

## **Sprint 1 Planning Document**

### **Team 36 (Simplease)**

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#### **Sprint Overview**

For this sprint, we would like to finish some of the core functionalities of our product. Our front end team will be in charge of creating the user interface, taking input from the user to create/signup an account, access apartment listing. Our backend team will be tasked with creating apartment and user databases, sending that data to the app, and starting the API documentation for the above mentioned functions.

**Scrum Master:** Rohan Rao

**Meeting Schedule:** Mondays 12:30 PM - 2:30 PM, Tuesdays & Thursdays 4:30 PM, Saturday 9AM-12PM

**Risks and Challenges:** This sprint will be a huge learning curve for our team members since we will need to learn the frameworks/technologies of React Native, MongoDB, and AWS to work on our project. Another challenge is that we need the front end to be up-to-date in order to make sure our API is performing correctly. We also need to have the backend running as fast as possible so that we can actually test if the app performs the needed functions properly.

### User Story #1

As a user, I would like to be able create a Simplease account.

#	Description	Time	Team	Owner
1	Display an option to create an account	3	Front	Matt
2	Retrieve data that the user inputs	4	Front	Matt
3	Set up database to store user information	5	Back	Nikitha
4	Implement creating new account functionality	6	Back	Abhi

**Testing:** Test that user information is sent and saved to the database, and make sure that the user's password meets a strict criteria that guarantees a secure password.

#### Acceptance Criteria

- Given the backend database is setup, when a user creates a new account their information should be added securely to the database.
- Given the class system is implemented correctly, a user should be upgraded to a potential tenant.
- Given that a user is upgraded to a potential tenant, they should have upgraded permission.

### User Story #2

As a user, I would like to be able sign into my account.

#	Description	Time	Team	Owner
1	Display a login screen when the app launches	3	Front	Rohan
2	Retrieve data that the user inputs	3	Front	Jordan
3	Send authentication request to the server	5	Front	Jordan
4	Verify authentication request	2	Back	Nikitha
6	Implement ability to maintain a logged in session	5	Front	Jordan

**Testing:** We need to test that (1) the user's information is properly stored in the database, and (2) that the user is able to provide their credentials to the app and are able to login to the app.

**Acceptance Criteria**

- Given that the user's login request is valid, he or she should have access to all their preexisting account information
- Given that the user is in one of the user class, the user should be able to access all the permissions of that specific user class
- Given that the user is successfully logged in, he/she should be able to remain logged in for as long as the app is open and active

**User Story #3**

As a user, I would like to be able to make changes to my account information.

#	Description	Time	Team	Owner
1	Display an option to edit account	4	Front	Rohan
2	Display current account information	2	Front	Jordan
3	Retrieve changes that the user has made	4	Front	Rohan
4	Update the database to store the new account information	4	Back	Abhi
5	Display updated account information	2	Front	Rohan

**Testing:** Test that updating user information in the app on the front end changes the user information in the database.

**Acceptance Criteria**

- Given that the user has an account, the app will display current account information
- Given that the user has made changes to his/her account information, the database should be updated accordingly
- Given that the database has updated the user information correctly, the app should display their profile back to them with the changes.

**User Story #4**

As a user, I would like to be able to control when and how I get my notifications.

#	Description	Time	Team	Owner
1	Allow user to access notification settings	4	Front	Rohan
2	Create notification settings (rent posted, maintenance request, etc.)	6	Back	Nikitha
4	Allow users to delete/acknowledge past notifications	4	Front	Matt

**Testing:** When a notification is sent to a tenant, the tenant receives it (or doesn't) based on their settings.

#### Acceptance Criteria

- Given that the notification functionality is setup properly on the backend, the user should be able to access the notification settings page
- Given the user is able to access their notification settings page, they should be able to update the presets
- Given that the user is able to access their notifications page, they should be able to delete/acknowledge

#### User Story #5

As a user or potential tenant, I would like to browse apartment listings.

#	Description	Time	Team	Owner
1	Retrieve listings from database	2	Back	Nikitha
2	Sort data in order of distance from user location	3	Back	Abhi
3	Display listings to user	4	Front	Matt

**Testing:** We will test whether new apartment additions show up in the apartment listings. We also will compare the contents of the database to what shows up on the app to make sure that the closest apartments are showing up first.

#### Acceptance Criteria

- Given that the database is already populated by the landlords, the user or potential tenant should be able to see listings.
- The user or potential user will only get listings that are open and no listings or already occupied apartments.

- Given that the listings are sorted, the user or potential tenant should be able to see listings closest to them.

### User Story #6

As a potential tenant, I would like to find apartments based on a set of variables (# of rooms, cost, location, etc.)

#	Description	Time	Team	Owner
1	Retrieve listings from database	2	Back	Nikitha
2	Sort apartment list based on the various criteria selected by the user	5	Back	Matt
3	Display the returned list of sorted apartments from the database	3	Front	Jordan

**Testing:** We need to test whether the backend is able to receive filters as part of a search request, and is able to respond to the request with the apartments that correspond to those filters.

### Acceptance Criteria

- Given that the unfiltered apartment listings are available to the user, they should be able to choose from a variety of filters.
- Given that the apartment listings are available, the user should get listings of apartments are open.
- Given that the apartment listings are available, the user should get results of apartments that are closeby.

### User Story #7

As a user, I would like to flag apartments that I am interested in renting so I can view them again later.

#	Description	Time	Team	Owner
1	Create an option to allow user to flag a given apartment	2	Front	Jordan
2	Create system for managing favorited apartments	5	Front	Jordan
3	Create screen to view favorited apartments	3	Front	Jordan

**Testing:** The most important test for this is linking saved apartments to the user's account so that they can be viewed in a later login session.

#### Acceptance Criteria

- Given that a user is able to view apartment listings, they should be able to click on a listing and then flag it to view later
- Given that a user has flagged an apartment, they should be able to view that apartment in a separate list at a later date.
- Given that a user has flagged an apartment, the database should update

#### User Story #8

As a tenant, I would like to rate my apartment when I move out, making it easier for potential tenants to browse listings.

#	Description	Time	Team	Owner
1	Prompt former tenants with exit survey	4	Front	Rohan
2	Link review information to specific apartment	5	Back	Riz
3	Create function to compute rating for apartment/landlord	4	Back	Abhi
4	Update the values of specific apartment to reflect the new rating	5	Back	Riz

**Testing:** Test if the backend side can receive and store ratings/reviews about an individual apartment, store that data in the apartment information, and send that information to the app to be displayed on the apartment information screen.

#### Acceptance Criteria

- Given that a tenant is moving out, the user should be prompted to fill out an exit survey
- Given that a user has filled out a survey, the database should link it to the tenant's old apartment
- Given that the database has linked the survey to the apartment, the updated ratings should be calculated and saved to the database

#### User Story #9

As a landlord, I would like to send notifications to my tenants (rent is due, late bills, emergencies, etc.)

#	Description	Time	Team	Owner
1	Create notification messages	5	Front	Rohan
2	Save the notification to the database	5	Back	Riz
3	Retrieve information about the person the information is supposed to be sent to	5	Back	Riz
4	Send notification to a specific user	4	Front	Rohan
5	Associate the notification with the user and the landlord	5	Back	Riz
6	Send notification to a group of users	4	Front	Rohan

**Testing:** Test if the landlord can create notifications and if the user can receive only notifications that are targeted towards them.

#### Acceptance Criteria

- Given that a landlord is able to access their account, they should be able to choose from preset notifications
- Given that a landlord is able to choose a notification, they should be able to choose which users receive the notification
- Given that a landlord can choose who receives a notification, they should be able to send a message to as many or as few people as they need at a given time

#### User Story #10

As a landlord, I would like to easily list available apartments/houses for potential tenants to see.

#	Description	Time	Team	Owner
1	Add data of apartment listings to the database	4	Back	Nikitha
2	Retrieve information all all apartment listings relevant or associated to that landlord	4	Back	Nikitha
3	Display the apartments from the database	5	Front	Matt

**Testing:** Test whether data for newly created apartments is stored in the database, and test whether the new apartments are correctly displayed on the app. The user must also be able to click on the listing, which should give them the ability to display more information.

**Acceptance Criteria**

- Given that the landlord has the list of apartments, he/she should be able to input the data into the database.
- Given that the database has received the landlord's input, the data should be formatted in a way that is compatible for our database.
- Given that the database has properly processed the apartment data, the apartment listings should be displayed on the app's homepage.

**User Story #11**

As a landlord, I would like to update listings to reflect apartments that are either available or not.

#	Description	Time	Team	Owner
1	Make create/update/delete thread of executions	6	Back	Nikitha
2	Retrieve updated list from server	5	Back	Abhi
3	See changes made in list displayed to user	5	Front	Matt

**Testing:** Test if the apartment status is properly changed, and test whether that change is reflected instantly in the app's display.

**Acceptance Criteria**

- Given that the listing already exists in the database, the landlord should be able to update information about an apartment.
- Given that the listing updates, the listing should reflect the new information updated by the landlord.
- Given that the listing exists, only the landlord of the listing should be able to update the listing.

**User Story #12**

As a landlord, I would to be able to update a potential tenant to a tenant and vice versa



#	Description	Time	Team	Owner
1	Make a system to update user classes	5	Back	Riz
2	Give landlord permissions to update user classes	2	Front	Jordan
3	Have function to link tenant's apartment to their account	5	Back	Abhi
4	Have an option(button) that landlord can click to change the user class given a drop down list of user class options	5	Back	Abhi

**Testing:** Test if the user's status has been changed, and test whether that user's permissions have been updated accordingly.

#### Acceptance Criteria

- Given that there is a function to update user classes, the landlord should have permission to access that function.
- Given the tenants' apartment is linked to their account, the landlord should be able to update the tenant to be attached to the apartment they are renting
- Given the tenant has been added to the apartment, they now have access to the functions of that apartment

## Remaining Requirements

#### Functional Requirements:

1. ~~As a user, I would like to be able create a Simplease account.~~
2. ~~As a user, I would like to be able sign into my account.~~
3. ~~As a user, I would like to be able to make changes to my account information.~~
4. As a user, I would like to be able to navigate through the app easily.
5. ~~As a user, I would like to be able to control when and how I get my notifications.~~
6. As a user, I would like my personal information to be secured.
7. As a potential tenant, I would like to schedule apartment tours easily.
8. ~~As a potential tenant, I would like to find apartments based on a set of variables (# of rooms, cost, location, etc.)~~
9. ~~As a user or potential tenant, I would like to browse apartment listings.~~
10. As a potential tenant, I would like to be able to find potential roommates.
11. As a tenant, I would like to communicate with my landlord.

12. As a tenant, I would like to view up to date pictures of the apartment.
- ~~13. As a user, I would like to flag apartments that I am interested in renting so I can view them again later.~~
14. As a tenant, I would like to upload pictures of my apartment.
15. As a tenant, I would like to be able to pay my rent.
16. As a tenant, I would like to be notified when my bill has been posted.
17. As a tenant, I would like to request maintenance (General Issues).
18. As a tenant, I would like to request emergency services that would have a fast response time.
19. As a tenant, I would like to be able to document any damage or issues concerning my apartment to solve any disputes immediately.
20. As a tenant, I would like to be able to store important documents safely within the app,
21. As a tenant, I would like to be able to view my documents whenever I want.
22. As a tenant, I would like to be able to communicate with other tenants in the same apartment structure.
23. As a tenant, I would like to be able to have easy way of subleasing my apartment
- ~~24. As a tenant, I would like to rate my apartment when I move out, making it easier for potential tenants to browse listings.~~
25. As a tenant, I would like to read other tenants reviews to decide if I want to rent
26. As a tenant, I would like to be able to opt into or out of communicating with potential tenants about my experience.
27. As a landlord/apartment owner, I would like to easily communicate with my tenants.
- ~~28. As a landlord, I would like to send notifications to my tenants (rent is due, late bills, emergencies, etc.)~~
29. As a landlord, I would like to notify tenants of packages that have been dropped off at the office (if applicable).
30. As a landlord, I would like to have a checklist for tenants to know what they need to do before they move out.
- ~~31. As a landlord, I would like to easily list available apartments/houses for potential tenants to see.~~
- ~~32. As a landlord, I would like to update listings to reflect apartments that are either available or not.~~
- ~~33. As a landlord, I would to be able to update a potential tenant to a tenant and vice versa.~~
34. As a landlord, I would like to access contractors from the app, in order to take care of maintenance requests. [If time permits]
35. As a landlord, I would to be able to contact my maintenance workers and update them on their current assignment and give new assignments. [If time permits]
36. As a service provider, I would like to create a Simplease account, and exchange messages with my employer (landowner). [If time permits]

37. As a service provider, I would like to be notified on my assignments and their locations.  
[If time permits]

### **Non-Functional Requirements:**

- Due to personal information stored within the accounts we must ensure the security of user information
- This app must be compatible with Android and iOS mobile operating systems so that any user can access the application.
- To insure compatibility with all types of mobile devices, we will be using React Native to design the front end of our app
- The interface must be very user-friendly and fast, in keeping with the goal of streamlining the process as much as possible.
- Need to have separate backend (probably hosted on AWS), to host all the documents/messages
- Since each type of user has different privileges, we will ensure that they only get access to the features accessible to that user
- The app must be able to handle a user account for each person involved in the building for each building
- The app must be able to have every apartment listing without having downtime