

Apollo

Team 4 Backlog

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Problem Statement

Most Purdue students have gone through the process of desperately looking for information about the course they are signing up for and connecting with those who have previously taken it. Our goal with this project is to create an efficient way for Purdue students to gather data on their potential courses based on the experiences of those who have previously taken the course, and also allow a way for current students to connect with their classmates and professors. With Apollo, students will no longer need to browse various platforms in order to find the information for a course they are looking for. This will be done by combining aspects of a social networking site such as chat-rooms with a review site and compiling crowd-sourced data based on official course data scraped from Purdue's websites and organizing this data into an index of courses.

Audience

As of now, there is no reliable way for students and staff members to interact and easily access important information and events. Purdue has many online resources to inform its attendees, however, most of these online resources are often hard to reach, making them in essence obsolete. With Purdue's vast population, they will have the opportunity to grasp all they will need for their future endeavors on one platform.

Similar Platforms

There are several other platforms that have components of what we are hoping to make. Such as: RateMyProfessor, Pluto for Purdue, and others. What makes our idea different is that we plan to combine different resources from all over to make a one-in-all website for all information, and not just have to be tailored to only classes, dining courts, or general info.

Limitations

The main limitation that all other programs had was that they all contained only a part of the information you would need; RateMyProfessor will show you some information about that professor, but it will be about all courses taught and not specifically tailored to what you are looking for. Furthermore, you will need to go to other websites to learn more. We believe students should be able to have a designated spot where they can combine, share, and learn from each other.

Compatibility

Apollo will be compatible with the latest versions of Chrome, Safari, and Firefox. It will also be optimized for both Desktop and Mobile and their respective aspect ratios.

Accessibility

Apollo will abide by the [WCAG 2.1 Standards](#).

Functional Requirements

Account

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 / review 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 courts 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.

Scalability

Apollo will be hosted on servers and keep all data on databases capable of handling increasing demand without degradation in performance. Apollo will not suffer from data loss during scaling events and will not have lower response times under heavy loads and will try to maintain an average of 200ms response rate.

Usability/Clarity

Usability is a crucial part of the user's experience with the app because it opens up a lot of possibilities for the user to benefit from the app. We need to make sure to include all of the important information regarding the Purdue courses in order to prevent the user from going to different websites to gather information about the courses. It is important that the user has a good experience with the app so that the user will recommend it to other people, and we have clarity about how well the app is working. We will also add extra features if the app is liked by a lot of people.

Security

Security is an important part for the user account creation to prevent anybody that isn't a Purdue Student or Professor from making an account. We will need to make sure that the users that are made are Purdue verified emails. This would mean that a user creating an account needs to make sure that the email that they are registering with is a Purdue email by sending an email confirmation. This will be done with an email verification api. The account type will also be different so that students cannot modify core information relating to the course.

Deployment

For our web app, the frontend and backend will be separately hosted. The backend will consist of MongoDB Atlas to host our database and Heroku to host our Node.js/Express.js server-side code. For the frontend, we will use Netlify to host our React application.