
Apollo

Sprint 1 Planning Document

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Sprint Overview

During this sprint, Team 4 hopes to build the foundations of Apollo. This will include designing the backend communications and constructing a front end skeleton. We will be heavily focused on implementing the account functionality for our users but also plan on building the barebones for the search bar, course homepage, and dining hall homepage. Additionally, Sprint 1 will require a fair amount of research and familiarization with the various technologies that we will be using.

Scrum Master: Jacob Beene

Meeting Plan: Mondays / Thursdays at 8pm

Risks / Challenges

Team 4 will be incurring a fair amount of challenges as we enter Sprint 1. The most obvious being the lack of experience within the team. Especially for our first sprint, many hours will be spent on familiarizing ourselves with the libraries and frameworks that we will be using. Additionally, time management will be crucial. There have been a few incidents of “late work” in recent weeks and everyone on the team will need to prioritize their assigned user stories and complete them in reasonable time.

Current Sprint Detail

User Story #1

As a user, I want to be able to create an account.

Tasks	Status	Estimated Time	Owner
Login page	Not started ▾	2 hours	Edward
Create Account page	Not started ▾	2 hours	Ali
Save information to database	Not started ▾	5 hours (each)	Daniel / Brandon
Pull information from the database	Not started ▾	5 hours (each)	Jacob / Sai
Testing	Not started ▾	1 hour (each)	Ali, Edward

Acceptance Criteria

- Given the login page is implemented correctly, any user should be able to view the Login page to login to their account.
- Given the Create Account page is implemented correctly, the user should be able to view the Create Account page to create an account.
- Given the database is implemented correctly, our server should be able to pull and save information to the database to store user information.

User Story #2

As a user, I want to be able to set my role (student vs prof)

Tasks	Status	Estimated Time	Owner
Send verification email to {user}@purdue.edu	Not started ▾	4 hours (each)	Brandon / Sai
Check Purdue directory to see if user is professor	Not started ▾	5 hours (each)	Jacob / Daniel
Display role on profile	Not started ▾	2 hours	Edward
Interface for setting role	Not started ▾	2 hours	Ali

Acceptance Criteria

- Given the verification step is implemented correctly, an automated system should be able to verify a registered email address for the given role by cross-checking the Purdue directory and sending a verification email.
- Given that the “Display role on profile” step is implemented correctly, other users should be able to view a user’s role on their profile page.
- Given the interface for setting a role is implemented correctly, users should be able to set their roles while creating an account through an interface embedded in the “Create Account” page.

User Story #3

As a user, I want to be able to add my major (students) / area of practice (professors) to my profile.

Tasks	Status	Estimated Time	Owner
Display major on profile	Not started ▾	2 hours	Ali
Interface for setting major	Not started ▾	2 hours	Edward
Store major in database	Not started ▾	2 hours (each)	Brandon / Daniel

Acceptance Criteria

- Given that the “Display major on profile” step is implemented correctly, other users should be able to view a user’s major on their profile page.
- Given the interface for setting a major is implemented correctly, users should be able to set their majors while creating an account through an interface embedded in the “Create Account” page.
- Given the major is stored in the database correctly, our servers should be able to access the major of a given user at any time.

User Story #4

As a user, I want to be able to link my social media accounts (Facebook, Twitter, Instagram) onto my Apollo profile.

Tasks	Status	Estimated Time	Owner
Display Links on Profile	Not started ▾	1 hour	Ali

Tasks	Status	Estimated Time	Owner
Interface for setting/changing links	Not started ▾	2 hours	Edward
Create buttons for the respective link	Not started ▾	2 hours	Ali
Send data to database	Not started ▾	2 hours	Brandon
Create unit test to check functionality of media link buttons	Not started ▾	2 hours	Sai

Acceptance Criteria

- Given that the “Display Links on Profile” is implemented correctly, the user and other users can view other social media links
- Given that the “Interface for setting/changing links” is implemented correctly, users will be able to decide whether or not to set or change the links through the create an account page or editing their account in the profile page.
- Given that the “Create buttons for the respective link” is implemented correctly by using unit tests to check, users should be able to see the logos of each social media link for a nicer look on the UI

User Story #5

As a user, I want to be able to add my class to my profile.

Tasks	Status	Estimated Time	Owner
Add classes to profile	Not started ▾	1 hour	Edward
Send data to database	Not started ▾	2 hours	Daniel
View classes on profile	Not started ▾	2 hours	Edward
Change classes on profile	Not started ▾	2 hours	Ali
Create unit test to check functionality	Not started ▾	2 hours	Brandon

Acceptance Criteria

- Given that “Add classes on profile” is implemented correctly, Users should be able to add their classes on the create an account page
- Given that “View classes on profile”, the user and other users will be able to view their classes that are being currently taken
- Given that “Change classes on profile”, the user will be able to add or delete the classes that are currently being displayed on the profile

User Story #6

As a user, I want to add my current courses to my profile.

Tasks	Status	Estimated Time	Owner
Collect a list of all classes currently offered	Not started ▾	4 hours (each)	Jacob/Daniel
Store a list of all classes currently offered	Not started ▾	1 hour	Jacob
Search classes from list	Not started ▾	2 hours (each)	Jacob/Daniel
Create unit tests to ensure functionality	Not started ▾	2 hours	Sai

Acceptance Criteria

- Given that “Pull all current courses from database” is implemented correctly, the backend developer should be able to use the data for the search engine in the homepage or for the class list page
- Given that “Provide a list of all classes currently offered” is implemented correctly, the user should be able to view all classes that are offered in the current semester in a separate page
- Given that “Search classes from list” is implemented correctly, users will be able easily search and traverse through the class list page, similar to the search bar in the home page

User Story #7

As a user, I want to be able to add a profile picture to my profile.

Tasks	Status	Estimated Time	Owner
Create the UI to pick the icon from the system storage.	Not started ▾	2 hours	Ali
Update the Database with the new profile picture for that specific account.	Not started ▾	2 hours	Daniel
Testing for icon permeation.	Not started ▾	2 hours	Sai

Acceptance Criteria

- Given “Create the UI to pick the icon from the system storage” is implemented correctly, when they click to add their icon they should be able to select it from any part of their device storage.
- Given “Update the Database with the new profile picture for that specific account.”, when a user adds a new icon the icon is updated with the user entry in the database.
- Given adding a new icon is uploaded and reached to the database, when a page is reloaded all instances of the user's icon will be updated and tested; it does that for several pages.

User Story #8

As a user, I want the ability to make my personal information secure (public vs. private profiles).

Tasks	Status	Estimated Time	Owner
Add toggle in edit profile	Not started ▾	1 hour	Edward
Hide personal info when user is private	Not started ▾	2 hours	Ali
Store public / private account in database	Not started ▾	4 hours	Brandon
Retrieve public / private account in database	Not started ▾	4 hours (each)	Jacob / Daniel
Test functionality	Not started ▾	1 hour	Daniel

Acceptance Criteria

- Given “add toggle in edit profile” is implemented correctly, when a user navigates to edit their profile or register for an account they should see a toggle allowing them to switch their account between public / private profiles.
- Given “hide personal info when user is private” is implemented correctly, if user x is not friends with user y, then user x should only see info such as: name, major, profile picture—the rest should be hidden until the two users are friends.

User Story #9

As a user, I want to be able to reset my password.

Tasks	Status	Estimated Time	Owner
Add password reset to the edit profile UI	Not started ▾	2 hours	Ali
Cross check “current password” with server	Not started ▾	4 hours	Jacob
Update password	Not started ▾	2 hours	Jacob
Test functionality	Not started ▾	1 hour	Jacob

Acceptance Criteria

- Given, “add password reset to the edit profile UI” is implemented correctly, the user should see a reset password button when they navigate to edit profile. That should then prompt them to enter their current password in one box and enter their new password in another and then press submit.
- Given, “cross check ‘current password’ with server” is implemented correctly, after the user clicks submit, the client should request a password check from server / database and get the return result.
- Given, “update password” is implemented correctly, after the password check is returned, if it matches the current password, then the client should request a password change, else, display an error message and do nothing.

User Story #10

As a professor, I want to add an “about me” section on my account.

Tasks	Status	Estimated Time	Owner
Add “about me” input field when creating a profile	Not started ▾	1 hours	Edward
Add “about me” display field in the user’s profile	Not started ▾	2 hours	Ali
Add a button that allows a user to modify their about me section	Not started ▾	2 hours	Edward
Store the “about me” in database	Not started ▾	1 hour	Brandon
Manually test that all buttons work and changes that done are final	Not started ▾	2 hours	Sai

Acceptance Criteria

- When a user signs up for a profile, there should be a section where they can enter text that will be displayed in their profile. There will need to be a word count/limit, no formatting options so all “about me”s will look the same. Furthermore, there should be some filtering to make sure appropriate language is used.
- This should be a simple task. What needs to be done is grab the information that was entered into the input field and then display it on the profile. One decision that will need to be made is if we implement a word limit or if we implement a scroll bar for “about me”s that go larger than the intended size.
- Also a simple task, this will be a copy of the field that was in the profile creation, however a user will need to click on a “modify about me” or something similar to be able to edit their profile. As well as a “confirm changes button”
- Manually test that all buttons do what they need to do, and that input and output fields display properly.

User Story #12

As a user, I want to be able to go to a class' homepage when I click on a class.

Tasks	Status	Estimated Time	Owner
Gather list of courses	Not started ▾	See Story 6	Jacob / Daniel
Create database request	Not started ▾	2 hours	Brandon
Create class homepage skeleton	Not started ▾	3 hours	Edward

Acceptance Criteria

- Given, "gather list of courses" is implemented correctly, the database should store an accurate list of courses.
- Given, "create database request" is implemented correctly, the client / server should be able to request and retrieve a specified course object.
- Given, "create class homepage skeleton" is implemented correctly, the user should be able to view a homepage of a course with dedicated areas for each of the elements that were mentioned to be included on the homepage.

User Story #29

As a user, I want to be able to view a dining court's homepage when I click on it.

Tasks	Status	Estimated Time	Owner
Make dining court display text an interactive hyperlink button	Not started ▾	1 hour	Edward
Figure out if we want to open a link in a new tab or the same tab	Not started ▾	1 hour	Ali
Decide between absolute and relative links when both are available	Not started ▾	2 hours	Edward
Manually test that all hyperlinks work	Not started ▾	2 hours	Sai

Acceptance Criteria

- Given that the display and button is complete for a certain dining court, when a user clicks on it they will be redirected to the homepage of that dining court.
- Given the hyperlinks have been formed for the menu buttons, the homepage will either be opened in the same tab, or a different tab.
- Given that this functionality is implemented, manual testing will have to be done.

User Story #39

As a user, I want to be able to search for classes

Tasks	Status	Estimated Time	Owner
Design the UI for the search bar and dropdown	Not started ▾	4 hours (each)	Ali / Edward
Backend should query for what is entered in the search bar.	Not started ▾	4 hours	Brandon
Algorithm to predict what the user is typing out and give suggestions.	Not started ▾	5 hours (each)	Daniel / Jacob
Unit testing for specific queries.	Not started ▾	2 hours	Sai

Acceptance Criteria

- Given the UI is fully fledged out, when the user enters in a new item the suggestions are added to a drop down and scales with the number of results.
- Given the search bar communication works with the backend, when a user types in a specific page the backend processes this information and pulls data from the backend with the same starting letters.
- Given the database is configured correctly, when the backend receives a search query we query all different types of pages and account for that specific query.
- Given the database result is found, when the backend calculates the best result it brings it to the front end to be displayed as possible links.
- Given the entries are displayed, when I click enter or click on a recommended result it sends me to the appropriate page.

User Story #40

As a user, I want to be able to search for other users on Apollo

Tasks	Status	Estimated Time	Owner
Design UI for how searching for users will look	Not started ▾	2 hours	Edward
Implement proper algorithms to minimize time that users spend searching.	Not started ▾	3 hours	Brandon
Autofill depending on the closest matching user	Not started ▾	2 hours	Sai
Adjust dropdown to show possible matching searching to what user is currently typing	Not started ▾	2 hours (each)	Ali / Edward

Acceptance Criteria

- We will have to split up the search into two parts. Front end and back-end. Where the front-end will mainly look into how our search looks, and how easy it is to use. Back-end will implement what goes on behind the scenes, and the implementation of the search itself.
- Find the best running search algorithm to perform on our list of users, so that search does not take a long time. Furthermore, the drop down list that will appear when a user tries to search has to be populated with users who are the closest match to whatever is being typed in.
- Finally, we will have to autofill the search bar to the **closest** match to whatever the user is typing in to make it a bit easier to search

User Story #42

As a user, I want to be able to search for dining courts

Tasks	Status	Estimated Time	Owner
Collect all the dining court locations.	Not started ▾	4 hours	Daniel
Make the general page for the displayed dining court.	Not started ▾	4 hours	Ali

Acceptance Criteria

- Given the dining court information is collected and entered into the Apollo DB, when a user searches for it the backend polls for data relating to hours open.
- Given the general page is created for the dining court, when a user opens a specific dining court information relating to the hours and food choices are provided.
- Given the searching for dining courts works, when searching for a query similar to that of a specific dining court the result pops up in the search bar drop down.

User Story #56

As a student, I want to see other people's plan of study in terms of future classes they would like to take or are looking to take.

Tasks	Status	Estimated Time	Owner
Look at the schedules of other students	Not started ▾	2 hour	Sai
Show what classes the other students are planning to take in the next semester	Not started ▾	2 hour	Edward

Acceptance Criteria

- We will give the user the ability to look at the schedules of other students so that he/she can see who to reach out to if they have questions or contact them.
- The user can see what classes other students are taking during that semester in order to plan his/her schedule.
- It would be good to show the user what classes the other students are planning to take in the next semester.

Remaining Backlog

Functional

User

- ~~1. As a user, I want to be able to create an account.~~
- ~~2. As a user, I want to be able to set my role (student vs prof).~~
- ~~3. As a user, I want to be able to add my major (students) / area of practice (professors) to my profile.~~
- ~~4. As a user, I want to be able to link my social media accounts (Facebook, Twitter, Instagram) onto my Apollo profile.~~
- ~~5. As a user, I want to be able to add my class to my profile.~~
- ~~6. As a user, I want to add my current courses to my profile.~~
- ~~7. As a user, I want to be able to add a profile picture to my profile.~~
- ~~8. As a user, I want the ability to make my personal information secure (public vs. private profiles).~~
- ~~9. As a user, I want to be able to reset my password and username.~~
- ~~10. As a professor, I want to add an "about me" section on my account.~~
11. As a developer, I want to verify that new users are students / professors at Purdue.

Class Homepage

- ~~12. As a user, I want to be able to go to a class' homepage when I click on a class.~~
13. As a user, I want to see a description of the class on its homepage.
14. As a professor, I want to be able to add my own description of the class on its homepage.
15. As a professor, I want to be able to upload new information or correct misinformation provided about the course I am teaching.
16. As a professor, I want to link an up to date PDF of various class resources such as syllabi from previous semesters.
17. As a user, I want to be able to see the professor(s) for a class on its respective homepage.
18. As a user, I want to see the grade distributions of previous semesters in an elegant pie chart showing the percentages of different grades obtained in the class.

- 19. As a user, I want to be able to see what semesters a class is being / has been offered in recent years.
- 20. As a user, I want to be able to see what times a class is being offered during the current (or upcoming) semester.
- 21. As a user, I want to see the ratings / reviews for the class.
- 22. As a user, I want to be able to leave a detailed rating / review for the class.
- 23. As a user, I want to be able to upvote / downvote reviews or questions that users post.
- 24. As a user, I want to be able to star / pin / favorite classes that I have interest in.
- 25. As a developer, I want course content to update with each new semester.
- 26. As a user, I want to see the difficulty level (based on their ratings) of pairing this course with a course I choose.
- 27. As a user, I want to see a leaderboard of the highest ranked classes at Purdue based on various categories such as material, difficulty, quality, and likability.
- 28. As a user, I want to be able to post questions and receive answers from other users.

Dining Court Homepage

- ~~29. As a user, I want to be able to view a dining court's homepage when I click on it.~~
- 30. As a user, I want to be able to view the menu for a specified dining court.
- 31. As a user, I want to be able to view the hours for a specified dining court.

Map

- 32. As a user, I would like to view an interactive map of campus on the map page
- 33. As a user, I would like search for buildings on the map
- 34. As a user, I would like to filter map pinpoints by libraries, restrooms, dorms, dining halls, etc.
- 35. As a user, I would like to get a brief blurb about the history of various locations across campus.

Other

- 36. As a user, I want to be able to switch between light and dark mode
- 37. As a user, I want to be able to see information about Purdue buildings and history.
- 38. As a user, I want to be able to view the schedules for Purdue athletics

Search

- ~~39. As a user, I want to be able to search for classes~~
- ~~40. As a user, I want to be able to search for other users on Apollo~~
- 41. As a user, I want to be able to search the Purdue directory
- ~~42. As a user, I want to be able to search for dining courts~~
- 43. As a user, I want to be able to search for buildings on campus
- 44. As a user, I want to be able to search for events.
- 45. As a user, I want to be able to search up study groups.
- 46. As a user, I want to be able to search for clubs.
- 47. As a user, I want to be able to search for study spaces.

Social Network Interactions

- 48. As a user, I want to be able to view other users' profile pages when I click on their name
- 49. As a student, I want to be able to join group chats for classes
- 50. As a developer, I want the class group chat to reset after each semester.
- 51. As a student, I want to be able to organize or attend study sessions / groups
- 52. As a student, I want to be able to see a ranking of all the different study spaces students use.
- 53. As a user, I want to be able to add / remove other users from my friends list
- 54. As a user, I want to be able to add other users to my block list
- 55. As a user, I want to be able to receive email notifications for certain responses and posts
- ~~56. As a student, I want to see other people's plan of study in terms of future classes they would like to take or are looking to take.~~

Non-Functional

Scalability

1. As a user, I do not want to experience degradation in performance under load.
2. As a user, I do not want to lose data.
3. As a user, I want a reasonable response rate.

Usability / Clarity

4. As a user, I want an easy to understand user interface.
5. As a user, I want to navigate pages within the site without any issues.

Security

6. As a user, I want my account to be secure.
7. As a user, I want my private information to be kept private.