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| National University of singapore  nus_logo.gif |
| CKY Restaurant  Online Booking System |
| CS2102 Database Systems – Project Report |
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| **YEAR**  **14/15 Semester 1** |

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GROUP 62  
TEAM MEMBERS:

1. SIEW KAE YEE A0098127X
2. Lui Yu Yao A0098155W
3. Chen Tze Cheng A0112092W

**Introduction**

In this project, our group had built up an online booking system for CKY Restaurant to facilitate it with providing online reservation services. This platform provides a range of services such as sign up, log in/out, make/edit/delete reservation, statistical report for administrators and etc. More details of the system will be provided in the following sections.

**Implementation of the Online Booking System**

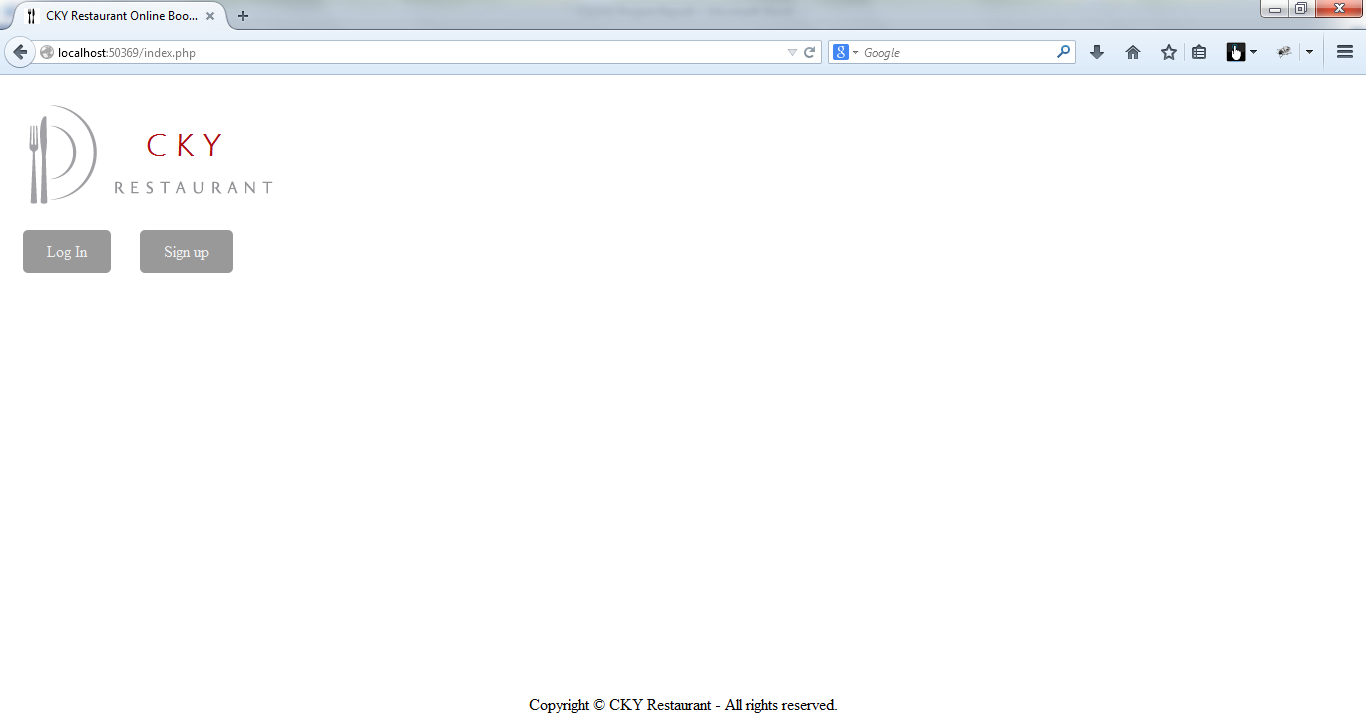
Our group had used **HTML** together with **Javascript/JQuery** and **CSS** in building up the user interface of this system. We used **Microsoft Web Matrix** in developing this system in which the server is built up together with the installation of Web Matrix. The server side language that we used is **PHP** which is the same language as the one used by Facebook. We had decided to use **MySQL** as our database management system due to its easy accessibility and also because it is a freeware.

<INTRODUCE OUR SQL TABLE SCHEME HERE>

**Chapter 1 Sign up function and Log in function**

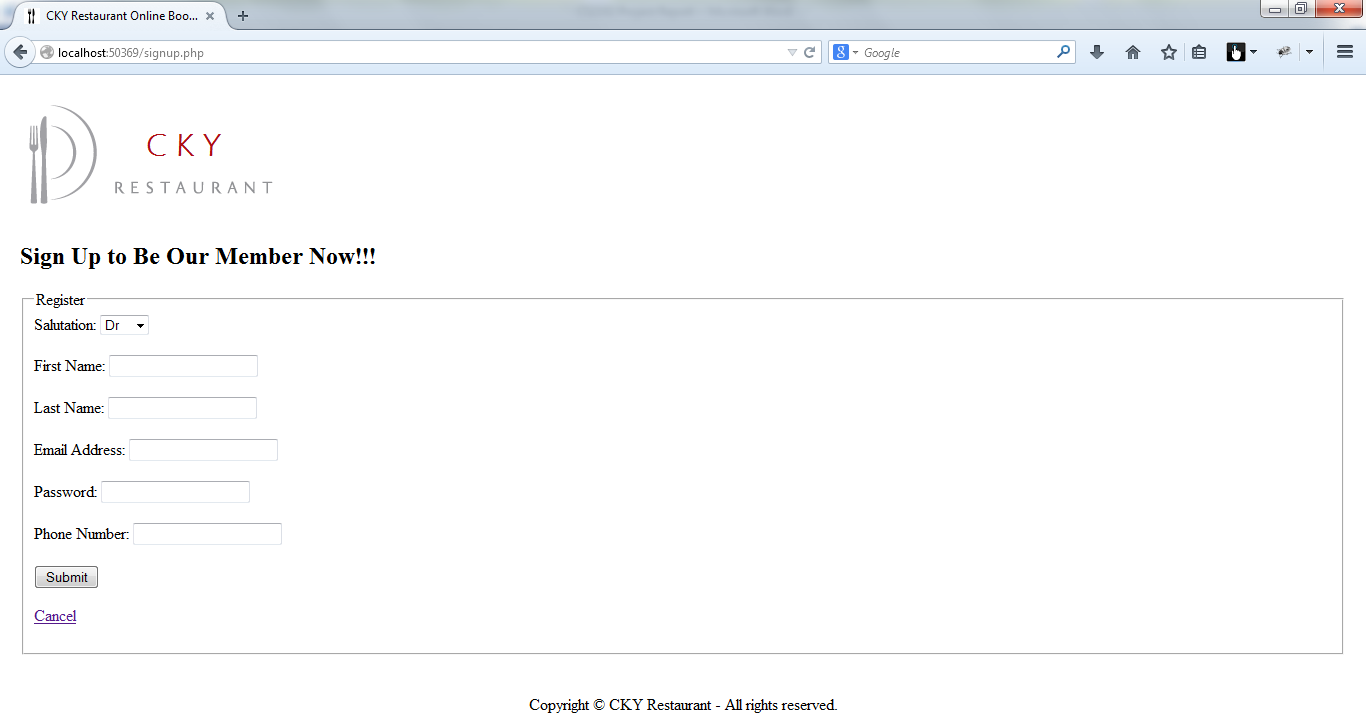
**1.1 Sign up**

Figure 1.1.1 Interface of Our Home Page (index.php)



As shown in our home page, for customers, we have two options for them. They can either sign up or log in (using their previously registered account).

Figure 1.1.2 Sign up page for first time user (signup.php)



**First layer restriction:**

All fields are to be filled up. These restrictions are enforced by Javascript:

1. Email Address is checked to ensure it is in correct form by using REGEX.

Var regex = /^([a-zA-Z0-9\_.+-])+\@(([a-zA-Z0-9-])+\.)+([a-zA-Z0-9]{2,4})+$/

1. Password needs to be at least 6 characters long.
2. Phone number has to be exactly 8 digits

**Second layer restriction:**

After the form has passed first layer restriction, our system will check the email provided by the user to see if our database already contains that email address. If so, the registration will fail and subsequent error message will be shown to the user like so “Email Address has been used by another account. Please provide another email address.”.

A snippet of PHP code showing how the checking is done by constructing and executing an SQL SELECT query. Only if our database does not contain the provided email address, do we confirm the sign up is successful and insert a new tuple into the user table. That being said, email address is the primary key of user table.

$email = $\_POST['email'];

$checkQuery ="SELECT \* FROM user where Email\_Address = ?";

$chkStatement = $databaseConnection -> prepare($checkQuery);

$chkStatement -> bind\_param('s', $email);

$chkStatement -> execute();

$chkStatement -> store\_result();

if($chkStatement -> num\_rows > 0){

echo "Email Address has been used by another account. <br>";

echo "Please provide another email address.";

}else{

$query = "INSERT INTO user(Email\_Address, First\_Name, Last\_Name, Salutation, Password, Phone\_Number, Created\_On) VALUES (?, ?, ?, ?, ?, ?, ?) ";

$statement = $databaseConnection -> prepare($query);

$statement -> bind\_param('sssssss', $email, $fName, $lName, $salutation, $password, $phoneNum, $createdOn);

$statement ->execute();

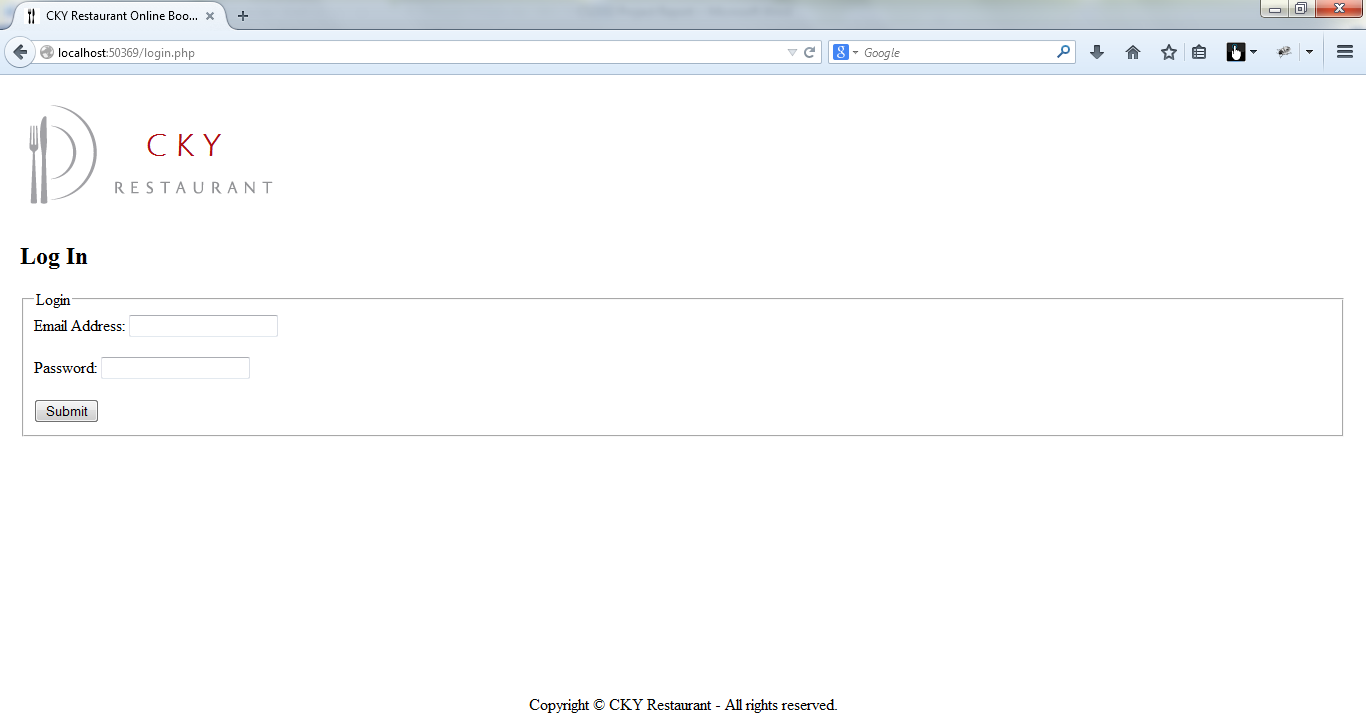
$statement ->store\_result();

}

A successful sign up will redirect user into the homepage.

**1.2 Log in**

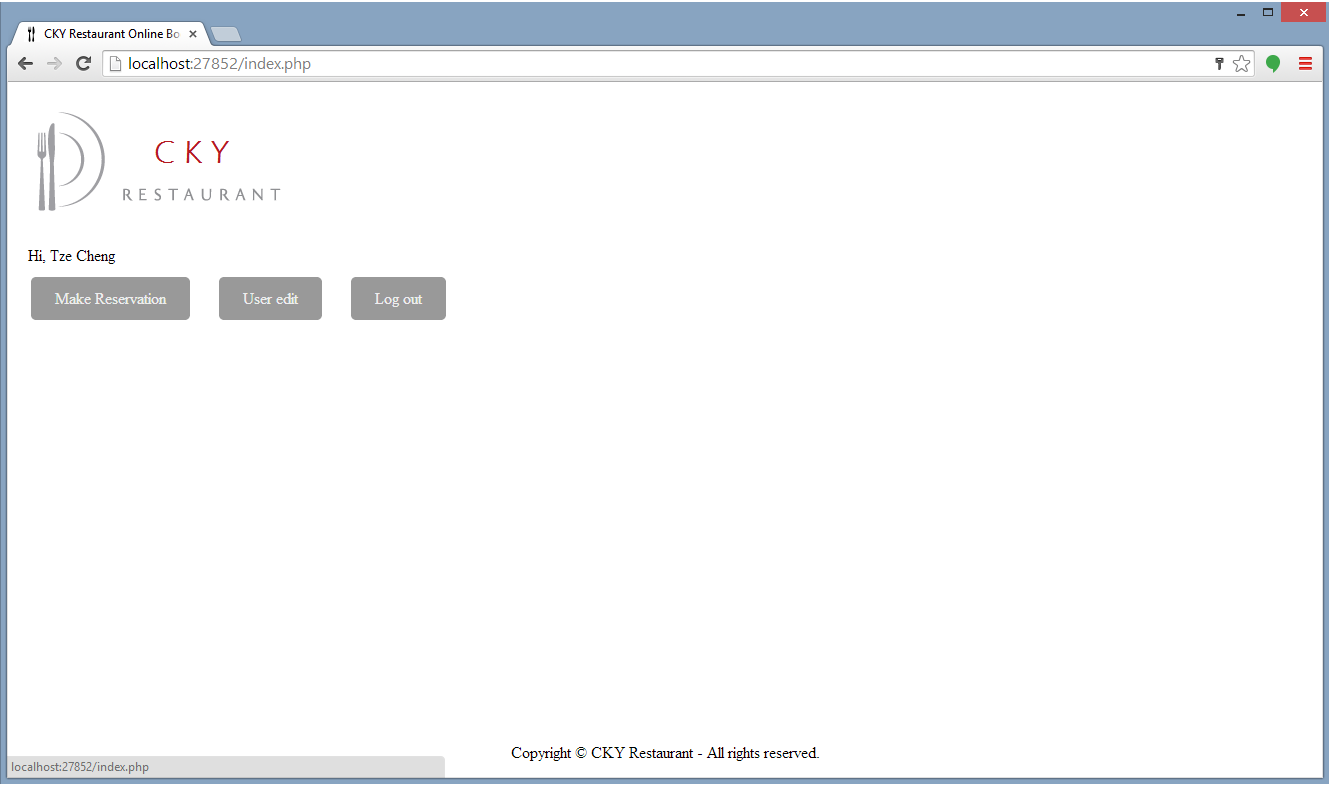
**Figure 1.2.1 log in page for registered user (login.php)**



A registered user who wishes to make reservation can go to log in page to fill in two fields, namely Email Address and Password. Error message will be thrown to screen if either one of the field does not match the other, like so “Email Address/ Password is incorrect!!”.

A successful log in will redirect registered user into the homepage and show their last name on homepage.

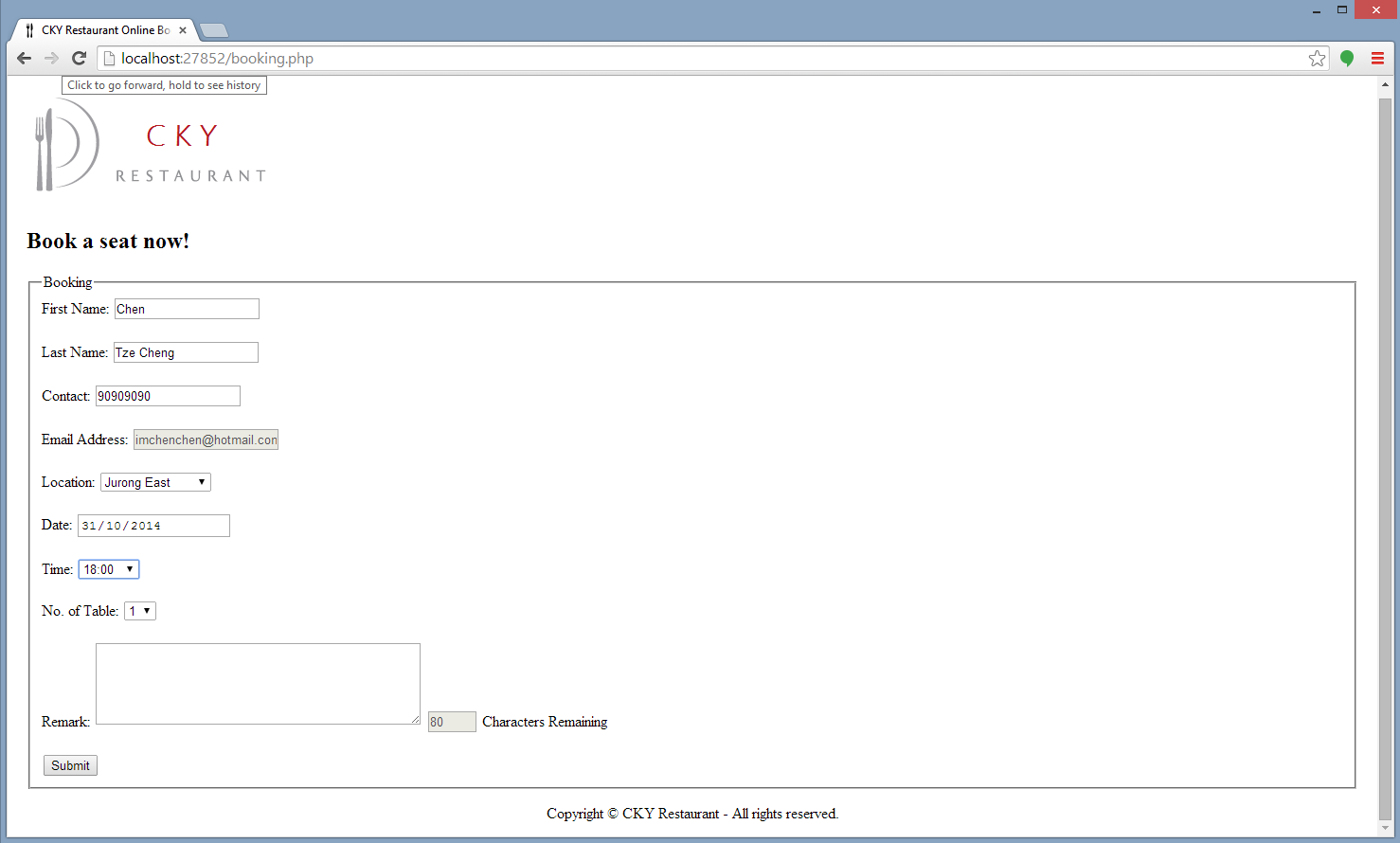
**Figure 1.2.2 Home page after log in**



**Chapter 2: Making reservation and User Edit**

**2.1 Making reservation**

After user logged in, user can go to Make Reservation page to fill in the details of the reservation. The user’s personal details such as First Name, Last Name, Email and contact number will be pre-filled in into fields for user’s convenient. This is achieved by selecting user’s details from mysql database and setting the default value of each field.

**Figure 2.1.1 Pre-filled in field of booking page. **

User can fill in the location, date and time they preferred, and number of table they wanted to book. If the user has any special requirements, there is also a Remark field to fill in.

**Figure 2.1.2 User can select date and time via calendar and drop down list respectively.** 