**Product Backlog**

**Project Name:** GradeBook

**Team 10 :** Dennis Chia, Michael Mertz, Avinash Prabhakar, Pranav Shekar, Ai Li Yew

**Problem Statement:**

“What grade do I need in my remaining exams in order to get an A in this class given the grades that I have so far?” Our web application will answer this question and also track the user’s grades easily throughout the semester. The main difference between this web application and Blackboard is that Blackboard does not contain detailed information on a course as it only shows a total of all points achieved. Grades and weights will have to be manually inputted, but users can create an account that tracks all their previously inputted information.

**Background information:**

**Problem:** Towards the end of each semester, students begin to worry about their final grades in classes and spend time calculating their current grade and possible final grades. Generally, this is done during finals week or the week before, which takes time away from actually studying for the finals.

**Domain:** Our team plans on creating a web application, then moving it to a mobile application, specifically Android, once finished.

**Targeted users:** Our targeted users are students, specifically Purdue students. There is an option where non-Purdue students can register. However, the application would allow Purdue students to log in with their career account.

**Limitations:** The biggest limitation with Blackboard is that it does not always show a total of all points achieved. In addition to that, it is difficult for new users to navigate Blackboard. Our goal is to make the interface of our application intuitive for students to keep track of their grades throughout the semester.

**Requirements:**

**Functional:**

1. As a student, I would want to login through my Purdue career account.
2. As a student, I would like to be able to use the web application without any login.
3. As a student, I would like to create an account.
4. As a student, I want be able to keep track of all past classes I inputted.
5. As a student, I want to be able to input the number of hours that each class requires.
6. As a student, I want to have a search bar to be able to find what I’m looking for.
7. As a student, I want to be able to trigger if a class is a “wf” or a “w”.
8. As a student, I want to be able to choose whether a class is Pass/Fail or has a letter grade.
9. As a student, I would want my GPA to be shown in the application.
10. As a student, I would want to be able to calculate my Cumulative GPA based on the results of each course.
11. As a student, I would like to be able to view the grades of each exam in every course that I’ve taken.
12. As a student, I would like to be able to edit the grades for the exams in case the professor mistakenly entered my grade.
13. As a student, I would like to view my grades in a beautiful chart.
14. As a student, I want to be able to create a new class.
15. As a student, I would like to be able to remove a class.
16. As a student, I want to be able to add a weight to each course.
17. As a student, I want to be able to add assignments to each section.
18. As a student, I want to be able to add sections to a course.
19. As a student, I want to be able to see the current % grade of current courses I’ve added.
20. As a student, I want a automatic calculator for figuring out what % I need on left over assignments.
21. As a student, I want to be able to create multiple semesters.
22. As a student, I want to be able to access a help page if I am lost or confused.
23. As a student, I want to be able to select a distinct college I’m registered in.
24. As a student, I want to be able to have error notifications if something doesn’t add up right.
25. As a student, I want an extra credit section that I can add free points to.
26. As a student, I want a side navigation bar for intuitive use of the application.
27. As a user I want to be able to make a schedule for all my classes. (if time allows)
28. As a student, I want to be able to have push notifications for when each class is. (if time allows)
29. As a student, I want to be able to add recurring homework assignments. (if time allows)
30. As a student, I want to be able to have reminders for upcoming due dates. (if time allows)
31. As a developer, I would like to see user feedback.
32. As a developer, I would like to define test cases to test the application.
33. As a developer, I would like to have a logo for this web app.
34. As a developer, I want to have a cache system that allows all the data to be downloaded once as a user uses the application.

**Non-functional: (Response time, scalability, usability, security)**

1. As a student, I would like the application to have fast response times.
2. As a student, I would like to be able to access the web application from anywhere.
3. As a student, I want to be able to use the application on my Android mobile device.
4. As a student, I want to be able to use this application on multiple devices.
5. As a student, I want to be able to use this application on my iPhone. (If time allows)
6. As a student, I would like a user-friendly and intuitive application.
7. As a developer, I want the user to input some sort of human validation to prove that it is not a virus or machine.
8. As a developer, I want to ensure that students can only access their own content.