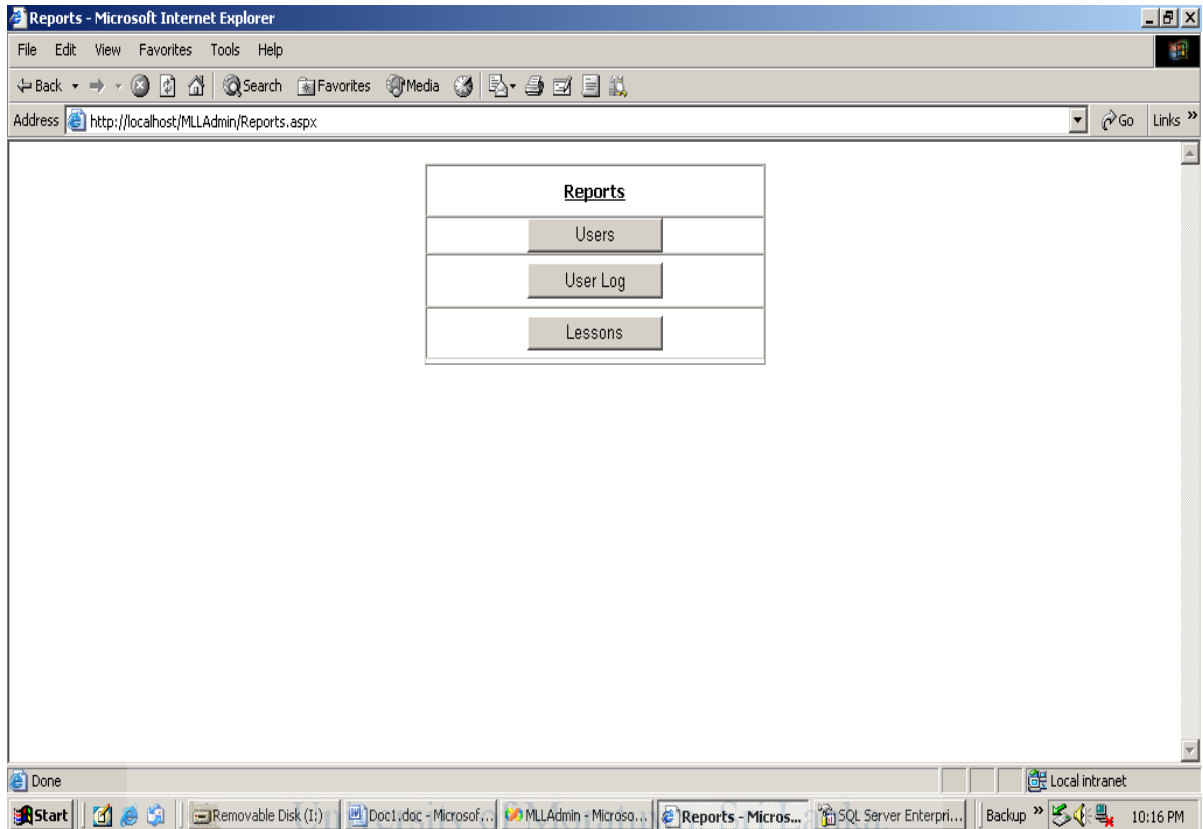
Language: English

Level: Begginer

Lesson No.: 1

Done

Removable Disk (I:) Doc1.doc - Microsof... MLLAdmin - Microso... AddData - Micros... SQL Server Enterpri... Backup 10:16 PM



Sample Codes – Process Class

```

using System;
using System.Data.SqlClient;
using System.Configuration;
using System.Data;

namespace MobLanLer
{
    /// <summary>
    /// Summary description for process.
    /// </summary>
    public class process
    {
        private SqlConnection sqlConn; //define sql connectinio
        private string strSqlConn =
ConfigurationSettings.AppSettings["MLL"]; //get the connection string
from

//web.config file
        private SqlDataAdapter sqlDatAp;

        #region "Constructor"

        public process()
        {

```

```

        sqlConn = new SqlConnection(strSqlConn); //assign the
DB Connection string to SqlConnection
        //sqlConn.Open();
//open the DB connection ** not use coz Adaptor works fine
        //{DataAdaptor manages the DB connection fine so no
need for manual open}
    }

#endregion

#region "Custom Error Traping"
public class UndeclaredVarException : ApplicationException
{
    public UndeclaredVarException(string VarName, string
VarType)
        : base("[ " + VarType + " ] not valid in this
context [ " + VarName + " ]")
    {
    }
    public UndeclaredVarException(string VarName, string
VarType, Exception innerException)
        : base("[ " + VarType + " ] not valid in this
context [ " + VarName + " ], innerException)
    {
    }
}
}

```



Annex – E

User Manual

This user manual is designed to give some user guidelines to use the system.

This MLL includes with two main modules.

- Mobile based web application for providing lesson information
- Web application for the admin for administration of the mobile application.

How to access the mobile based site

For access this system user must have mobile phone with following properties.

- WAP enabled
- GPRS activated

If the user has the above requirements, then go to Internet using GPRS and type the URL 222.165.132.14/ml1 and submit the request. The successful connection will give the Login screen to log into the MLL.



How to login to the MLL

To log into the system, user must have a valid User ID and the Password. User can register him or her self using the site or by contacting the system admin the user id and password can be obtained. After obtaining the necessary access permissions then he/she can be log into the MLL.

Annex – F

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