LAB 321Assignment

Type: Long Assignment

Code: J3.L.P0016
Point: 750

Slot(s): NA

Title: Resource Sharing

Background

Build a website to share the company's resource.

Program Specifications

Build a website for managing resource sharing within the company. A company is divided into 3 groups of employees: manager, leaders, and employees.

- Leaders and employees group have different role to use resources.
- The Manager has the right to accept or deny the requests of subordinate employees.
- Student must use Servlet as Controller and follow MVC2 model.

Features:

This system contains the following functions:

Function 1: Login- 100 Points

- The actor enters userID and password
 - The function checks if the userID with the password is in the available user list, then system grants the access permission.
 - Otherwise, a message would appear to notify that user is not found.
- Login function includes logout and welcome.
- This function must integrate with verify service using Google reCAPTCHA service.

Function 2: Display- Search- 50 Points

- All users can use this function (login is required).
- User can find the resource based on category, name and using dates.
- List first 20 available items in the system corresponding with login user and order by item name. Some
 information is shown as item name, color, category, quantity.
- Paging is required.

Function 3: Create new account-100 points

- o Register new user with information such as email as userID, phone, name, address, create date.
- Create date is current date.
- o The default status of new user is New.
- o You must verify the email address of the user before changing the status of new user to Active.

Function 4: Booking- 100 points

- All users can use this function except manager role (login is required)
- o If the user has not authenticated, the system redirects to the login page.
- o Members can send a request to use the resource and waiting for the manager's approval.

- o The default status of the request is New.
- The status will be changed to Accept if the manager accepts that request.

- Function 5: Request process- 150 points

- Only manager account can use this function.
- List first 20 requests in the system order by date. Paging is required.
- This function is used to support search old request/available process with showing with some information such as date, resource name, user request, status (New, Delete, Accept).
- User input the text that they want to find and select request's status after that click the Search button or the Enter key. A list request which contain the search keyword (search by content)
- This GUI allows to delete or approval the selected request.
 - The list result must be updated after delete or approval.
 - Delete action is used to update the status of request to Delete.
 - Approval action is used to change the status of request to Accept.

- Function 6: Request history- 100 points

- User can take over the request history: list of request order by booking date.
- o This function is used to support search old request by searching following name or request date.
- This function is used to support delete old request in list result
 - Notes: update the status of old request to inactive
- Login is required by user

- Function 7: Store database on Amazon web service- 100 points(extra)

o This function is used to store website data on Amazon Relational Database Service.

- Function 7: Login with Google account- 50 points (extra)

User can login by using Google account.

^{*} The above specifications are only basic information; you must perform a requirements analysis step and build the application according to real requirements.

^{*} You have to build your own database.

^{*} The lecturer will explain the requirement only once on the first slot of the assignment.