



# Imperium

Team 15

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## Sprint Overview

This sprint will be mostly focused on getting a solid foundation on all fronts of our application. We will be starting the initial steps for our database, frontend, and backend. For each of these we will be implementing crucial user logic that nearly every future feature of the app will use in some way. On top of doing the tasks listed below we will be learning a lot of javascript and other web technologies to make sure we can effectively develop our app. By the end of this sprint we should have some semblance of an application with user authentication and the features required to assist account management.

### Scrum Master

Anthony Popilov

### Meeting Schedule

Weekly meetings on Monday @6pm as well as Thursday @6pm.

### Risks and Challenges

As this is our first sprint we will need to lay the foundation of what we're to develop in the coming months. This will require all of us to learn new technologies and languages and put them into practice quickly. If we're unable to do this, then we may have an unstable foundation from which to begin our future sprints from. To avoid this, we will be deliberate in what user stories we choose to begin with so that we can learn as we go and build from the ground up.

## Current Sprint Detail

### User Story 1

As a user, I would like to be able to create an account for Imperium so that I can find a job or so that I can recruit.

Description	Assignee	Work Estimate
Create initial backend server	CJ	6 hours
Create initial Firebase database	Jeremy/Peter	8 hours
Create initial React app with router	Jacob	5 hours

Create signup view to send login requests to the backend	Anthony	5 hours
Write controller for user logic	CJ	5 hours
Integrate password hashing library with user controller	CJ	4 hours
Write authentication middleware using JWT	CJ	6 hours
Create server side logic to store user information in firebase	Jeremy	5 hours
Write unit tests to ensure the user controller functions correctly under expected input	Peter	4 hours

### Acceptance Criteria

- Given that the logic to create users is implemented correctly, when a user attempts to create an account with an email linked to an existing account then the account creation should fail.
- Given that the logic to create users is implemented correctly, when a user attempts to create an account with a blank email or password, or with an invalid email then the account creation should fail.
- Given that the logic to create users is implemented correctly, when a user creates an account then their password should be stored not as plain text but as a salted and hashed string.
- Given that the logic to use JWTs as sessions is implemented correctly, when a user successfully creates an account, their session should persist through that JWT.

## User Story 2

As a user, I would like to be able to reset my password if I forget it so that I won't be locked out of my Imperium account.

Description	Assignee	Work Estimate
Create password reset view that can send a password reset request to the backend	Anthony/Jeremy	4 hours
Add "forgot password?" button to login/signup forms	Jacob	2 hours
Write handler for password reset in user controller	Jacob	4 hours
Write code to email user their new, random, temporary password	Anthony	4 hours
Write unit tests to ensure that the password was successfully changed	Peter	4 hours

### Acceptance Criteria

- Given that the reset password logic is implemented correctly, when a user resets their password then their old password should no longer work.
- Given that the reset password logic is implemented correctly, when a user resets their password then they should receive their new random password in their email.
- Given that a user forgets their password, when they go to the signup/login page then it should be clear how they are supposed to recover their account.

### User Story 3

I would like to be able to login and manage my Imperium account so that I can use Imperium as effectively as possible

Description	Assignee	Work Estimate
Create login view that can send a login request to the backend	Jacob	4 hours
Write handler for logging in in user controller	Jeremy	3 hours
Create account management view where users can update their preferences	Anthony	5 hours
Write handler for updating user preferences	Jeremy	4 hours
Create server side logic to edit and update user information in firebase	Anthony	4 hours
Create unit tests to ensure logging in only works for a correct username and password	Peter	4 hours
Create server side logic to store and update user files in firebase	Peter/Jeremy	7 hours

### Acceptance Criteria

- Given that the managing preferences logic is implemented correctly, when a user uploads a document, it will show up on their account page and be updated in the database.
- Given that the managing preferences logic is implemented correctly, when a user inputs their preferences, they will be saved in the database and more easily accessible when the user logs in next time.

- Given that the managing preferences logic is implemented correctly, when a user inputs their preferences, the user will clearly be able to see the new preferences which take the place of the past preferences.

## User Story 4

As a user, I would like to delete my account so that I can no longer be associated with the service.

Description	Assignee	Work Estimate
Add delete user section to user preferences view	Jacob	3 hours
Write handler for deleting an account in user controller	Anthony	4 hours
Write a unit test that creates an account, sends a request to the delete account endpoint, and makes sure that account no longer exists	Peter	3 hours

### Acceptance Criteria

- Given that the managing preferences logic is implemented correctly, when a user deletes their account, it will be correctly removed from the database.
- Given that the managing preferences logic is implemented correctly, when a user deletes their account, they will no longer be able to login to that account.
- Given that the managing preferences logic is implemented correctly, when a user opens their user preferences page, a delete user section will be shown.

## User Story 5

As a user, I would like to logout of my account so that others cannot potentially hijack my account.

Description	Assignee	Work Estimate
Logout user after they have been inactive for too long	CJ	3 hours
Add logout button on user view after login	Jacob	3 hour
Write handler for logging a user out in the user controller	Jacob	4 hour
Write a unit test to ensure that any request after a logout request no longer has a valid, authenticated header	Peter	3 hours

### Acceptance Criteria

- Given that the logic used to create the controller and JWT's is implemented correctly, when a user is inactive for a set amount of time, then they will be logged out.
- Given that the our UI is correctly implemented, when a user is logged in, then the logout button will be displayed to the user.
- Given that the controller logic is implemented correctly, when the user clicks the logout button, then they will be logged out and returned to the home page.

## User Story 6

As a user, I would like to be able to easily navigate through the website so that I can efficiently find jobs or potential employees.

Description	Assignee	Work Estimate
Create a hamburger menu to navigate to different pages	Jacob	5 hours
Set up building and minifying our react app with webpack	CJ	5 hours
Write unit test cases to ensure that your have transitioned to the correct page	Peter	3 hours

### Acceptance Criteria

- Given that the hamburger menu is implemented correctly, when a user clicks the hamburger button then the menu reveal itself
- Given that the navigation logic is implemented correctly, when a user clicks on any menu option in the hamburger menu, then the back button should still work as expected
- Given that the navigation logic is implemented correctly, both kinds of users will fluidly be able to navigate throughout various aspects of the website including the searching area as well as their own preferences and home page.

## User Story 7

I would like to have the option to remember my password for easier login

Description	Assignee	Work Estimate
Prompt a pop up asking if the user would like the information remembered after logging in for the first time	Anthony	3 hours
Write handler for remembering login information in user controller	Peter	3 hours
Create server side logic that enables the user to access a forgotten password	Jeremy	4 hours

Write unit test cases to ensure users properly access their forgotten password	Peter	3 hours
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### Acceptance Criteria

- Given that remember login logic is implemented correctly, when a user logs in they should stay authenticated and not have to log back in for a set amount of time.
- Given that remember login logic is implemented correctly, when a user tries to login after their authentication has expired, their email should be auto filled.
- Given that our login form is implemented correctly, when a user logs in, then most password managers should be able to recognize and store their login.

## Remaining Backlog

### Functional Requirements

#### 1. User Account

As a user,

- I would like to be able to create an account for Imperium so that I can find a job or so that I can recruit
- I would like to be able to login and manage my Imperium account so that I can use Imperium as effectively as possible
- I would like to be able to reset my password if I forget it so that I won't be locked out of my Imperium account
- I would like to upload a photo of myself/my company so that companies can see more about me
- I would like to logout of my account so that others cannot potentially hijack my account
- I would like to delete my account so that I can no longer be associated with the service
- I would like to have the option to remember my password for easier login

#### 2. Student Account

As a student,

- I would like to upload my resume so that companies can learn more about me
- I would like to create a bio about myself so that companies can quickly understand who I am
- I would like to create job specific preferences about what I want so that companies can more effectively find me
- I would like to filter companies based on job listings
- I would like to specify a radius of where I am interested in having a job

- f. I would like to specify whether I want a job, internship, or co-op
  - g. I would like to specify that I am interested in jobs for more than 1 major
- 3. Employer Account
  - As an employer
    - a. I would like to have a main page for my company if time allows
    - b. I would like to create sub groups for specific majors that I am interested in so that I can more effectively find potential employees if time allows
    - c. I would like to create a bio for the specific job/internship
- 4. Student Actions
  - As a student,
    - a. I would like to be able to view employer profiles so that I can see what companies are hiring
    - b. I would like to be able to like employers that I'm interested in so that I can show interest in those employers
    - c. I would like to chat with employers who I have matched with so that I can talk to companies where there is a mutual interest
    - d. I would like to 'favorite' up to 3 companies to show that I am extra interested
    - e. I would like to unmatched with an employer so that I can adjust my interests over time
    - f. I would like to view a history of past matches of employers
    - g. I would like to "match" with an employer who has viewed my profile
    - h. I would like to send a calendar that has all my availability windows in the chat
    - i. I would like to be able to see when an employer has favorited me
- 5. Employer Actions
  - As an employer,
    - a. I would only want to give certain people access to certain sub groups that they are in charge of if time allows
    - b. I would like to be able to navigate between subgroups if time allows
    - c. I would like to search through students in specified subgroups if time allows
    - d. I would like to "match" with a student who has viewed my profile
    - e. I would like to view student profiles so that I can get a better understanding of a student
    - f. I would like to be able to like students that I'm interested so that we can begin to build a professional relationship
    - g. I would like to chat with students I've matched with so that I can find employees to hire
    - h. I would like a history of past students I matched with
    - i. I would like to easily schedule interviews with matched students so that I can continue the relationship past our initial meeting
    - j. I would like to unmatched with a student so that I can better keep track of students I'm interested in
    - k. I would like to hide my profile from students for when positions are full
    - l. I would like to be able to see when a student has favorited me



- m. I would like to remove job listings if the position has been filled
- 6. Notifications
  - As a user,
    - a. I would like to get desktop notifications when i get matched or have new messages if time allows
    - b. I would like to receive email notifications that can give me updates about my profile if time allows
    - c. I would like to receive a notification when another user favorites me
    - d. I would like to disable certain notifications as I please if time allows

## Non Functional Requirements

- 1. Performance
  - As a developer
    - a. I would like the website to support thousands of users
    - b. I would like the website to act fast between pages and have communication be instant
    - c. I would like the website to be bug free so that users are not inconvenienced with crashes
- 2. Server
  - As a developer
    - a. I would like the application to support real time server client communication
    - b. I would like the application to store X students and X employers in the database
    - c. I would like the application to interface swiftly between Firebase and Google Cloud
    - d. I would like the application to be able to store both employer and student data.
- 3. Appearance
  - As a developer
    - a. I would like the website to look visually appealing and aesthetically pleasing
    - b. I would like the user to be able to switch over to a night theme if time allows
- 4. Security
  - As a developer
    - a. I would like to verify that they applicant is a valid employer to avoid fake people from creating employer accounts
    - b. I would like to limit one account per email to help avoid one person creating multiple accounts if time allows
    - c. I would like the password to be hidden when typing it in for login
    - d. I would like passwords to be at least longer than 7 characters and contain a number to ensure that user accounts are secure
- 5. Usability
  - As a developer



- a. I would like to access Imperium on any device regardless of size or resolution so that I don't need a desktop to use our product
- b. I would like to be able to easily navigate through the website so that I can efficiently find jobs or potential employees