| **SOEN 390:**  **SOFTWARE ENGINEERING TEAM DESIGN PROJECT** |
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| **Condo Management System**  **Requirements and User Stories Backlog** |
| **(Sprint 1)** |
|  |
|  |
| **Team 14** |
| **Instructor: Dr. Jinqiu Yang  Date: February 7th, 2024** |
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# 1. Epics

| **01** | **Create User Profile** | | |
| --- | --- | --- | --- |
| As a user, I can create a profile in which my personal information will be stored, so that I may access all the functionalities of the system. | | | |
| M | XL | L | 3 |

| **02** | **Create and Update Condos** | | |
| --- | --- | --- | --- |
| As a condo management administrator, I want to add and modify the properties on my dashboard. Further, I may modify the finer details of each property and must be provided the fields to do so. | | | |
| M | XL | H | 8 |

| **03** | **Communication with Occupants** | | |
| --- | --- | --- | --- |
| As a condo management administrator, I want an interface in which I may communicate with the occupants and employees of any condominium, so that they can be updated of any changes, requests, discounts, or registration keys. | | | |
| M | XL | M | 5 |

| **04** | **Financial Profile** | | |
| --- | --- | --- | --- |
| As a condo management administrator, I want a financial profile to be collected on each condominium in my dashboard, so I may supervise company finances. | | | |
| M | XL | M | 5 |

| **05** | **Reservations** | | |
| --- | --- | --- | --- |
| As a user, I want access to a reservation database of common facilities so I may either reserve time slots for common facilities or set up new common facilities. | | | |
| M | XL | M | 8 |

| **06** | **Communication with Management** | | |
| --- | --- | --- | --- |
| As an occupant, I want an interface in which I may communicate with management and other occupants, so that I may plan events and submit requests. | | | |
| M | XL | H | 5 |

| **07** | **Requests Management** | | |
| --- | --- | --- | --- |
| As a condo owner, I want to be able to submit a request for condo facilities and issues and expect a timely resolution, so that I may provide an adequate management of my property. | | | |
| M | XL | H | 8 |

# 2. User Stories with Acceptance Criteria

## 2.1 User Account Types

| **0101** | **Public User Account** | | |
| --- | --- | --- | --- |
| As a public user,  I want to be able to create my own unique profile with my personal profile picture, user name, contact email and phone number.  So that I may properly access the functionalities offered and manage my condo(s). | | | |
| Create User Profile\Public User Account\ | | | |
| M | M | L | 2 |

**0101** Acceptance Criteria

1. When entering the app for the first time, the user must be prompted to create an account (or login).
2. A public account user must be able to enter all of his information on one screen.
3. A public account user must be able to modify their personal profile picture, username, contact email, and phone number once their account is created (under the account section).
4. A public account user must be able to enter a registration key.
5. A public account user who does not enter a registration key must not have access to condo owner or rental user account functionalities.

| **0102** | **Logging Into Pre-Existing Account** | | |
| --- | --- | --- | --- |
| As a user, I want to be able to log out and into my account, so I can access the contents of my account at any time. | | | |
| Create User Profile\Logging Into Pre-Existing Account\ | | | |
| M | M | M | 2 |

**0102** Acceptance Criteria

1. The system must recognize the username and open the appropriate account.
2. The username of a condo owner should be granted access to an administrator’s or management’s account.
3. Login credentials must be stored in a database.
4. If the account does not exist or the credentials are wrong, an error message should pop up.

| **0103** | **Condo Owner Account** | | |
| --- | --- | --- | --- |
| As a condo owner, I want to be able to create a condo owner account with a registration key, so that I may access the condo owner functionalities such as managing my condo(s). | | | |
| Create User Profile\Condo Owner Account\ | | | |
| M | M | L | 2 |

**0103** Acceptance Criteria

1. A public user account must be updated to a condo owner account when linked with the correct registration key.
2. A condo owner account user must only be able to access the condo owner functionalities within the system.

| **0104** | **Rental User Account** | | |
| --- | --- | --- | --- |
| As a rental user, I want to be able to create a rental user account with a registration key, so that I may access the rental user functionalities. | | | |
| Create User Profile\Rental User Account\ | | | |
| M | M | L | 2 |

**0104** Acceptance Criteria

1. A public user account must be updated to a rental user account when linked with the correct registration key.
2. A rental user account must only be able to access the rental user functionalities within the system.

| **0105** | **Employee User Account** | | |
| --- | --- | --- | --- |
| As an employee of one of the condominiums, I want to create an account where I may have access to an employee dashboard listing my employee role, so that I may access the current requests submitted by the condominium manager and/or the condo company administration. | | | |
| Create User Profile\Employee User Account\ | | | |
| M | M | L | 2 |

**0105** Acceptance Criteria

1. Employee accounts must be stored in a database with the employee type.

| **0106** | **Dashboard of Properties** | | |
| --- | --- | --- | --- |
| As a condo owner, I want to view all my properties in an easy-to-navigate and minimalist interface, so that I may know the remaining balance on my monthly condo fee payments, status of submitted requests and general condo information on my properties. | | | |
| Create User Profile\Dashboard of Properties\ | | | |
| M | L | M | 8 |

**0106** Acceptance Criteria

1. The properties dashboard must only be available to a condo owner account.
2. The dashboard must have a user-friendly design with a rich user experience.

## 2.2 Condo Management Companies

| **0107** | **Condo Management Company Account** | | |
| --- | --- | --- | --- |
| As a condo management company administrator, I want to create a profile for our properties, so that we may manage our property profiles. | | | |
| Create and Update Condos\Condo Management Company Account\ | | | |
| M | M | L | 3 |

**0107** Acceptance Criteria

1. The administrator can successfully add a property to their dashboard through a button on their admin account page when logged in.
2. The form to create a property profile should include fields for the property name, the unit count, the locker count and address.
3. Once the form has been submitted, the new created profile must be listed and viewable from the admin account page dashboard.
4. The system successfully registers the new property into the appropriate database.
5. The property must be accessible only through the administrators account credentials.

| **0208** | **Upload Files For Properties** | | |
| --- | --- | --- | --- |
| As a condo management company administrator, I want to be able to upload files for each of my properties so that they may be accessible to all condo owners of that property. | | | |
| Create and Update Condos\Upload Files for Properties\ | | | |
| C | M | L | 3 |

**0208** Acceptance Criteria

1. Condo files uploaded by the administrator must be accessible to the condo owner of that property.
2. Only an administrator logged in with the company administration credentials may upload files.
3. Administrators must be able to interact with the properties listed on their dashboard so they can upload files.
4. The system must search for all condo owners of that property and notify them that a file has been shared with them concerning their property.

| **0209** | **Property Information** | | |
| --- | --- | --- | --- |
| As a condo management company, I want to be able to enter and modify information concerning units, parking spots and lockers in a building, so that I can properly manage my properties. | | | |
| Create and Update Condos\Property Information\ | | | |
| C | L | M | 5 |

**0209** Acceptance Criteria

1. Only condo management company users can enter and modify property details.
2. Property information must be available to view to all public users.

| **0310** | **Send Registration Keys** | | |
| --- | --- | --- | --- |
| As a condo management company administrator, I want to digitally send the registration keys to the respective units of the unit owners or rental users, so that I may maintain contact and oversee condo units. | | | |
| Communication With Occupants\Send Registration Keys\ | | | |
| M | L | M | 5 |

**0310** Acceptance Criteria

1. Only condo management company users can send registration keys.
2. The system must notify a unit owner or rental user when a registration key is sent to them.
3. Unit owners and rental users must be able to enter their registration key by clicking a button which prompts them to enter the registration key they received.

## 2.3 Reservation System

| **0511** | **Reserving A Common Facility** | | |
| --- | --- | --- | --- |
| As an occupant, I want to receive the availability of and reserve a common facility in a calendar like interface, so that I may enjoy the amenities offered by the condo company. | | | |
| Reservations\Reserving a Common Facility\ | | | |
| S | L | H | 8 |

**0511** Acceptance Criteria

1. Occupants of their condominium must be able to navigate to a facilities page, in which all facilities offered by the condominium will be listed.
2. Each facility listed must be interactable, sending the occupant or user to a calendar interface in which they can view the facility’s availability.
3. Upon selecting an available time slot, the system should display a button which allows the user to confirm their booking.
4. Once a valid booking is confirmed, the system should block off that time slot so that other users cannot book the facility for that day and at that time.
5. The system should include validation checks, disallowing users to book a time slot which has already been logged in the system.
6. The reservation system should update the visual interface of the calendar when the booking is made.
7. A log of all reservations should be kept by the system.
8. A notification should be sent to the occupants notification page upon successful booking.

| **0512** | **Setting Up Common Facility** | | |
| --- | --- | --- | --- |
| As a condo management company administrator, I want to set up and create new common facility interfaces whereby condo owners and rental users may access the interface to reserve a slot for the facilities offered so that we may continue to grow a loyal customer base and stellar reputation. | | | |
| Reservations\Setting Up Common Facility\ | | | |
| M | L | M | 5 |

**0512** Acceptance Criteria

1. Administrators must be able to navigate towards their facilities page for a condominium, accessed solely through an administrators account.
2. The facilities page should have a form that allows the administrator to add a new common facility to the condominium.
3. The form should contain the necessary fields to detail the purpose of the facility.
4. The created facility must be added to a facilities database.
5. The created facility must be intractable by the occupants of the building, so they may reserve time slots.

| **0713** | **Public Users Notifications** | | |
| --- | --- | --- | --- |
| As a public user, I want to be notified of any activities in my submitted or assigned requests in a common interface or page so that I may easily access and monitor the latest activities in a timely manner. | | | |
| Communication with Management\Public Users notifications\ | | | |
| S | L | H | 3 |

**0713** Acceptance Criteria

1. Users must be able to navigate to a notifications page in a menu.
2. The notifications page must be visible to all users, such as condo company administrators, condo owners and renters.
3. The notification page should contain a list of all current and past notifications.
4. Notifications should include if a user has booked a common facility, if a company administrator has uploaded a file to their condominium, events, submitted and assigned requests.
5. Each notification must display the notification message and time it was sent.
6. Notifications should be saved in a database.

## 2.4 Communication and Events

| **0614** | **Message Board** | | |
| --- | --- | --- | --- |
| As a public user, I want to have a page where I am able to post messages to a forum, so that I may communicate with other members in the condo building and address issues. | | | |
| Communication with Management\Message Board\ | | | |
| C | M | H | 2 |

**0614** Acceptance Criteria

1. The forum page must be navigable from the menu.
2. Users should include administrators, condo owners and renters.
3. The page should allow the user to submit a message from a text box.
4. Messages should be displayed on the forum with the username of the account that had posted it.
5. Messages should be posted in chronological order.

| **0615** | **Organize Events Through Portal** | | |
| --- | --- | --- | --- |
| As a public user, I want a dedicated page where I can organize events through the portal and invite other occupants of the condo building to attend using my user profile so that I may facilitate community engagement. | | | |
| Communication with Management\Organize Events\ | | | |
| S | M | M | 3 |

**0615** Acceptance Criteria

1. The events page must be navigable from the menu.
2. The page should contain a form field that the current user may use to create an event.
3. The form should have the fields for the title of the event and a dropdown list of all members in their condominium that they may invite.
4. Invited members should receive notifications on their notification page.
5. The dropdown list must be taken from a database of occupants from the user’s condominium.

| **0316** | **Discount Offers** | | |
| --- | --- | --- | --- |
| As a condo management company administrator, I want an announcements page with a dedicated section for coupons, so that we may offer discounts to the occupants of our condo building(s). | | | |
| Communication with Occupants\Discount Offers\ | | | |
| S | M | L | 2 |

**0316** Acceptance Criteria

1. Only a condo management company profile can list coupons/offers.
2. Coupons/offers must be visible to all unit owners and rental users of a property.
3. Users should be notified when a new coupon/offer is listed.

| **0717** | **Request Submission** | | |
| --- | --- | --- | --- |
| As a condo owner, I want to be able to submit requests concerning moving in/out, elevator reservation, intercom changes, access requests, reports, or questions in order to achieve seamless management of my property. | | | |
| Requests Management\Request Submission\ | | | |
| C | M | M | 5 |

**0717** Acceptance Criteria

1. Condo owner is able to open a request.
2. Condo owner is able to choose the request type.
3. Condo owners are able to submit concerned units and condo units.
4. Condo owner is able to input current date, occupant information and if applicable, date the request is intended for.
5. Condo owner has communication with management.

| **0318** | **Request Assignment** | | |
| --- | --- | --- | --- |
| As a Manager, I want to be able to assign requests to employees so that all requests are addressed and able to be fulfilled. | | | |
| Request Management\Request Assignment\ | | | |
| M | M | M | 5 |

**0318** Acceptance Criteria:

1. Manager is able to consult requests.
2. Manager is able to browse Employees based on request type.
3. Manager is able to view Employee availabilities.
4. Manager is able to assign a request to an Employee.
5. Manager is able to add notes to an assignment.
6. Manager is able to communicate with the Condo Owner and Employee.

## 2.5 Employee Roles

| **0319** | **Employee Roles** | | |
| --- | --- | --- | --- |
| As a condo management administrator, I want a page where I am capable of setting the roles and managing my employees assigned to the same property that I may access through my dashboard, so that I can properly delegate the responsibilities of the property thereby allowing coherent property management and upkeep. | | | |
| Communication with Occupants\Employee Roles\ | | | |
| M | M | S | 2 |

**0319** Acceptance Criteria

1. The properties dashboard must be navigable from the menu.
2. Must be accessible only through the company administrator’s account.
3. Each property must be interactable, and open a new page when clicked.
4. The page for each individual property, accessed through the dashboard, should have a section for employee roles.
5. A list of employees should be displayed.
6. Employees can be toggled to change their employee roles.
7. Changes in roles should be reflected in an employee database.

## 

| **0620** | **Employee Notifications** | | |
| --- | --- | --- | --- |
| As an employee of one of the condominiums, I want an interface in which I may interact and view requests received by the building management or the company administrator, so that I may know what duties and responsibilities I must fulfill as an employee. | | | |
| Communication with Occupants\Employee Notifications\ | | | |
| S | M | M | 5 |

## 

**0620** Acceptance Criteria

1. Requests must be stored in a database.
2. Only employees can access.

| **0621** | **Employee Request Completion** | | |
| --- | --- | --- | --- |
| As an employee of one of the condominiums, I want to mark requests displayed on the employees notification page as completed, so that I may communicate that I have fulfilled the request. | | | |
| Communication with Occupants\Employee Request Completion\ | | | |
| S | M | L | 2 |

**0621** Acceptance Criteria

1. Requests must be stored in a database.
2. Only employees can access.
3. Marked requests are deleted from the database.

## 2.6 Finance

| **0422** | **Generate Annual Finance Report** | | |
| --- | --- | --- | --- |
| As a condo management administrator, I want to generate an annual report of all condo fees collected in a given year through interacting with a digital element on the financial page, so that I may pay the necessary cost for the upkeep of shared areas, services and management. | | | |
| Financial Profile\Generate Annual Finance Report\ | | | |
| M | XL | H | 8 |

**0422** Acceptance Criteria

1. Only a condo management company user can generate an annual report.
2. The report should show the collected fee of each property as well as the total collected fees of all properties.

| **0423** | **Setting Condo Unit Costs** | | |
| --- | --- | --- | --- |
| As a condo management administrator, I want to enter the cost of a condominium unit being sold per square foot. Furthermore, I want to enter an added fee per parking spot requested in the purchase of a unit, so that I may place the unit on the market, determine property insurance or factor into the mortgage. | | | |
| Financial Profile\Setting Condo Unit Costs\ | | | |
| M | XL | M | 8 |

**0423** Acceptance Criteria

1. Only a condo management company user can enter these values.
2. The condo fee per square foot and per parking spot must be clearly visible to all public users.

| **0424** | **Calculate Condo Fees** | | |
| --- | --- | --- | --- |
| As a resident, I want the condo fee of each of my units to be calculated and presented in a figure on my properties dashboard, so that I may observe my housing costs and property transactions. | | | |
| Financial Profile\Calculate Condo Fees\ | | | |
| M | XL | M | 5 |

**0424** Acceptance Criteria

1. The calculated condo fees must be accessible to unit owners at all times on their properties dashboard.

| **0425** | **Calculate Operation Costs** | | |
| --- | --- | --- | --- |
| As a condo management company user,  I want to be able to view my condo building’s operational budget and cost,  So that I can enter the cost for each operation (condo fees) and display them to unit owners. | | | |
| Financial Profile\Calculate Operation Costs\ | | | |
| M | XL | H | 5 |

**0425** Acceptance Criteria

1. Only condo management company users can view the condo’s operational budget and cost, as well as enter the cost for each operation.
2. Condo management company users must be able to provide a description of the operation costs.
3. Unit owners should be notified when their property is flagged with an operation cost and be able to view the fees and their description.

## 2.7 Additional Features

| **0026** | **App On Multiple Digital Platforms** | | |
| --- | --- | --- | --- |
| As a user, I want the condo management system to be accessible on multiple digital platforms, including Android, iOS, Linux, MacOS, and Windows, so that it may be available on any device of choice. | | | |
| Additional Features\App On Multiple Digital Platform\ | | | |
| C | XL | H | 8 |

**0026** Acceptance Criteria

1. The application can be opened and run successfully on Android, iOS, Linux, MacOS, and Windows.

| **0027** | **Language Diversity** | | |
| --- | --- | --- | --- |
| As a public user, I want the application to be available in not only English but French as well, so that it may be more accessible to me. | | | |
| Additional Features\Language Diversity\ | | | |
| C | L | L | 3 |

**0027** Acceptance Criteria

1. The entire system should be translated into French properly.

| **0028** | **Single Sign-On** | | |
| --- | --- | --- | --- |
| As a user, I want to login using my Gmail account, so that I can easily create an account without additional login credentials. | | | |
| Additional Features\Single Sign-on\ | | | |
| C | XL | L | 3 |

**0028** Acceptance Criteria

1. Single Sign On with Gmail, Outlook or other services must successfully log the user into their correct account.