

M4 Design Documents
Team 71 Four Dog Night
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User Stories:

- As a user, I want to be able to create an account so that I can sign in to the app.
- As a user, I want to log in to the app with my username and password, so that I can access the app.
- As a user, I want to see a list of all shelters in the covered area, so that I can then individually examine any shelter I wish.
- As a user, I want to self-report at what shelter I will sleep on a given night, so that the vacancy count will be accurate.
- As a user, I want to see the address of a shelter, so that I can determine where it is relative to me and how to get there.
- As a user, I want to see the vacancy of a shelter, so that I can evaluate whether I will be able to get a spot in the shelter on a given night.
- As a user, I want to see all nearby shelters on an interactive map, so that I can see which shelters are close to me.
- As a user, I want to be able to see information about the restrictions of a shelter so that I do not go to a shelter for which I am not qualified.
- As a shelter employee, I want to update availability at my shelter so that the app can more accurately express vacancy to users.
- As an admin, I want to add and remove shelters so that I can ensure that the list of current shelters is accurate and up to date.
- As an admin, I want to be able to lock and unlock accounts to ensure the safe and proper usage of the app by users and shelter employees.

Manley Roberts:

Title: As a shelter employee, I want to update availability at my shelter so that the app can more accurately express vacancy to users.

Tasks:

- Design UI for viewing and modifying current vacancies at a specific shelter
- Change controllers so that a shelter employee can override normal vacancy algorithms and edit model data directly.
- Implement a UI/controller path that a shelter employee can use to reach the modification page for their shelter from the main page
- Implement a UI path that a shelter employee can use to reach the modification page from their shelter's detail page
- Code UI for modification page
- Implement authentication to ensure that shelter employees can only modify data at their own shelters.

Acceptance Scenarios:

- GIVEN a shelter employee is signed in to the app, WHEN the shelter employee navigates to their shelter's page, THEN a button will appear linking to the vacancy modification page for that shelter.
- GIVEN a shelter employee is signed in to the app, WHEN the shelter employee navigates to the page of a shelter that they do not work at, THEN no option will exist to reach that shelter's vacancy modification page.
- GIVEN a shelter employee is signed in to the app, WHEN the shelter employee navigates to the main screen, THEN a button will appear linking directly to the vacancy modification page for the employee's assigned shelter.
- GIVEN an ordinary user is signed in to the app, WHEN the user navigates to a shelter's page, THEN no option will exist to reach that shelter's vacancy modification.
- GIVEN an ordinary user is signed in to the app, WHEN the user navigates to the main screen, THEN no button will exist to navigate to a vacancy modification page.
- GIVEN a shelter employee is signed in to the app, WHEN the shelter employee navigates to the vacancy modification page for their shelter, THEN the shelter employee will be able to view and edit the current vacancy count in each category (singles and family) at their assigned shelter.
- GIVEN a shelter employee has navigated to the vacancy modification page for their shelter, WHEN the shelter employee attempts to enter a vacancy count that is invalid (less than 0 or greater than capacity) in one or both categories and selects the confirmation button, THEN an error message will be displayed, and no change will be made to the model.
- GIVEN a shelter employee has navigated to the vacancy modification page for their shelter, WHEN the shelter employee enters a valid vacancy count (0 or greater, and not exceeding the total capacity) in one or both categories and selects the confirmation button, THEN a confirmation button will be displayed, and the model will be updated.
- GIVEN a shelter employee has navigated to the vacancy modification page for their shelter, WHEN the shelter employee selects the cancel button, THEN the app will return to the previous screen.

- GIVEN a shelter employee has navigated to the vacancy modification page for their shelter, WHEN the shelter employee selects the device's back button, THEN the app will return to the previous screen.

Done Done Criteria:

- All unit tests specific to feature and affected by feature pass.
- Feature functions on multiple different emulated devices.
- Feature and code are demoed to all group members, and all are satisfied with functionality and code organization.
- Feature code is uploaded to GitHub and merged into master branch.

Evan Mi:

Title: As a user, I want to self-report at what shelter I will sleep on a given night, so that vacancy count will be accurate.

Tasks:

- create class standing enum that requires updating for new homeless shelters
- make changes to homeless shelter class
- make changes to Model class
- add widget to view
- add spinner to have a list of homeless shelters
- update vacancy count across all instances of application
- check for fill to "take off" homeless shelter from availability list
- create a "leaving" method/function
- implement changes in controller/activity

Acceptance Scenarios:

- GIVEN an user is viewing the self-report page, WHEN the user a valid homeless shelter and class standing, THEN the vacancy count is updated across all instances of the application
- GIVEN an user is editing the self-report page, WHEN the user presses the back button, THEN the changes are discarded and no changes are made to the model.
- GIVEN an user is editing the self-report page, WHEN the user accidentally presses the OK or back button, THEN a pop-up screen will appear to confirm the choice.
- GIVEN an user is editing the self-report page, WHEN the user presses the leave or similar button, THEN the vacancy count will be updated to one less at that shelter.

Done Done Criteria:

- Unit tests are written or updated to include the updating of vacancy counts for the specific homeless shelter and are passed
- Code is merged with master branch
- The self-report button properly updates count at a certain homeless shelter

Isaac Weintraub:

Title: As a user, I want to see a list of all shelters in the covered area, so that I can then individually examine any shelter I wish.

Tasks:

- Create activity for viewing shelters
- Add view for a list of shelters
- Show details of individual shelter when corresponding element of list is touched
- Connect list of shelters to source of data
- Add refresh button to shelter view activity
- Set up refresh button to reinitialize shelter list

Acceptance Scenarios:

- GIVEN a user is viewing the list of shelters, WHEN the user taps on a shelter in the list, THEN a screen appears displaying information about the shelter.
- GIVEN a source of data about shelters, WHEN the shelter view loads, THEN it extracts its information about the shelters from that source of data.
- GIVEN a user is viewing the list of shelters, WHEN the user presses the refresh button, THEN the list of shelters is reinitialized with current data.

Done Done Criteria:

- Unit tests of the feature are passed.
- Feature functions on multiple emulated devices.
- Feature has been demonstrated to all group members and all approve.
- Code is merged into master.

Jared Duncan:

Title: As a user, I want to see all nearby shelters on an interactive map, so that I can see which shelters are close to me.

Tasks:

- Create Google Maps activity
- Get location data from shelter model
- Plot shelters on the map with markers
- Set defaults for map center and scale to be such that all shelters are in view and are easily distinguishable
- Pull up information about a shelter when a user clicks on its marker

- Plot the user's current location on the map with a blue dot
- Add button to main activity which pulls up the Google Maps activity

Acceptance Scenarios:

- GIVEN a user is viewing the menu WHEN they click the map view button THEN the Google Maps activity is launched.
- GIVEN the Google Maps activity is opening WHEN the activity loads THEN all shelter locations are plotted on the screen as markers.
- GIVEN the Google Maps activity is opening WHEN the activity loads THEN the scale and center are set such that all shelters are in view and are easily distinguishable.
- GIVEN the user is viewing the Google Maps activity WHEN they click on a shelter marker THEN an information window is pulled up which shows basic information about the shelter.
- GIVEN the Google Maps activity is opening WHEN the activity loads THEN the user's current location is plotted on the map with a blue dot.

Done Done Criteria:

- Activity passes all tests.
- Activity is tested on multiple devices with screens of different scales.
- Code passes review from all teammates.
- Code is merged into the master branch.