Super Market 6 Leave Management System (LMS)

Supermarket 6 Leave Management System (LMS) is an online system that allows employees of the company to submit leave application and for the heads of departments and the general manager to approve leave application online. The heads of department can also view leave reports for employees under his/her department and the general manager can view reports on all the employees in the company. The LMS have four major users and one IT Administrator who only deals with technical issues and system upgrades.

The four major users

1. Employee – A normal employee can use the system to: apply for leave; view Leave history, reset password; and view his/her user profile.
2. Heads of Division (HOD) – A HOD can use the system to apply for leave; view Leave history, reset password; view his/her user profile; respond to leave application; and view leave reports.
3. HR Administrator – The HR AdministratorApply can use the system to apply for leave; view Leave history, reset password; view his/her user profile view Leave history; add/edit employees; add/edit posts; add/edit departments, edit leave types; and view user reports.
4. General Manager (GM) - A HOD can use the system to apply for leave; view Leave history, reset password; view his/her user profile; respond to leave application; and view leave reports.
5. The ICT Administrator has the capabilities of all the users for modification and upgrading of the system.
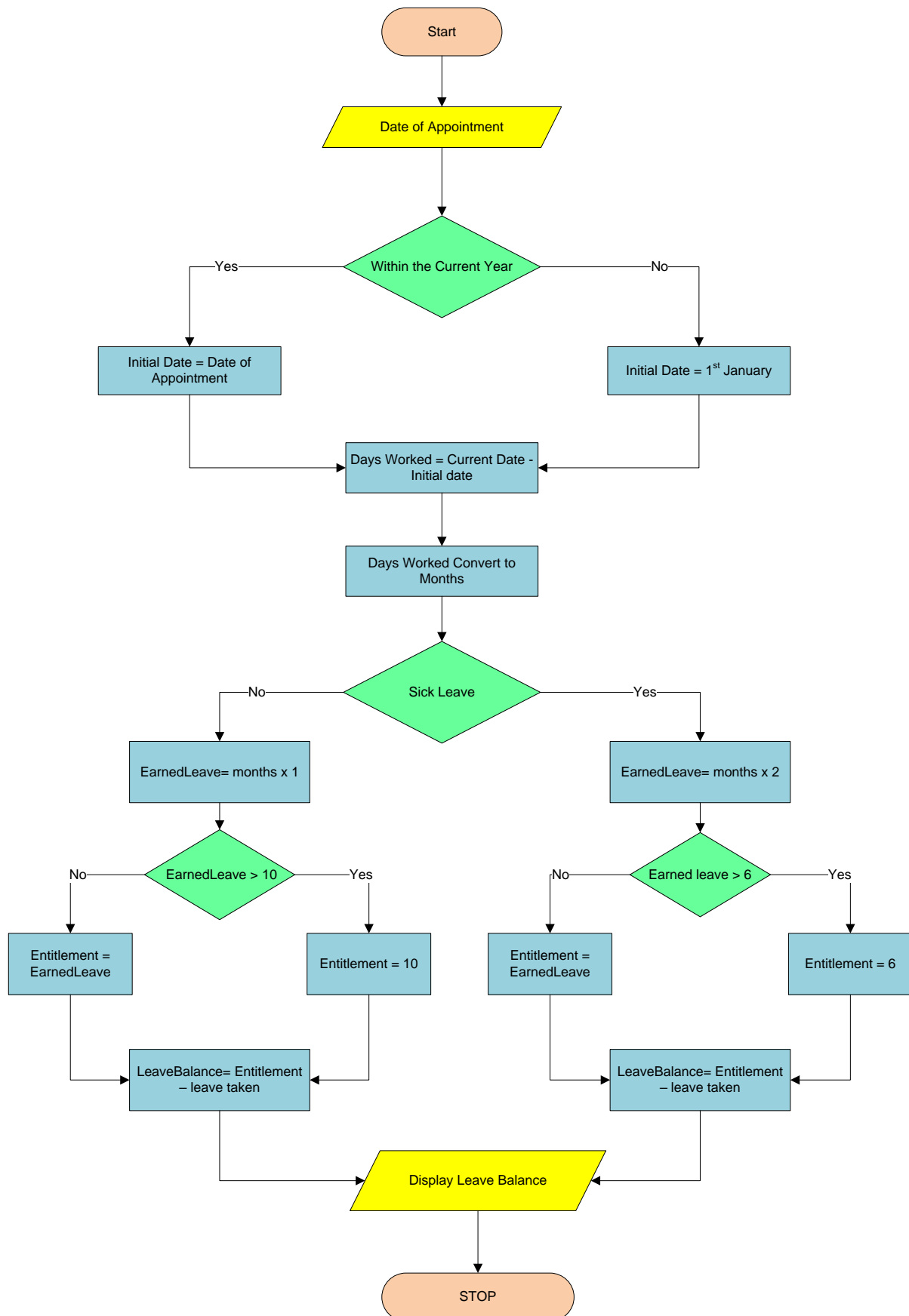
Security Features

➢ A password must be 8 characters or more and it is hashed and stored for security purposes.
➢ An employee changing his/her password must enter the old password to confirm genuine ownership of the account.
➢ Session() function is used to avoid bypassing login form with a successful user authentication.
➢ The session function is also set to auto-log out a user if he/she does not interact with the system for more than 7 minutes.
➢ A clean_it() function is used to remove unwanted spaces before or after text inserted into the system,
➢ An escapeq() function is used to handle escape sequence such a apostrophes, quotations and back slashes that have special meaning in MYSQL.
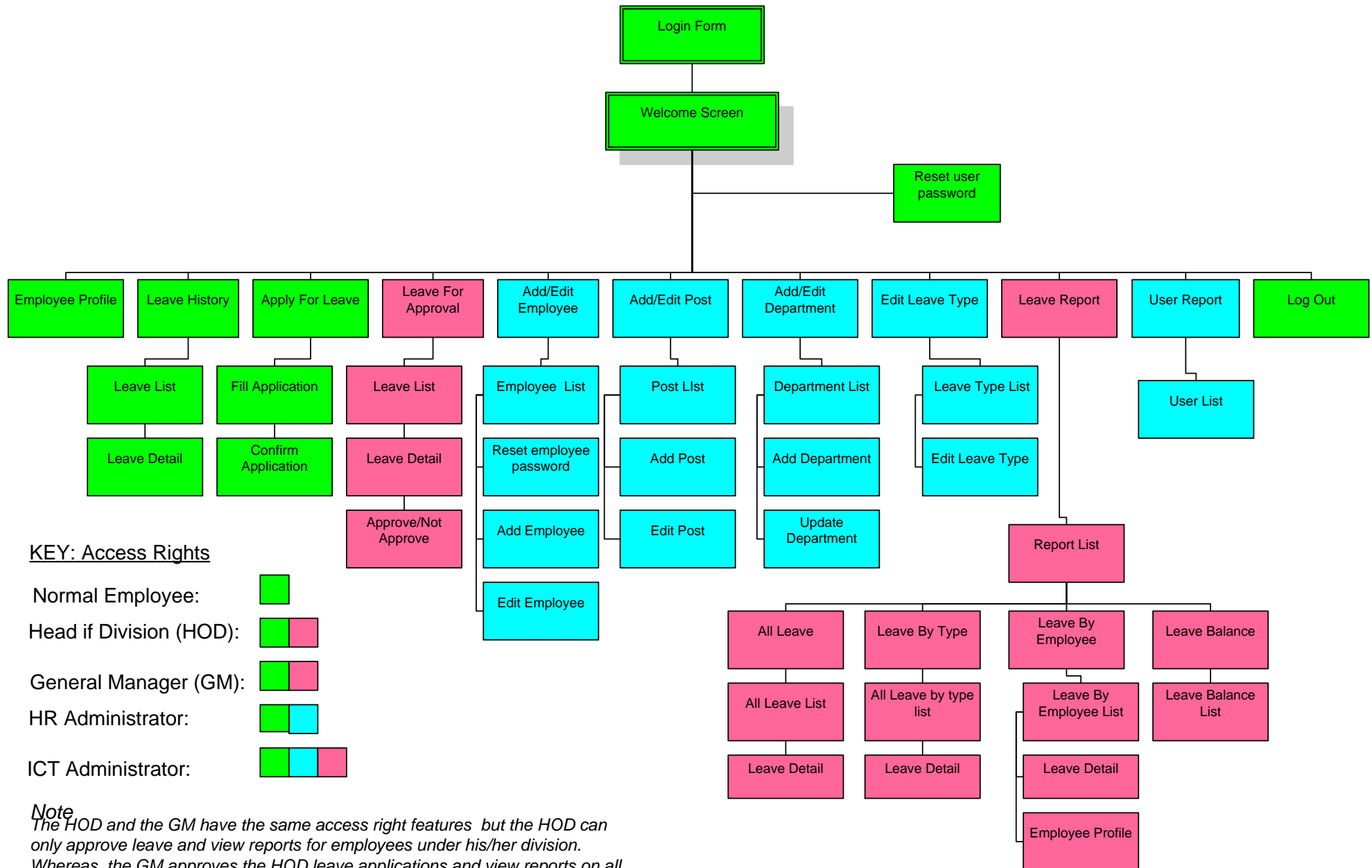
Leave Policy
Leave is assigned annually and are not carried forward from one calendar year to the next. An employee is automatically granted three days casual leave, two days bereavement leave, and twenty days maternity Leave once they are appointed and are renewed on the 1st January every year. Sick leave and vacation leave in the other hand are earned. An employee earns two days sick leave for every month worked and must not exceed a maximum of six days per annum. An employee earns one day vacation leave for every month worked and must not exceed ten days per annum.

Months worked is calculated from the date of appointment for employees appointed in the current calendar year. For employees that were appointed before the current calendar year, their months worked is calculated from the 1st January of the current calendar year. All leave entitlement is reset on the 1st January of every year.

Leave Balance Calculation for Sick Leave and Vacation Leave Flow Chart

```
                          ┌──────────┐
                          │  Start   │
                          └────┬─────┘
                               │
                      ┌────────▼────────┐
                      │ Date of Appointment │
                      └────────┬────────┘
                               │
                          ◇────▼────◇
          Yes ───────── ◇ Within the Current Year ◇ ───────── No
           │                  ◇─────────◇                      │
           │                                                   │
  ┌────────▼────────┐                               ┌──────────▼──────────┐
  │ Initial Date =  │                               │ Initial Date =      │
  │ Date of         │                               │ 1st January         │
  │ Appointment     │                               └──────────┬──────────┘
  └────────┬────────┘                                          │
           │          ┌──────────────────────┐                │
           └─────────►│ Days Worked = Current │◄───────────────┘
                      │ Date - Initial date   │
                      └──────────┬───────────┘
                                 │
                      ┌──────────▼───────────┐
                      │ Days Worked Convert  │
                      │ to Months            │
                      └──────────┬───────────┘
                                 │
                            ◇────▼────◇
            No ──────────── ◇ Sick Leave ◇ ──────────── Yes
             │                ◇─────────◇                  │
  ┌──────────▼──────────┐                      ┌───────────▼──────────┐
  │ EarnedLeave=        │                      │ EarnedLeave=         │
  │ months x 1          │                      │ months x 2           │
  └──────────┬──────────┘                      └───────────┬──────────┘
             │                                             │
        ◇────▼────◇                                   ◇────▼────◇
   No ─◇ EarnedLeave > 10 ◇─ Yes              No ─◇ Earned leave > 6 ◇─ Yes
    │   ◇─────────────◇     │                  │   ◇─────────────◇     │
┌───▼───┐          ┌────────▼───┐     ┌────────▼───┐          ┌───────▼───┐
│Entitle│          │Entitlement │     │Entitlement │          │Entitlement│
│ment = │          │= 10        │     │= EarnedLeave│         │= 6        │
│Earned │          └────────┬───┘     └────────┬───┘          └───────┬───┘
│Leave  │                   │                  │                      │
└───┬───┘                   │                  │                      │
    │    ┌──────────────────▼┐      ┌──────────▼──────────┐           │
    └───►│ LeaveBalance=      │      │ LeaveBalance=       │◄──────────┘
         │ Entitlement        │      │ Entitlement         │
         │ – leave taken      │      │ – leave taken       │
         └──────────┬─────────┘      └──────────┬──────────┘
                    │                           │
                    └──────►┌────────────────┐◄─┘
                            │ Display Leave  │
                            │ Balance        │
                            └───────┬────────┘
                                    │
                              ┌─────▼─────┐
                              │   STOP    │
                              └───────────┘
```

Supermarket 6 Leave Management System Site Map

Login Form

Welcome Screen

Reset user password

| Employee Profile | Leave History | Apply For Leave | Leave For Approval | Add/Edit Employee | Add/Edit Post | Add/Edit Department | Edit Leave Type | Leave Report | User Report | Log Out |

Leave List

Fill Application

Leave List

Employee List

Post LIst

Department List

Leave Type List

User List

Leave Detail

Confirm Application

Leave Detail

Reset employee password

Add Post

Add Department

Edit Leave Type

Approve/Not Approve

Add Employee

Edit Post

Update Department

Edit Employee

Report List

KEY: Access Rights

Normal Employee: ▢

Head if Division (HOD): ▢▢

General Manager (GM): ▢▢

HR Administrator: ▢▢

ICT Administrator: ▢▢▢

| All Leave | Leave By Type | Leave By Employee | Leave Balance |

All Leave List

All Leave by type list

Leave By Employee List

Leave Balance List

Leave Detail

Leave Detail

Leave Detail

Employee Profile

Note
The HOD and the GM have the same access right features but the HOD can only approve leave and view reports for employees under his/her division. Whereas, the GM approves the HOD leave applications and view reports on all employees in the company.

1. The Login Form (index.php)

The LMS used username and password combination for user authentication. The username and the initial password is provided by the HR Administrator subsequent to the creation of the account once an employee is officially appointed. Only a valid user credential entered will be granted access into the system.

Figure 1.1: User authentication event flow chart
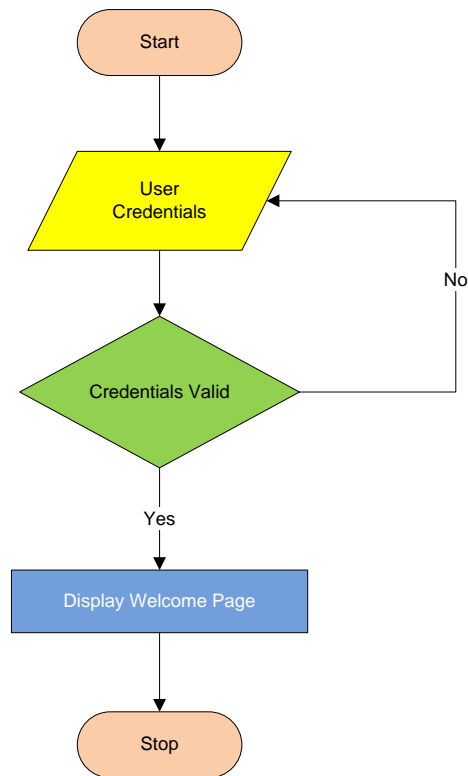
Figure 1.2: Login Form

Figure 1.3: Unsuccessful Login Form
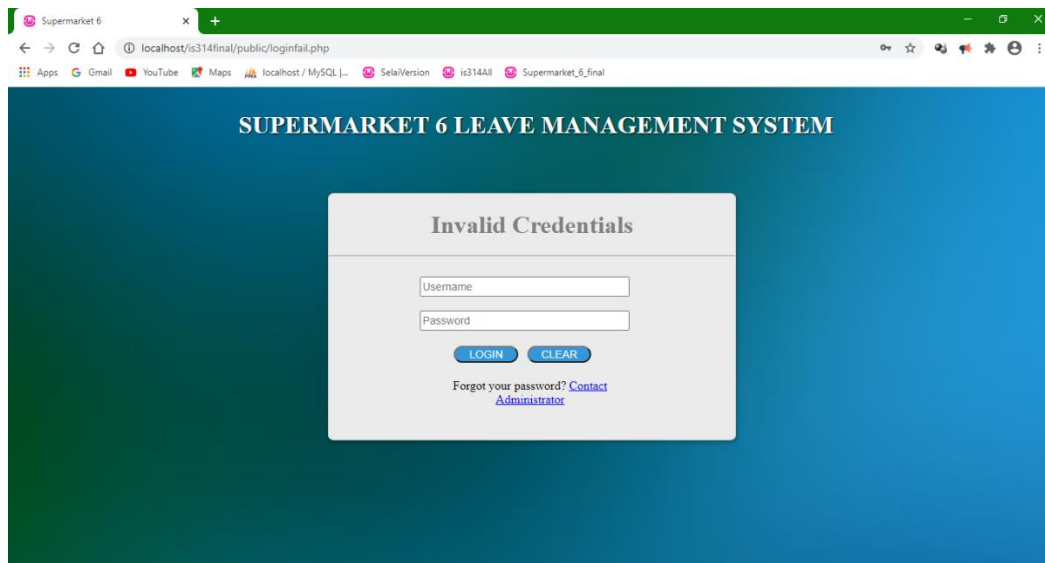
2. Welcome Screen (All employee)

Upon a successful login, a welcome screen is displayed with the user's full name of the main page banner and the main form with a welcome message plus a short background information on the company. A left navigation pane is displayed with menu based on the user's access-right type.

Figure 2.1: Different navigation pane for the four main users

Figure 2.2: The welcome screen with the HR administrator (Tasi Tuuhetoka) access-right.
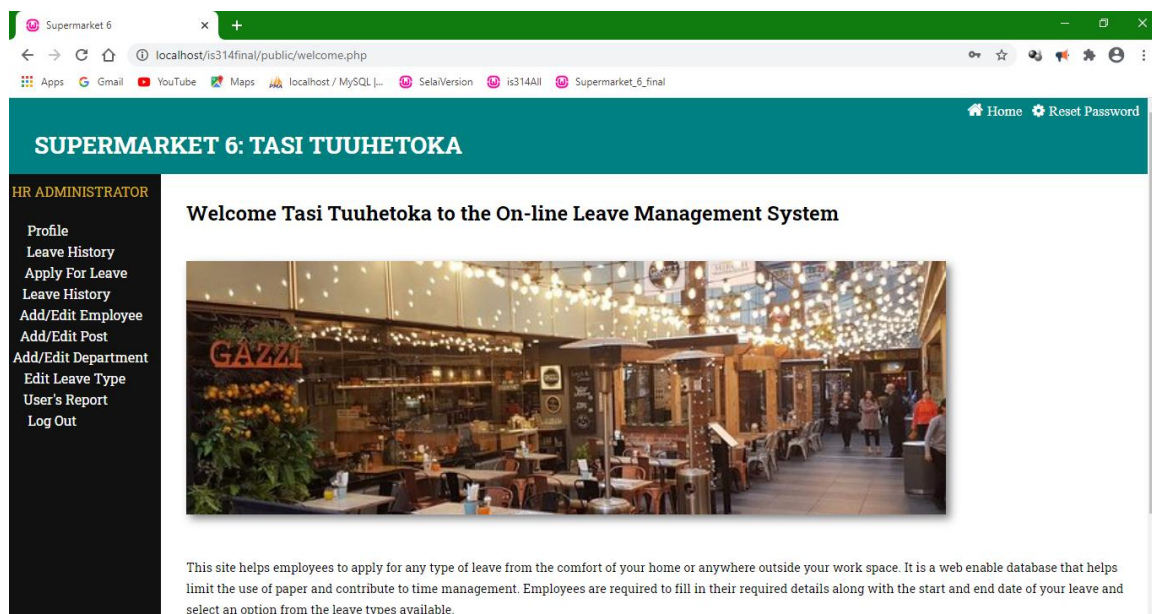
3. Employee "Profile" page (All Employee)

An employee can view his/her personal and work information including his/her leave balance as of the current date on the "Profile" page through the link on the navigation bar on the left .

Figure 3.1: Profile Page

4. "Leave History" page (All Employee)

An employee can view his/her leave history, each leave with status on the leave history page. The "Leave_ID" column is linked to the "Leave Details" page where the user can click to view the details of a particular leave.

4.1: The Leave History page.

Figure 4.2: Leave details page

5. **Apply for Leave page** (All employee)
   This page contains the application form where and employee can apply for leave of a particular type and dates. Leave balance is also displayed on this page but validation is done on the execution page when the leave is submitted and confirmed. A submitted leaver is passed to a confirmation page before it is saved into the system's database. A leave application is validated in execution page before it is saved to the database.

Figure 5.1: Apply for Leave Form

Figure 5.2: Applying for leave event flow chart.
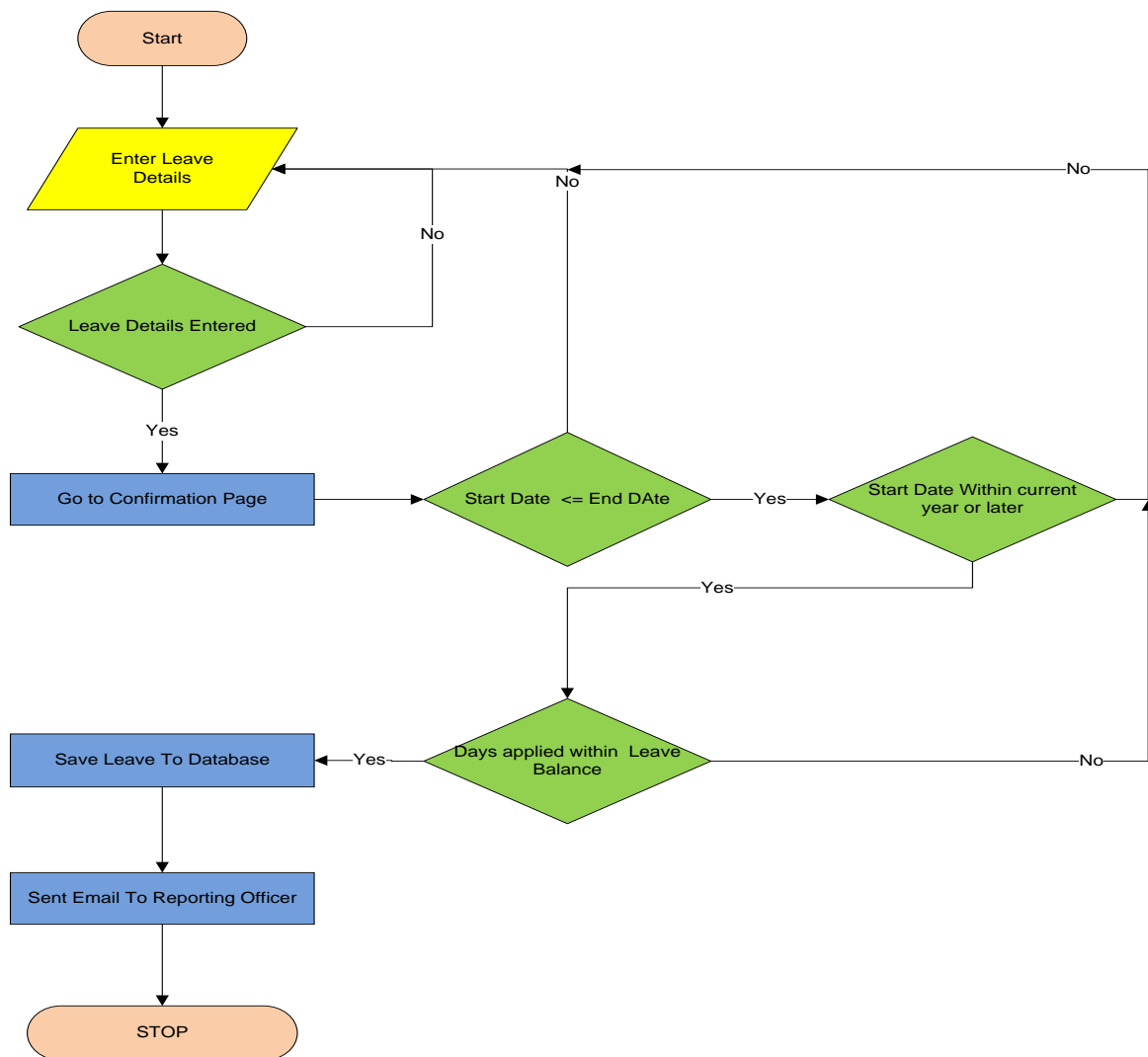
Figure 5.3: Leave application confirmation page.

Figure 5.4: A successfully submitted leave application.
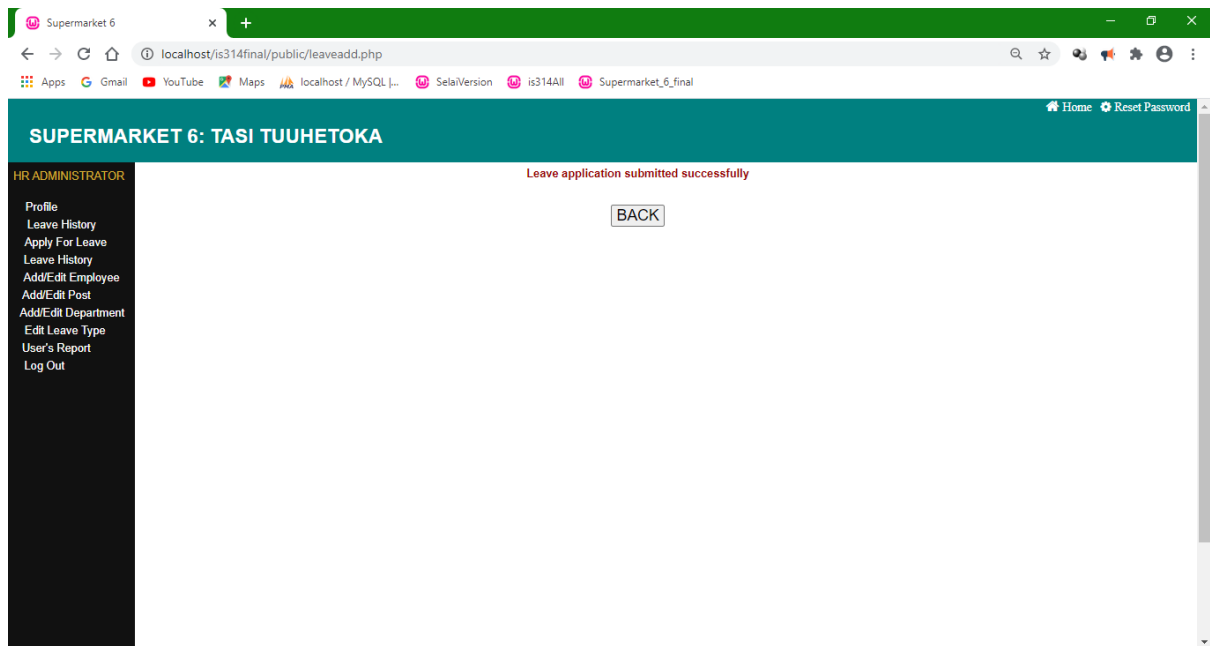
6. **Leave for Approval page** (HOD & General Manager Only)

A HOD can view leave application and response on the Leave for Approval Page. Leave awaiting a decision is showed on this page until they a decided "Approved" or "Not Approved". The HOD can sue the link on the "Leave_ID" to view the application detail and make his/her decision. Once the decision is made, the leave application is removed from this page. The GM also accesses the "Leave for Approval" page but only the HODs' leave applications are submitted for her to decide.

Figure 6.1: Leave for approval list page
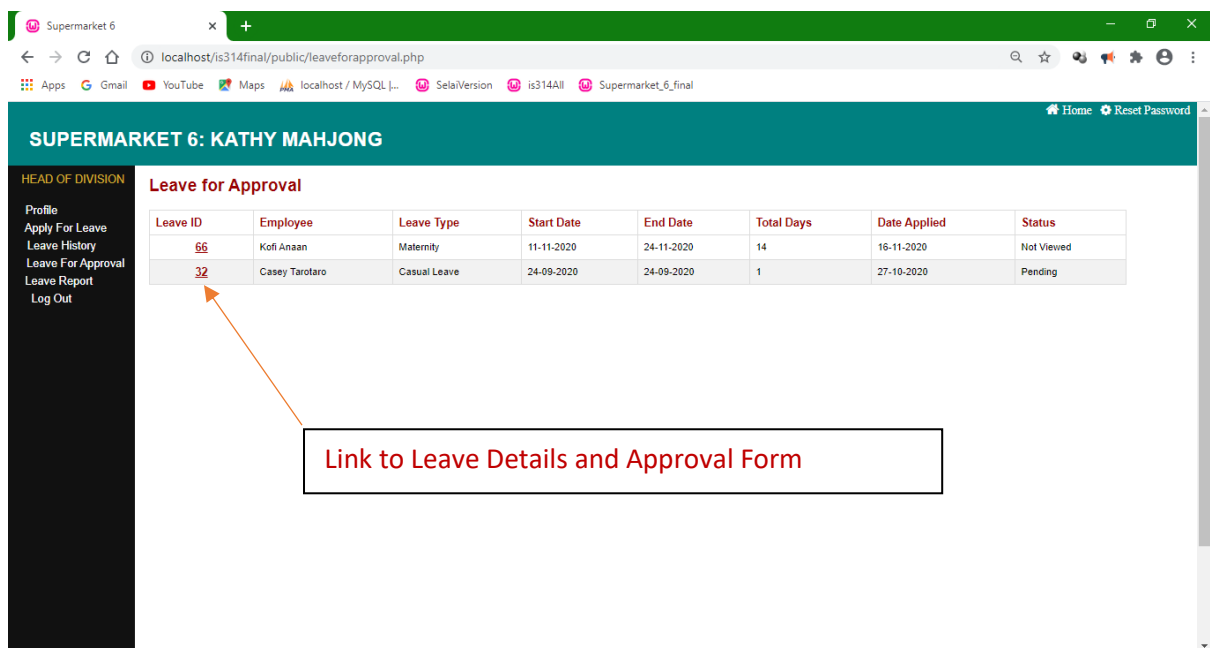
Once the supervisor opens the leave detail form, the leave status is automatically changed from "Not Viewed" to "Pending". The HOD decision will be displayed in the applicant's leave history and an email should be sent to the applicant of the decision made.

Figure 6.2: Leave detail and approval page.

7. **Leave Report page** (HOD and GM only)

The leave report page allows the HOD to view reports on employees' leave under his/her division leave history in several views. The General manager on the other hand can view the same reports for all the employees in the company. There are four standard report s which can be accessed through the Leave Report page.

Figure 7.1: Leave Report Page

Firstly, is the "All Employee Leave ". This repost shows all leave taken by employees in a department for HODs and all employees of the company if it is the General Manager. The leave report can be queried by date range. The Leave ID column link to the details of that specific leave.

Figure 7.2: Leave Report Page

The second report is similar to the first report but displays employees' leave by leave type. User can select a specific leave and date range to view. User can view a leave's details through the Leave ID column.

Figure 7.3: Leave By Leave Type

The third report allows the user to view a specific employee's leave history and can be queried by date range. An employee list is displayed, and the user can select to view a specific employee's details or the leave he/she has taken in a particular date range.

Figure 7.4: The employee list

Figure 7.5: Leave Taken

From figure 7.4, the user selected to view leave taken by Casey Tarotaro. Note the user can also view the leave details for a specific leave taken from this page through the Leave ID column

The fourth and final report is the employees leave balance. The HOD or GM can view employees leave balance for all the leave types and can query by a specific leave type.

Figure 7.6: Leave Balance

8. Add Edit Employee (HR Administrator)

The "Add/Edit Employee" page allows the HR administrator to edit an employee record or reset an employee's password. An employee list is generated with links to reset an employee's password or view an employee profile including a button for adding a new employee. Only the HR Administrator can access this page.

Figure 8.1: Employee List

Figure 8.2: Resetting an employees' password.

Figure 8.3: Add new Employee.

When adding a new employee or editing and existing one, the user must enter the employee's position and department from the existing posts and departments provided in drop-down lists. Upon submitting, the system automatically searches for a "Head of Department" position in the allocated department and assign it as the new or the edited employee's supervising officer who will approve leave application form the newly created or edited employee.

9. Add/Edit Post page (HR Administrator)

The Add/Edit page allows the HR Administrator to add new positions or edit existing ones. Similar to the Add/Edit employee page, a list of existing posts is generated with links to edit an existing post or add a new post.

Edit existing posts.

Add new posts.

Figure 9.1: Add New Post

10. Add/Edit Department (HR Administrator)

This page allows the HR Administrator to edit existing departments or add new departments to the company. A department list is generated with link edit existing departments or add new ones. It is important for the HR administrator after adding a new department, to add a HOD before employees are added to the department. If an employee is created to a department without a HOD, the employee will be automatically set to report to the GM.

Figure 10.1: Department List

Figure 10.2: Add new department

11. Edit Leave Type (HR Administrator)

Because leave types can have different formula based on company policies, new leave type cannot be added by the HR administrator. Adding new leave type would require modification of system codes. The HR administrator can only edit the existing ones through a list of the existing leave trypes.

Figure 11.1: Leave Type list

Edit existing leave types

Figure 11.2: Edit Leave Type

12. Users Report (HR Administrator)

THe user report shows all the users of the system with their username and access-rights. This allows the HR Administrator to monitor users and manage movement of employees that could affect the allocated access-rights. Users can be viewed by a specific access-right.

Figure 12.1: System Users

13. Resetting Password

All user can reset their own passwords apart from the HR administratopr who can force reset any employee's password. The employee password reset link is at the top right hand corner of the page and it can be accessed from any page.

13.1: User password reset