

Project Backlog

Team 35 - PurdueClass

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Problem Statement:

Having an ideal and organized semester schedule is what every student seeks for. However, myPurdue does not provide a friendly environment for students: it cannot track courses status efficiently; it does not allow students to save their ideal schedule before register; there's no environment for students to manage all their academic work in one place. And two-step authentication even makes it more complex. PurdueClass fixes this problem and provides services of searching classes, tracking courses available spots, and saving schedule on IOS devices efficiently. And throughout the semester, it provides the academic schedule for students with the class time and the homework reminder, and it also allows students to edit and manage their own schedule on the app.

Background Info:

Audience:

Purdue students are fostered to be engaged in their academic work. They need tools and technologies that can help them manage their registrations, class schedules, and other events. A mobile app, which is tailored made for Purdue students and can help them to be academically successful, will gain great popularity.

Similar Platforms:

There are several existing course management services like BlackBoard, myPurdue, and Radar. BlackBoard focuses on homework assignments and gradebooks; myPurdue provides information of registration and graduation plan; Radar inserts class schedules on mobile calendars from myPurdue.

Limitation:

Currently, purdue students have to use multiple services for their daily tasks. Students go to mypurdue to look up schedule, blackboard to look up homeworks, and scheduling assistant to search classes and submit schedule. Although these services perform very well individually, there is not an integrated application, that students can access multiple services easily, without remembering and switching among all these sites. What is more, these platforms have different layouts, which can be very confusing for new boilers. As a group of juniors and seniors, most of us have gone through the hard time trying to keep up everything, from signing up courses to making reminders for upcoming homeworks. Our team hope to come up with an app that helps you save time. So you can focus more on study, instead of wasting time checking all these sites.

Functional Requirements:

As a user, I would like to be able to get class information via professor, course, title, classroom, department, course availability, number of students, and course level(300,200), simultaneously.
As a user, I would like to be noticed if there are spots available for specific sections.

As a user, I would like to get the professor rating score and get the link to rate my professor website.

As a user, I would like to see course information in the schedule.

As a user, I would like to be able to see detailed course information by touching the thumbnails.

As a user, I would like to be able to switch course sections by touching the thumbnails.

As a user, I would like to be able to save the calendar into my photo collections.

As a user, I would like to be able to save the calendar in the app and edit later.

As a user, I would like to be able to export course schedule, homework information, and evening exams to the iOS or google calendar.

As a user, I would like to be able to see all available homework posted on Blackboard, in the timeline format. (if time allows)

As a user, I would like to be able to add or edit homework reminder in the timeline.

Non-functional Requirement:

Architecture and Performance

We plan to develop the application on IOS platform. The frontend will primarily be written in Swift4 and Chameleon(open source on github) to design the user interface. The backend will be serving by the AWS server. AWS has many developer tools to host, test, and protect the applications.

Security:

PurdueClass attaches great importance to user data security, since it will involve student's academic information, including the username and password to the purdue account. The AWS cloud security gives a perfect database support. To help protect data privacy, the AWS infrastructure puts strong safeguards in place, providing scalable and efficient encryption features. All the user data will be stored in highly secure AWS data centers.

Usability:

The application is an integration of advantages of apps currently in market. The criteria of the user interface are to improve productivity and guarantee user a satisfactory experience. The user interface should be well designed in a clean and attractive manner. The layout will be well organized and the views will be easy to navigate. The user interface is desired to be simple enough to be learnable and memorable. It provides users useful options and is easy to recover from user errors. Lastly, the application is accessible on all screen sizes and resolutions.

Hosting/Deployment:

Because we are using the AWS as sever, we can deploy on AWS. AWS has autoDeploy tools, which will be much convenient. Also, we could publish our project on App Store (IOS) if we finish it properly.

