

# **Sprint 2 Planning Document**

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### **Sprint Overview**

Team 4 plans to focus heavily on collecting and displaying course information. This will involve a fair amount of data scraping and understanding various API's that we will use to gather our data. In addition, we will be beginning the implementation of our social network aspect by adding thread functionality to class pages. Most importantly, we will be adding dark mode to Apollo. This sprint will add a lot of functionality to our project, and we look forward to sharing it with our users.

Scrum Master: Jacob Beene

Meeting Plan: Tuesdays / Thursdays at 8pm

# Risks / Challenges

Team 4 will be embarking into Sprint 2 very much enlightened after an interesting Sprint 1. As mentioned in our Sprint 1 retrospective, we are adjusting some of our development processes in an attempt to become more efficient and productive. This introduces a fair amount of risk as we are trying a different development process than last time. Spring break also introduces some challenges as the communication between team members will be minute as some will choose to rest over their break while others will prefer to work.

# **Current Sprint Detail**

### **User Story #13**

As a user, I want to see a description of the course on its homepage.

Tasks	Status	Estimated Time	Owner
Collect descriptions for courses	Not started •	4 hours	Jacob
Manually test for function	Not started •	1 hour	Jacob

#### **Acceptance Criteria**

- 1. Given that "collect descriptions for courses" is implemented correctly, the majority of courses will have a description.
- 2. Given that the majority of courses have a description, the description should give the user a brief overview of the class.
- 3. Given that User Story 13 is implemented correctly, the description should be displayed on the course's homepage

## User Story #14

As a professor, I want to be able to add my own description thread of the course on its homepage.

Tasks	Status	Estimated Time	Owner
Create "professor comments" thread in course schema	Not started •	2 hours	Daniel
Only allow prof to comment	Not started *	2 hours	Edward
Manual Testing	Not started •	1 hour	Sai

- 1. Given the thread for each course is implemented correctly, users will be able to view the thread on the course homepage.
- 2. Given the commenting/replying functionality is implemented correctly, users will be able to comment on the course thread.

3. Given the commenting functionality is implemented correctly, users' comments for each course will persist.

#### **User Story #15**

As a professor, I want to be able to upload new information about the course that I am teaching.

Tasks	Status	Estimated Time	Owner
Upload functionality for professor	Not started •	3 hours	Daniel
Edit information functionality for professor	Not started *	3 hours	Sai
Display changes on the UI	Not started •	3 hours	Brandon

#### **Acceptance Criteria**

- 1. Given that the upload functionality is implemented correctly, professors should be able to upload information onto the course's homepage.
- 2. Given that the edit information functionality is implemented correctly, professors should be able to edit information on the course's homepage.
- 3. Given that the changes are displayed correctly, users should be able to view the updated information on the course homepage.

# **User Story #16**

As a professor, I want to link an up to date PDF of various course resources such as syllabi from previous semesters.

Tasks	Status	Estimated Time	Owner
PDF upload functionality for professor	Not started •	3 hours	Sai
Store PDF in server or database	Not started •	2 hours	Daniel
Display PDF of UI	Not started •	3 hours	Edward

- 1. Given that the upload functionality is implemented correctly, professors should be able to upload PDFs onto the course's homepage.
- 2. Given that the store PDF in server functionality is implemented correctly, the teacher will be able to post older syllabi.

3. Given the UI is implemented correctly, the PDF should be displayed on the course page.

# **User Story #17**

As a user, I want to be able to see the professor(s) for a course on its respective homepage.

Tasks	Status	Estimated Time	Owner
Add current professors to course schema	Not started •	1 hour	Sai
Add UI link for prof accounts	Not started *	1 hour	Brandon
Collect data on current professors for course	Not started •	4 hours	Jacob
Manual Tests	Not started •	1 hour	Sai

#### **Acceptance Criteria**

- 1. Given that add current professors to course schema is implemented correctly, it should be displayed on the course homepage
- 2. Given that add UI link for prof accounts is implemented correctly, when a user clicks on a professor's name, it should link the user to their profile page
- 3. Given that users can see professors on a course homepage they can see their username.

# **User Story #18**

As a user, I want to see the grade distributions of the most recent semester in a chart showing the percentages of different grades obtained in the course.

Tasks	Status	Estimated Time	Owner
Collect data from boilergrades.com relating to the most recent semester.	Not started 🕶	5 hours	Edward
Add the course schema and GET requests for UI.	Not started 🕶	3 hours	Sai, Jacob
Create the UI to display the course statistics for grade distribution.	Not started •	5 hours	Brandon
Manual Tests	Not started •	1 hour	Daniel

- 1. As a user, given that the data was collected, when I search and open a class, I am presented with a bar graph that provides a breakdown of the grades from the most recent semester.
- 2. As a user, given the UI was implemented, when I hover over the bar graph, I get more information relating to the grades such as the percentages and number of people that got a specific grade.
- 3. As a user, given the UI was implemented the bar is presented on a page, an indicator is shown that describes the average gpa and general percentile scores of the class.

## **User Story #19**

As a user, I want to be able to see what semesters a course is being / has been offered in recent years.

Tasks	Status	Estimated Time	Owner
Collect data on when courses have been offered	Not started •	4 hours	Jacob
Add to schemas	Not started •	1 hour	Sai
Add respective UI to the course page	Not started •	1 hour	Edward
Manual tests	Not started •	1 hour	Jacob

# **Acceptance Criteria**

- 1. Given a user searches up for a course, a list of semesters a class has been offered is given.
- 2. Given a user is viewing the course homepage, they will be able to view what semester (spring / fall) a course is more commonly offered
- 3. Given a user is viewing the course homepage, they will see previous semesters a class has been offered as well as upcoming ones

# User Story #20

As a user, I want to be able to see a course's times, locations, and professors for the current semester.

Tasks	Status	Estimated Time	Owner
Collect data on course	Not started •	2 hours	Jacob

Tasks	Status	Estimated Time	Owner
schedule			
Collect data on course locations	Not started *	2 hours	Jacob
Collect data on course professor	Not started •	2 hours	Jacob
Add to schemas	Not started •	1 hour	Sai
Add respective UI	Not started •	1 hour	Edward
Manual Test	Not started •	1 hour	Sai

- 1. Given that "add respective UI" is implemented correctly, users will be able to view the course schedule for a course during the current semester on its course homepage.
- 2. Given that "add respective UI" is implemented correctly, users will be able to view the course location for a course during the current semester on its course homepage.
- 3. Given that "add respective UI" is implemented correctly, users will be able to view the course professors for a course during the current semester on its course homepage.

# User Story #21

As a user, I want to see the ratings / reviews for a course.

Tasks	Status	<b>Estimated Time</b>	Owner
Create ratings and reviews class structures, APIs, and more	Not started *	3 hour	Daniel
Create schema for class rating and reviews in database	Not started *	3 hour	Daniel
Add UI to display ratings and reviews on course homepage	Not started •	3 hour	Ali
Add UI functionality to allow users to filter ratings and reviews by star number	Not started •	2 hour	Ali

Tasks	Status	Estimated Time	Owner
Manual Test	Not started •	1 hour	Jacob

- 1. Given this is completed properly, users should be able to view ratings and reviews on the homepage of a course.
- 2. Given this is completed properly, users should be able to see the average rating and the number of ratings for a given course.
- 3. Given this is completed properly, users can choose to filter reviews by how many stars were given.

#### **User Story #22**

As a user, I want to be able to leave a detailed rating / review for a course.

Tasks	Status	Estimated Time	Owner
Create UI for user to add review/rating	Not started •	3 hours	Edward
Add schema	Not started •	2 hours	Sai
Manual Test	Not started •	1 hour	Sai

# **Acceptance Criteria**

- 1. Given this is implemented correctly, a user should be able to leave a rating (1 to 5 stars), along with a review written in text to go with it.
- 2. Given this is implemented correctly, there should be a separate field to indicate which professor this user took the course with.
- 3. Given this is implemented correctly, there should be a field to indicate what semester the user took this course.

# User Story #23

As a user, I want to be able to upvote / downvote reviews or questions that users post.

Tasks	Status	Estimated Time	Owner
Add to thread schema	Not started •	1 hour	Sai
Create API requests	Not started •	2 hours	Daniel
Add respective UI	Not started •	1 hour	Edward

Tasks	Status	Estimated Time	Owner
Manual Tests	Not started •	1 hour	Daniel

- 1. Given the downvote / upvote functionality is implemented when a user opens a course thread, there will be an upvote and downvote option for each post.
- 2. Given the downvote/upvote functionality is implemented when a user upvotes a post or downvotes a post, the value of the post increments by one or decrements by one if it was an upvote or a downvote.
- 3. Given the downvote/upvote functionality is implemented when a user posts to a thread, the downvote and upvote buttons are not enabled for the original poster.
- 4. Given the downvote/upvote functionality is implemented when a user opens a review the same system used for thread posts is used for rating reviews.

### User Story #24

As a user, I want to be able to favorite classes that I have interest in.

Tasks	Status	Estimated Time	Owner
Add UI to the landing page to show shortcuts to the favorited courses.	Not started •	2 hours	Edward
Add UI to the course page to favorite the course like a star button.	Not started *	0.5 hours	Edward
Add a list of the starred courses to the user schema with POST and GET requests for UI.	Not started •	2 hours	Daniel
Manual Test	Not started •	1 hour	Ali

- 1. Given the shortcut ui is implemented when a user logs in, there should be a list of shortcuts underneath the search bar of all the favorite courses.
- 2. Given the shortcut ui is implemented when a user clicks on a course shortcut the user will then be redirected to the course page.
- 3. Given the favorite button is implemented when a user searches for a course and favorites the course, the course will then show up on the landing page.

### User Story #26

As a user, I want to see the difficulty level (based on their ratings) of pairing this course with a course I choose.

Tasks	Status	Estimated Time	Owner
Add UI to select a course	Not started •	2 hours	Ali
Add UI to set the pairing difficulty of said course	Not started *	3 hours	Brandon
Write API requests	Not started •	3 hours	Jacob
Manual Test	Not started •	1 hour	Sai

### **Acceptance Criteria**

- 1. Given that "select a course" is implemented correctly, there should be a dropdown on the course homepage for course y where you can select course x.
- 2. Given "set the pairing difficulty" is implemented correctly, users can rate the difficulty of taking course *y* concurrently with course *x*. The difficulty scale will be from 1 5 or a similar numbering scale.
- 3. Given user story 26 is implemented correctly, on a course homepage, users should be able to view a handful of courses and their pairing difficulty with the currently selected course.

# User Story #28

As a user, I want to be able to post questions and receive answers from other users.

Tasks	Status	<b>Estimated Time</b>	Owner
Create thread schema	Not started •	1 hours	Jacob
Add UI to display threads	Not started •	3 hours	Edward
Add UI to add threads	Not started •	3 hours	Edward
Add UI to comment on threads	Not started *	4 hours	Brandon
Write POST / GET requests	Not started •	3 hours	Jacob
Manual Test	Not started •	1 hour	Jacob

- 1. Given "display threads" is implemented correctly, there should be a designated area where threads for a class are located and as a user you can view them.
- 2. Given "add threads" is implemented correctly, there should be a place to add a new thread where you can add a thread title, description, etc.
- 3. Given "comment on threads" is implemented correctly, when viewing a thread, if you have a verified account, you should be able to add a comment or reply to other comments.

### **User Story #30**

As a user, I want to be able to view the menu for a specified dining court.

Tasks	Status	Estimated Time	Owner
Implement POST method to fetch proper data, and organize	Not started *	4 hour	Daniel
Add UI to display the menu for a specified dining court on a specified day	Not started •	4 hour	Edward
Manual Test	Not started •	1 hour	Brandon

# **Acceptance Criteria**

- 1. Given this is implemented correctly, a user should be able to see what is available for breakfast, lunch, dinner.
- 2. Given this is implemented correctly, the display section for a specific meal for a specific dining court that is not open should display "<Dining hall name> is not open for <meal> on <day>", or something similar.
- 3. Given this is implemented correctly, a user should be able to see the menu for the next couple of days, and not just the current day.

# **User Story #31**

As a user, I want to be able to view the hours for a specified dining court.

Tasks	Status	Estimated Time	Owner
Add UI to display dining court hours on court homepage	Not started •	2 hour	Ali
Manual Tests	Not started •	1 hour	Sai

- 1. Given this is implemented correctly, a user should be able to see the hours of a dining court on its homepage.
- 2. Given this is implemented correctly, a user should be able to view timing that differs from regular timing in special cases.
- 3. Given this is implemented correctly, a user should be

### **User Story #36**

As a user, I want to be able to switch between light and dark mode

Tasks	Status	Estimated Time	Owner
Add UI toggle	Not started •	1 hour	Brandon
Add UI color schemes	Not started •	4 hours	Brandon
Manual Tests	Not started •	1 hour	Sai

#### **Acceptance Criteria**

- 1. Given that "add UI toggle" is implemented correctly, users will be able to switch between light and dark mode.
- 2. Given that user story 36 is implemented correctly, the default setting will be dark.
- 3. Given that user story 36 is implemented correctly, the light / dark mode should remain consistent throughout the application.

# User Story #48

As a user, I want to be able to view other users' profile pages when I click on their name

Tasks	Status	<b>Estimated Time</b>	Owner
Add links in UI on user's names	Not started •	1 hour	Brandon
Manual Tests	Not started •	1 hour	Brandon

- 1. Given that "add links..." is implemented correctly, user's names within threads should appear 'clickable' as if they were links.
- 2. Given that "add links..." is implemented correctly, when a user's name is clicked you should be redirected to that user's profile page.
- 3. Given that user story 48 is implemented correctly, if I @ a user by their username in my thread, that should link me to their profile page as well.

# **User Story #55**

As a user, I want to be able to receive email notifications for certain responses and posts.

Tasks	Status	Estimated Time	Owner
Add UI for notifications settings in profile	Not started *	1 hour	Ali
Add subscribed to threads to user schema	Not started •	1 hour	Sai
Send email to user when a thread that they are subscribed to has changes	Not started *	1 hour	Daniel
Auto subscribe users to threads that they have commented in	Not started *	4 hours	Daniel
Manual Test	Not started *	1 hour	Ali

- 1. Given "send email..." is implemented properly, users should receive email notifications for threads that they are subscribed to.
- 2. Given that "add Ul..." is implemented properly, users should be able to toggle email notifications for threads on or off.
- 3. Given that a user toggles their email notifications off, they should not receive email notifications for threads that they are subscribed to.
- 4. Given that a user toggles their email notifications on, they should receive email notifications for threads that they are subscribed to.

# **Incomplete User Stories from Sprint 1**

#### **User Story #2**

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

Tasks	Status	Estimated Time	Owner
Check Purdue directory to see if user is professor	In progress •	5 hours	Daniel

#### **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.
- 2. 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.
- 3. 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 #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	In progress 🕶	4 hours (each)	Jacob
Store a list of all classes currently offered	In progress *	3 hours	Jacob

- 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

3. Given that "add current courses to profile is implemented correctly", after a user adds their current courses, they should see them appear on their profile 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.	In progress *	2 hours	Ali

#### **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.
- 2. Given "Update the Database with the new profile picture for that specific account" is implemented correctly, when a user adds a new icon the icon is updated with the user entry in the database.
- 3. Given a user has NOT uploaded a profile picture, a blank avatar should be displayed.

### **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	<b>Estimated Time</b>	Owner
Gather list of courses	In progress *	See Story 6	Jacob

- 1. Given, "gather list of courses" is implemented correctly, the database should store an accurate list of courses.
- 2. Given, "create database request" is implemented correctly, the client / server should be able to request and retrieve a specified course object.
- 3. 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.

# **Remaining Backlog**

#### **Functional**

User

- 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).
- 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 user, 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 syllabited 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.