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FPT ACADEMY INTERNATIONAL

FPT – APTECH COMPUTER EDUCATION

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ONLINE BANKING

Installaion and User Guide

March, 2019

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I. INTRODUCTION

- This document is created to guide users install and use the Internet banking system effectively. It is advisable that users should read this document before starting to use this system in reality.
- To run Online banking system, users need to follow the steps in our Installaion Guide.

II. SOFTWARE AND HARDWARE REQUIREMENTS

1. Hardware Requirements

Component	Requirement
Server	Processor type: Intel Core i5 or higher Processor speed: Recommended: 2.0 GHz or faster
Operating system	Microsoft Windows 10
Memory (RAM)	RAM: Minimum: 1 GB Recommended: 2.048 GB or more Maximum: Operating system maximum
Hard Drive	Free space: Minimum: 50 MB Recommended: 50 GB or more Maximum: Operating system maximum

2. Software Requirements

Component	Requirement
.NET Framework	Version 4.6.1
Visual Studio	Visual Studio 2017 (with ASP.NET MVC templates)
Database	SQL Server 2017

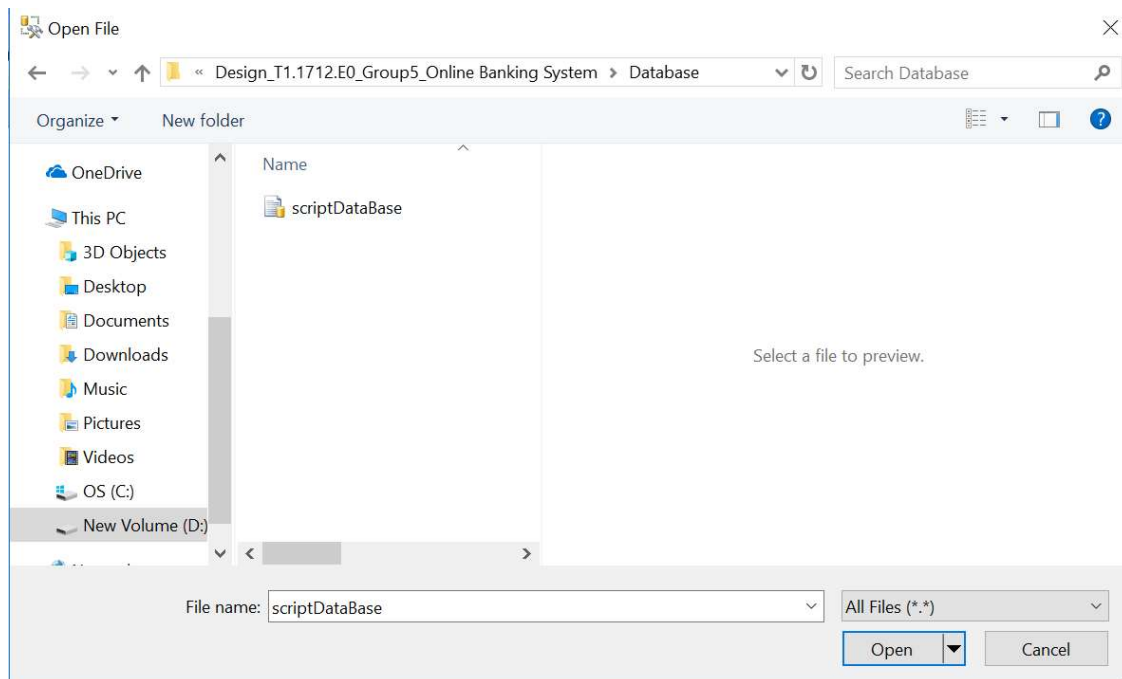
II. SETUP ONLINE BANKING SYSTEM

1. Download file

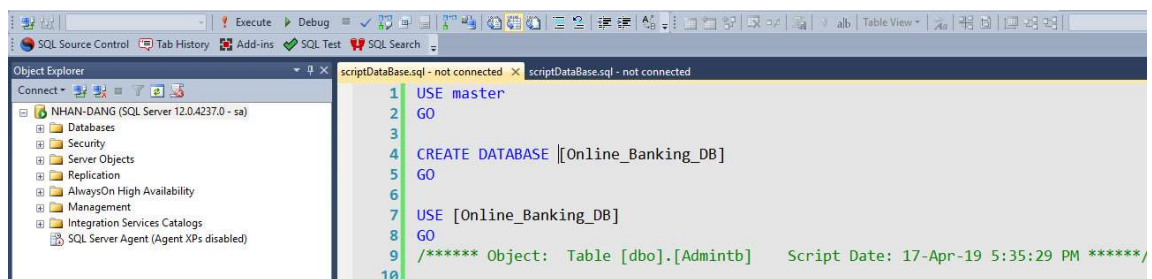
- Download the file rar ePRJ3_T1.1712.E0_Group5_OnlineBanking via this link:
- Extract the file rar: ePRJ3_T1.1712.E0_Group5_OnlineBanking

2. Configurations

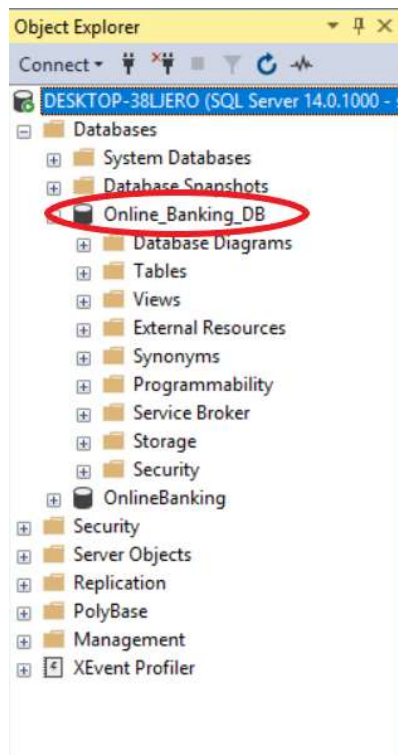
- Step 1: Open SQL Server and Connect
- Step 2: File → Open → File (Ctrl+O)
- Step 3: Select scriptDataBase.sql in Design_T1.1712.E0_Group5_OnlineBanking\ Database → Click Open



- Step 4: Execute scriptDataBase.sql to Create Online_Banking_DB Database
(Click Execute Button on toolbar or Press F5 on Keyboard)



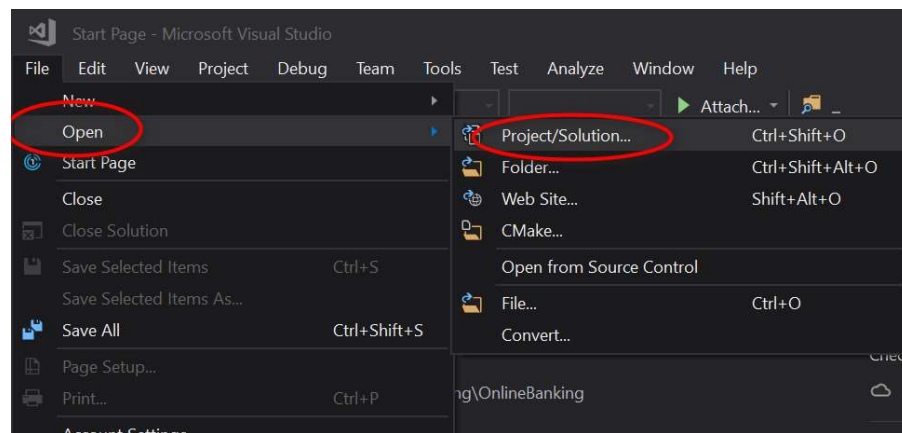
- Step 5: Right click the Databases folder and refresh, database Online_Banking_DB will be shown



3. Run Project Online Banking System

3.1 Open Project

- Open Visual Studio and then click File → Open → Project/Solution

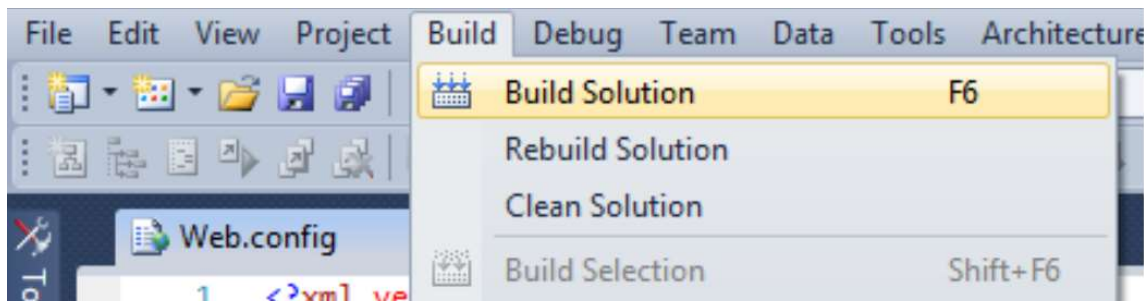


- Locate Project solution file in Design_T1.1712.E0_Group5_OnlineBanking\SourceCode\OnlineBanking
- Double-click on OnlineBanking.sln in Visual Studio

3.1. Connect Database

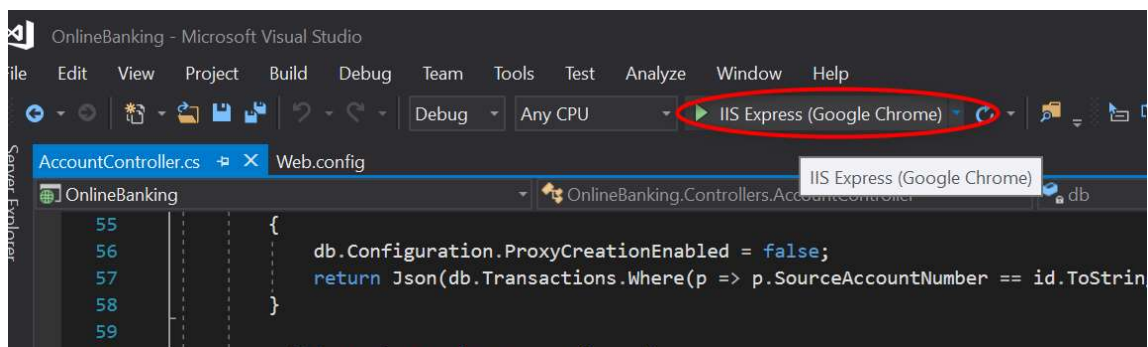
- In Visual Studio, open Web.config and Edit connectionString

```
<connectionStrings><add name = "OnlineBankingDbContext" connectionString =
"datasource=.;initial catalog = Online_Banking_DB;user id=sa;password=123;
MultipleActiveResultSets=True;App=EntityFramework"
providerName="System.Data.EntityClient" /></connectionStrings>
```
- Modify "connectionString"
 - datasource= [Server name][SQL instance name] (Example: LAPTOP-8LB1SVID\SQLEXPRESS)
 - uid: Username to log on SQL Server
 - password: Password to log on SQL Server
- In Visual Studio, Click on menu Build and select Build Solution and wait for Successful message:



4. Publish website from Visual Studio

- In Visual Studio, click IIS Express (Google Chrome) on menu



III. USER GUIDE

- After run the project, input

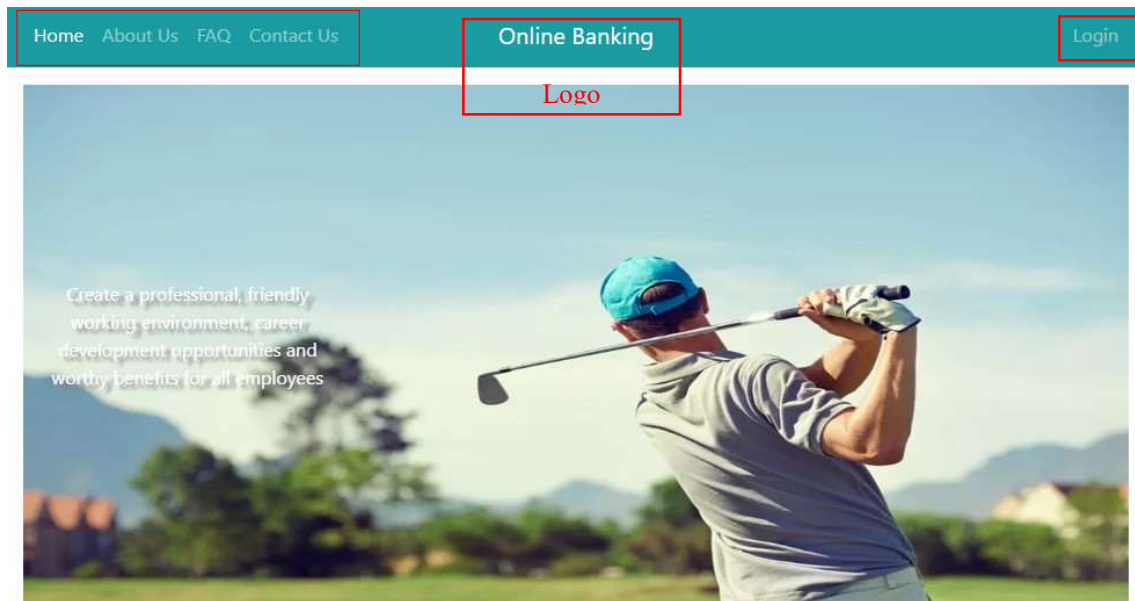
Login Admin: admin (password: admin)

Login Users: nhandang714@gmail.com or nhandang797@gmail.com (password: 12345 / transaction password: 12345)

I. CUSTOMER

1.1 Home

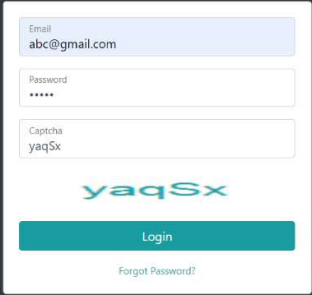
At homepage, users can:



- Click home link or **logo** for going to home page
- Click about us link for going to about page
- Click faq link for going to faq page
- Click contact us link for going to contact page
- Click login link for going to login page (only user)

1. Login

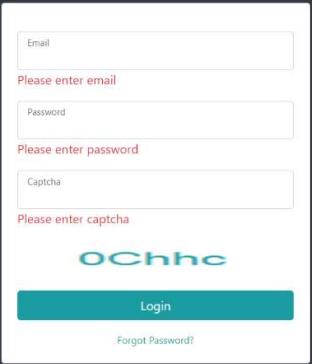
- Step 1: Enter your email, password and enter captcha



A login form on a dark background. The form has three input fields: 'Email' with the value 'abc@gmail.com', 'Password' with masked characters '*****', and 'Captcha' with the value 'yaq5x'. Below the inputs is a teal 'Login' button and a link 'Forgot Password?'. The 'yaq5x' logo is displayed above the button.

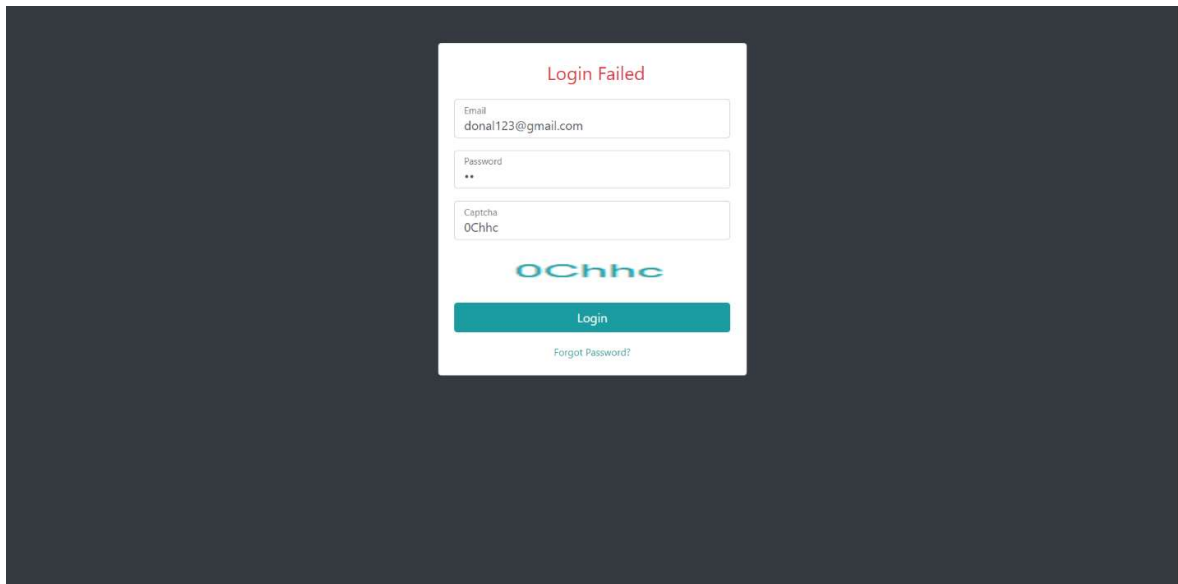
- Step 2: If you enter the correct data, the website will take you to the home page. If not, there will be 4 errors:

- You leave the input boxes blank and will report an error:

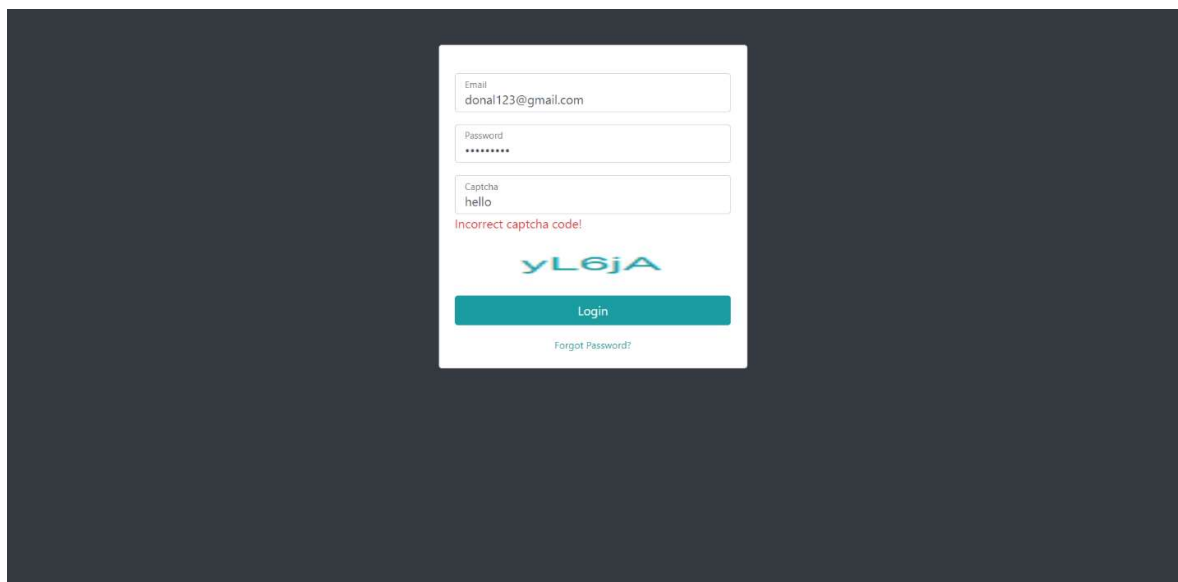


The same login form as above, but with validation errors. The 'Email', 'Password', and 'Captcha' fields are empty. Red error messages are displayed below each field: 'Please enter email', 'Please enter password', and 'Please enter captcha'. The 'OChhc' logo is displayed above the 'Login' button, and the 'Forgot Password?' link is still present.

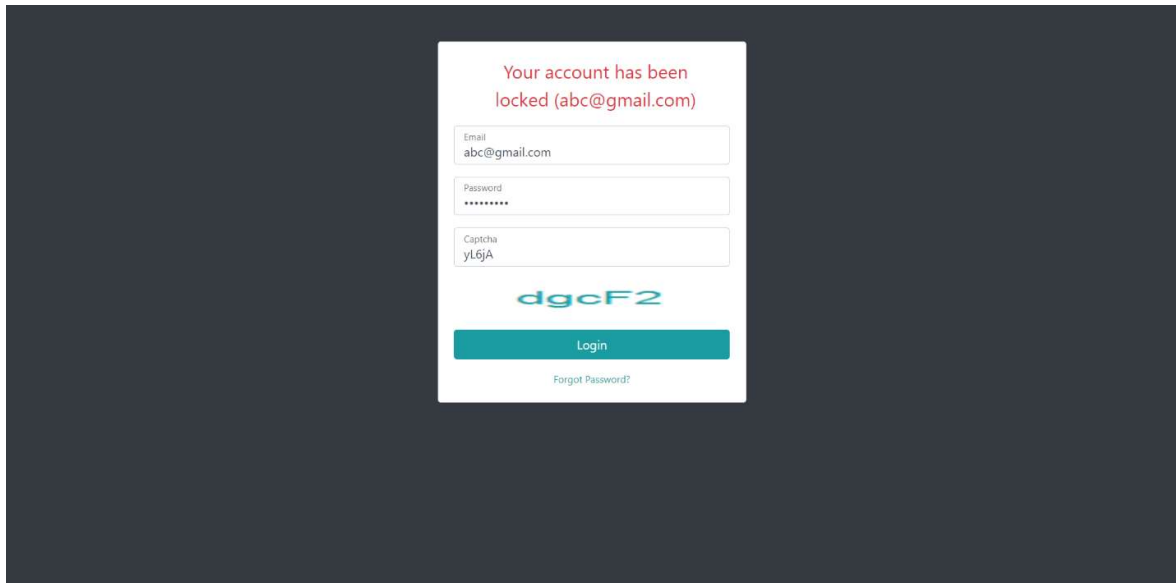
- You entered an incorrect email or password, or an unregistered email will report an error:



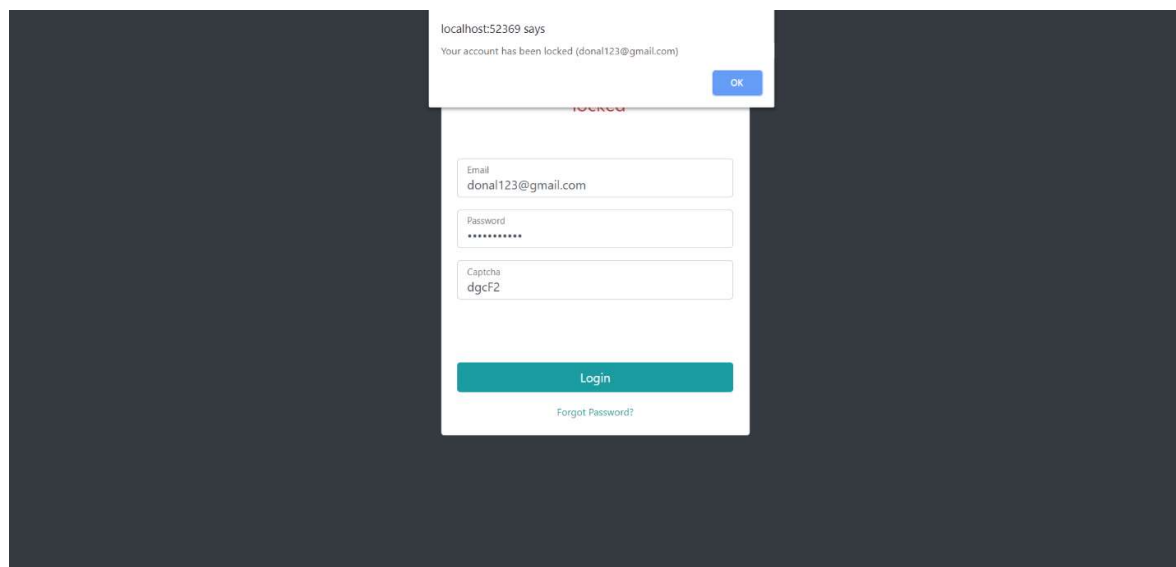
- You enter the correct email and password but wrong captcha will report the error:



- You enter a locked account that will report an error:



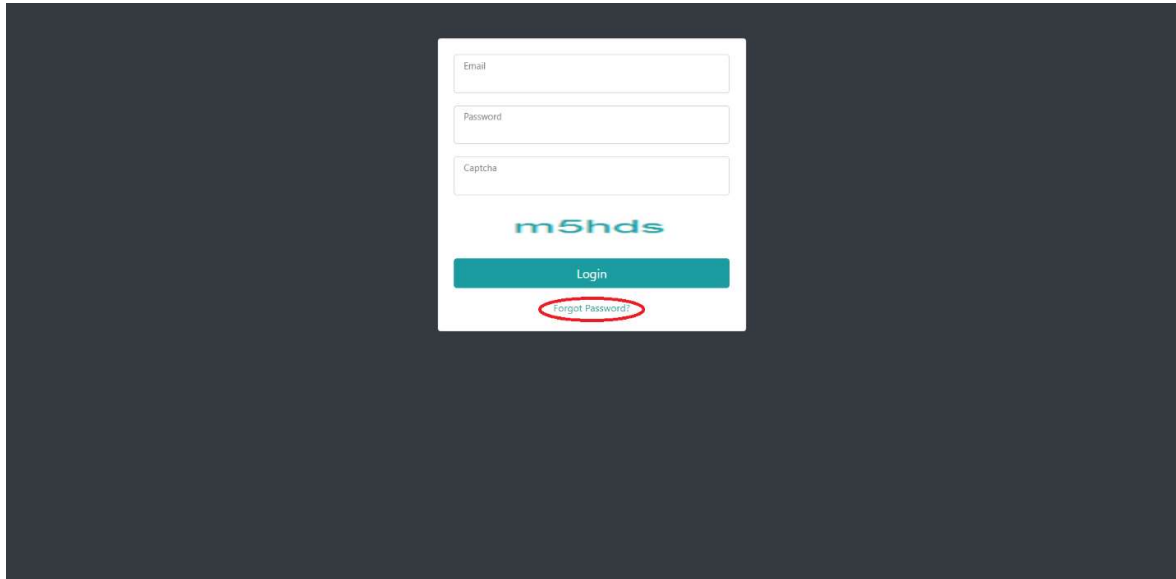
- You login incorrectly 3 times, the system will be locked your account:



2. Forgot

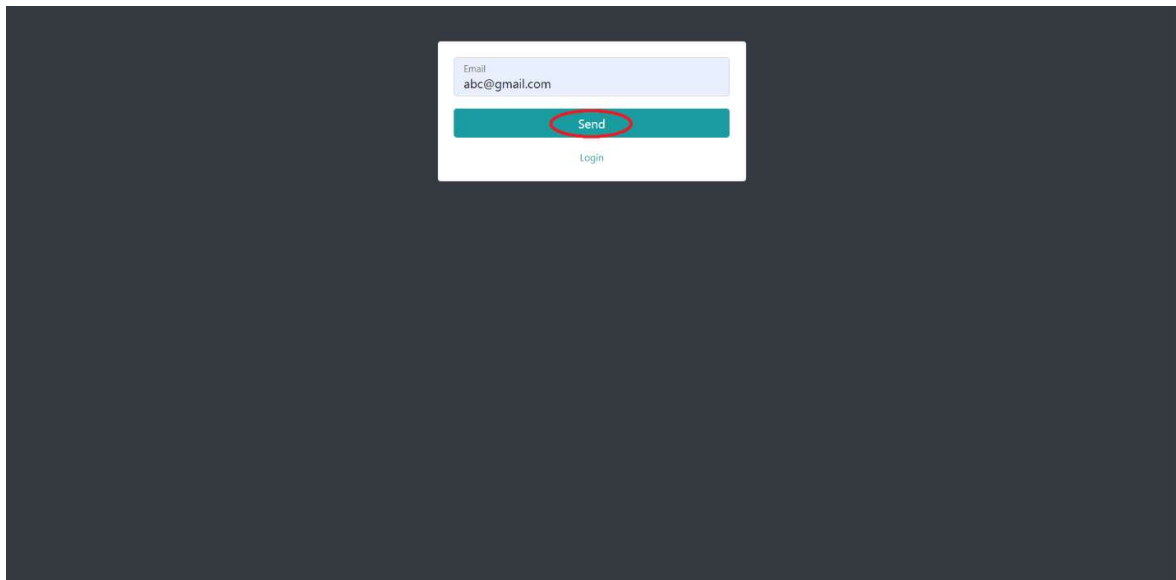
In case you forgot your password, follow these steps:

- Step 1: Clicking on that link will take you to the forgot password page



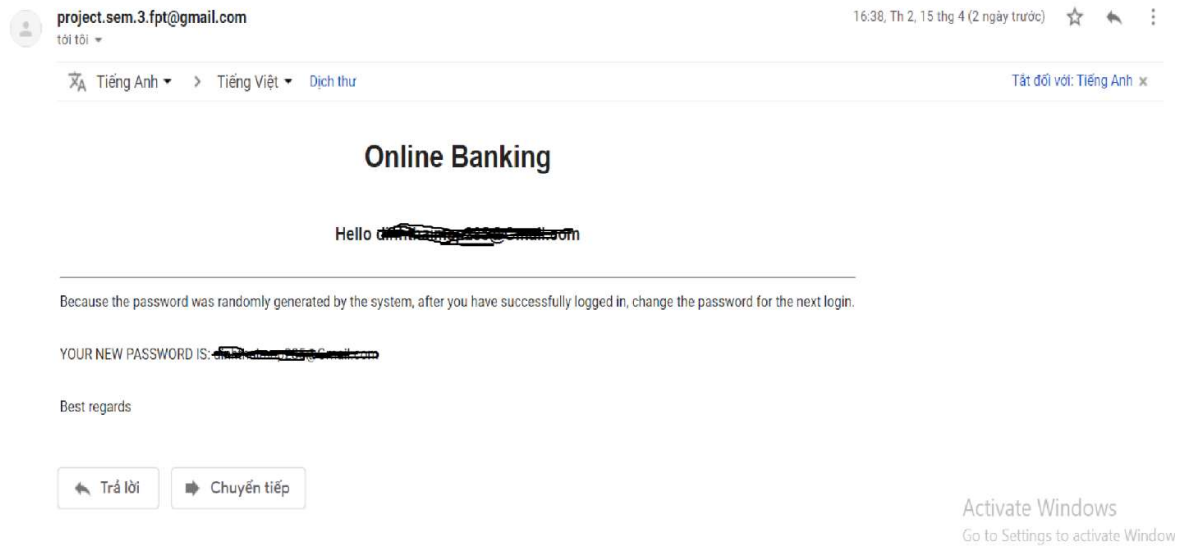
A screenshot of a web form for password recovery. The form is centered on a dark gray background. It contains three input fields labeled 'Email', 'Password', and 'Captcha'. Below these fields is the 'm5hds' logo in green. Under the logo are two buttons: a teal 'Login' button and a red 'Forgot Password' button. The 'Forgot Password' button is circled in red.

- Step 2: Enter an email that has forgotten the password and press the send button to send the new password to your email



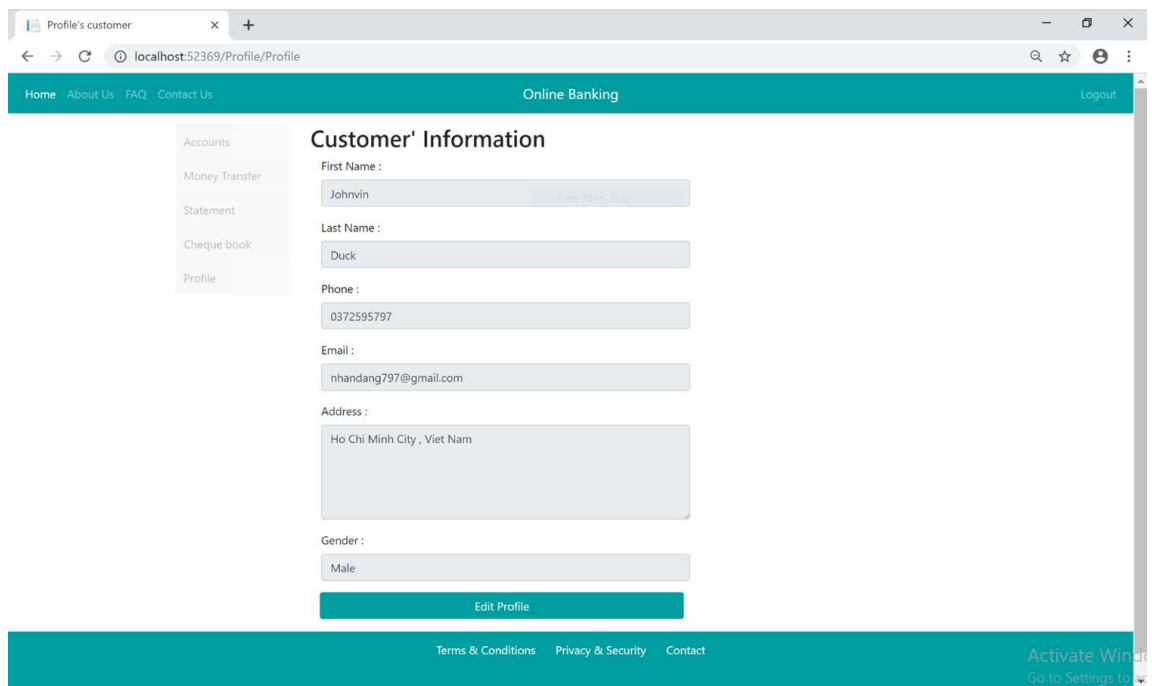
A screenshot of the same web form as above, but now the 'Email' field is filled with 'abc@gmail.com'. The 'Send' button, located below the email field, is circled in red. The 'Login' button remains visible below the 'Send' button.

- Step 3: View the message sent by the system to your email



3. View and Edit profile

This is the website that displays your information:



- Step 1: Clicking on that link will take you to the edit page

The screenshot shows a web browser window with the address bar displaying 'localhost:52369/Profile/Profile'. The page has a teal header with 'Online Banking' and a 'Logout' link. A sidebar on the left contains links for 'Accounts', 'Money Transfer', 'Statement', 'Cheque book', and 'Profile'. The main content area is titled 'Customer' Information' and contains the following fields: 'First Name' (Johnvin), 'Last Name' (Duck), 'Phone' (0372595797), 'Email' (nhandang797@gmail.com), 'Address' (Ho Chi Minh City, Viet Nam), and 'Gender' (Male). A teal 'Edit Profile' button is at the bottom of the form, circled in red. The footer includes 'Terms & Conditions', 'Privacy & Security', 'Contact', and a copyright notice for 2019.

- Step 2: Input the information into fields and Update button will be shown

The screenshot shows a web browser window with the address bar displaying 'localhost:52369/Profile/Update'. The page has a teal header with 'Online Banking' and a 'Logout' link. A sidebar on the left contains links for 'Accounts', 'Money Transfer', 'Statement', 'Cheque book', and 'Profile'. The main content area is titled 'Customer' Information' and contains the following fields: 'Address' (Ho Chi Minh City, Viet Nam), 'Password', 'Confirm Password', 'Transaction Password', and 'Confirm transaction Password'. A teal 'Back to profile' button is at the bottom of the form. The footer includes 'Terms & Conditions', 'Privacy & Security', 'Contact', and a copyright notice for 2019.

[Accounts](#)[Money Transfer](#)[Statement](#)[Cheque book](#)[Profile](#)

Customer' Information

Address

i

Password

Confirm Password

Transaction Password

Confirm transaction
Password

[Back to profile](#)[Update profile](#)

Activate Windows

[Go to Settings to activate Windows.](#)

4. List account banking page

Displays all account bank of user

Accounts	Account / Detail
Money Transfer	
Statement	
Cheque book	
Profile	

List Account Banking

Account number	Account Balance	Create Date
OB-1236598745	22.00	15-Apr-19 12:00:00 AM
OB-1489337983	20.00	16-Apr-19 9:59:07 AM
OB-1563379901	0.00	16-Apr-19 4:21:32 PM
OB-1593582154	10.00	16-Apr-19 11:47:24 AM
OB-1807755204	15.00	16-Apr-19 10:08:00 AM
OB-2568487812	269.00	12-Mar-19 12:00:00 AM

5. Cheque book page

Customer name: John Duck

Account Number

OB-1236598745

Date of Issue

4/17/2019

Cheque Leaves Number

5

Submit

Request Cheque Book List

Account Number	Number Cheque Request	Date of Issue	Date of Expiry	Status
OB-1236598745	5	17-Apr-19 12:55:26 PM	17-Apr-19 1:20:18 PM	InActive

- To create new cheque book, please select Account Number and Cheque Leaves Number.
- After clicking Submit button, new Cheque Book will be created and shown in the Request Cheque Book List below.

To stop Cheque Book payment, please click InActive button in Status column

6. Fund transfer

After login, people can click to Money Transfer to move to Money Transfer page

The screenshot shows a web browser window with the URL `localhost:52369/Transactions/FundTransfer`. The page has a teal header with navigation links: Home, About Us, FAQ, Contact Us, Online Banking, and a Login button. On the left, a sidebar menu contains: Accounts, Money Transfer, Statement (highlighted with a red box), Request (with a dropdown arrow), and Profile. The main content area is titled "Transfer information" and contains the following fields: "Originator account" (a dropdown menu showing "OB-1236598745"), "Beneficial account" (a text box with placeholder "Beneficiary account number"), "Amount" (a text box with placeholder "Amount of money"), and "Description" (a text box with placeholder "Transfer description"). A teal "Continue" button is at the bottom of the form. At the bottom of the page, a teal footer contains links: Terms & Conditions (highlighted with a red box), Privacy & Security, and Contact.

In Originator account dropdown menu, user can chose from what account of his/her that he/she wants to be transferred.

In Beneficial account text box, user can type the account they want to transfer to. If the account does not exist, or it's the same account as the Originator account, a proper message should appear.

In Amount text box, user enter the amount of money they want to transfer. This number cannot small than 0 or greater than the Balance of the account minus a small sum to active the account (10 USD). It only accept number type.

In Description text box, user enter his/her description of the transfer.

After that, user click Continue button to go to next page to confirm the transaction again.

The screenshot shows the "Transfer confirm" page of the web application. The layout is identical to the previous page, but the main content area now displays the confirmed transfer details: "Originator account" is "OB-1236598745", "Beneficial account" is "OB-1345021305 - ARERON ADEN" (in red text), "Amount" is "20" (in red text), and "Content" is "Valid account". A teal "Continue" button is at the bottom of the form.

User click continue to go to next page to enter the transaction password

The screenshot shows a web browser window with the URL `localhost:52369/Transactions/FundTransfer`. The page has a teal header with navigation links: Home, About Us, FAQ, Contact Us, Online Banking, and a Login link. A left sidebar contains links for Accounts, Money Transfer, Statement, Request (with a dropdown arrow), and Profile. The main content area features a white box titled 'Enter transaction password' with a text input field labeled 'Transaction password' and a teal 'Confirm' button. Below this box is a red rectangular placeholder. At the bottom of the page is a teal footer with links for Terms & Conditions, Privacy & Security, and Contact.

If user enter the correct transaction password, the money transfer is completed.

The screenshot shows the same web browser window, but the main content area now displays a green confirmation box titled 'Successful transfer'. The message inside reads: 'You have successfully transferred 20 USD to ARERON ADEN account number OB-1345021305'. Below the message is a button labeled 'Back to your accounts'. The header, sidebar, and footer remain the same as in the previous screenshot.

View Monthly/Annual Statement & Print

After login validly, user can view their monthly or annual statement

After click to Statement, user go to the page to Request their statement.

The screenshot shows a web browser window with the URL `localhost:52369/Transactions/ChoseStatementType`. The page has a teal header with 'Online Banking' and a 'Login' link. A sidebar on the left contains links: 'Accounts', 'Money Transfer', 'Statement', 'Request', and 'Profile'. The main content area is titled 'Chose your statement' and contains four dropdown menus: 'Account number' (selected: OB-1236598745), 'Statement type' (selected: Monthly), 'Year' (selected: 2019), and 'Month' (selected: Jan). A red box highlights a 'Request' button at the bottom of the form. The footer contains links: 'Terms & Conditions', 'Privacy & Security', and 'Contact'.

On Account number dropdown menu, user can chose what account he/she want to have a statement.

On Statement type dropdown menu, user can chose what type of statement he/she want (Monthly or Annual).

On Year Dropdown menu, user can chose the year they want to statement.

If user chose Monthly Statement, he/she should chose the month of the statement.

After that, user click Request to view the statement.

The screenshot shows the 'Monthly Statement' page with the URL `localhost:52369/Transactions/MonthlyStatement?Year=2019&Month=4&AccountNumber=OB-1236598745`. The page layout is similar to the previous one, but the 'Request' button is now a 'Print statement' button. The main content area displays the statement details for the year 2019 and month April.

Date	Transaction Description	Paid In	Paid Out	Balance
15/4/2019	admin	2		510
15/4/2019	admin	8		518
16/4/2019	2 USD	2		520
16/4/2019	abc@gmail.com		100	420
16/4/2019	1		20	400
17/4/2019	Valid account		20	380

Account Summary

Opening Balance	.00
Payment in	12.00
Payment out	140.00
Closing Balance	380.00

User can click the Print statement button to print the statement.

The screenshot shows a web browser window with the address bar displaying `localhost:52369/Transactions/MonthlyStatement?Year=2019&Month=4&AccountNumber=OB-1236598745`. A print overlay is visible on the left side of the browser window. The print settings include:

- Print button (blue)
- Cancel button (white)
- Destination: OneNote
- Pages: All (selected), e.g. 1-5, 8, 11-13
- Copies: 1
- Color: Color
- More settings (dropdown)
- Print using system dialog... (Ctrl+Shift+P) (checkbox)

The main content area displays the 'Monthly Statement' for the year 2019, month April. It includes account details and a transaction table.

Date	Transaction Description	Paid In	Paid Out	Balance
15/4/2019	admin	2		510
15/4/2019	admin	8		518
16/4/2019	2 USD	2		520
16/4/2019	alc@gmail.com		100	420
16/4/2019	1		20	400
17/4/2019	Valid account	20		380

At the bottom of the page, there are links for 'Terms & Conditions', 'Privacy & Security', and 'Contact'. A footer note states '© 2019 Copyright: OnlineBaking.com'.

II. ADMIN

1. Login – Admin

You must enter link : <http://localhost:52369/Admin/Login/Login>

The screenshot shows a login form titled 'OnlineBaking Management'. It contains two input fields: 'UserName' and 'Password'. Below these fields is a blue 'Login' button.

- Input the admin username and password and click login button to login

- Username : admin

- Password : admin

- After login successful, you will go to admin's control page

1.1 Admin's control page

At this page, users can:

The screenshot displays the Admin's control page for managing customer accounts. On the left, a sidebar menu contains 'Customers' (highlighted), 'FAQs', and 'Menu'. The main content area features a 'Create New Customer' button (labeled 'Create') and a search bar (labeled 'Search') with a 'Search Name ...' input, a dropdown menu set to 'All', and a 'Search' button. Below these is a table titled 'Customer Account' with columns for ID, Full Name, Gender, and Status. The table lists four customers: John Duck (ID 1, Male, Active), Donald Trump (ID 2, Male, Active), Areron Aden (ID 3, Male, Active), and Austin Aspen (ID 5, Female, Blocked). At the bottom right of the table, there are pagination controls: 'First', 'Previous', '1' (selected), '2', 'Next', and 'Last'. The word 'Details' is written in red below the table.

ID	Full Name	Gender	Status
1	John Duck	Male	Active
2	Donald Trump	Male	Active
3	Aron Aden	Male	Active
5	Austin Aspen	Female	Blocked

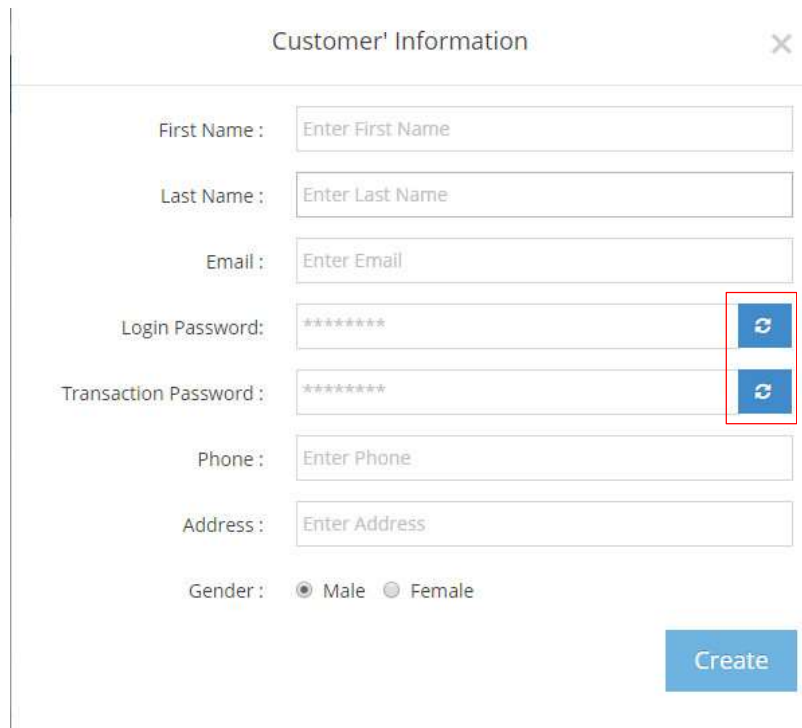
a. Menu

- Click Customers to show detail's customer page


This screenshot shows the Admin's control page for managing customer accounts. The sidebar menu on the left includes 'Customers' (highlighted), 'FAQs', and 'Menu'. The main content area features a 'Create New Customer' button and a search bar with a 'Search Name ...' input, a dropdown menu set to 'All', and a 'Search' button. Below these is a table titled 'Customer Account' with columns for ID, Full Name, Gender, and Status. The table lists four customers: John Duck (ID 1, Male, Active), Donald Trump (ID 2, Male, Active), Areron Aden (ID 3, Male, Active), and Austin Aspen (ID 5, Female, Blocked). At the bottom right of the table, there are pagination controls: 'First', 'Previous', '1' (selected), '2', 'Next', and 'Last'.

ID	Full Name	Gender	Status
1	John Duck	Male	Active
2	Donald Trump	Male	Active
3	Aron Aden	Male	Active
5	Austin Aspen	Female	Blocked

[Create](#)



A screenshot of a web form titled "Customer' Information" with a close button (X) in the top right corner. The form contains several input fields: "First Name" with placeholder "Enter First Name", "Last Name" with placeholder "Enter Last Name", "Email" with placeholder "Enter Email", "Login Password" with placeholder "*****", "Transaction Password" with placeholder "*****", "Phone" with placeholder "Enter Phone", and "Address" with placeholder "Enter Address". Below these fields is a "Gender" section with radio buttons for "Male" (selected) and "Female". To the right of the "Login Password" and "Transaction Password" fields are blue buttons with a circular arrow icon, which are highlighted by a red rectangle. At the bottom right of the form is a blue "Create" button.

- Click Create button to create customer
 - o Input the information of customer into each field and click Create button to create new customer
 - o Click button  to create random password so that admin can not see this one.
 - o After filling the form, click Create button and user's password will be automatically sent to his/her email.

*****Note : You must enter your email to recive password .**

b. [Search](#)

- Input name and click search button to find a details of customer or click drop down to find a details of customer by status

c. [Details](#)

- Display details of all the customer
- Users can click any row of Customer Account table to show specific customer's details (Customer details page)

Customer Information

First Name :

John

Last Name :

Duck

Login Password:

Login Password:

Phone :

0123644896

Email :

nhandang714@gmail.com

Address :

Ho Chi Minh City

Gender :

☒ Male

Status :

↻

Activated

List Account Bank

Transfers

Create New Account

Account Number	Balance	Create Date
OB-1236598745	22.00	15-Apr-19 12:00:00 AM
OB-1489337983	20.00	16-Apr-19 9:59:07 AM
OB-1563379901	0.00	16-Apr-19 4:21:32 PM
OB-1593582154	10.00	16-Apr-19 11:47:24 AM
OB-1807755204	15.00	16-Apr-19 10:08:00 AM
OB-2568487812	269.00	12-Mar-19 12:00:00 AM

If user account is locked, his/her status in Customer Information will show Deactivated. If not, it will show Activated.

After click button Active . You must check your email to receive new password .

- To re-active/lock user account, admin can click button

↻ Activated
- List account bank table displays all account bank of customer
- Click Create New Account to create new account bank
- Click Transfers button to show Transfers model

Transfers

Account

OB-1236598745

Money

Enter Value

Save Changes

- Select account number in Account dropdown box and input amount into Money field and click Save Changes button to add to customer's balance

- Click FAQs to show FAQ's control page

List FAQs		
		Create New
No.	Questions	
1	> How can I register to use ?a	Update Delete

- Click Create button to create a new FAQs
- Click Update button to Edit this FAQs
- Click Delete button to delete this FAQs