**TEAM 10: Product Backlog**

**PROJECT NAME: ScheduMate**

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**1. PROBLEM STATEMENT**

Time management is a challenge for college students. Maintaining good grades while being involved in various events/organizations makes the average college person’s schedule full of activity. Students can greatly benefit from having a scheduling assistant, as well as a reminder base in an application to assist their busy life. Our application will organize a student’s schedule with ease while efficiently creating a planner to consistently remind the student of daily activities.

**2. BACKGROUND INFORMATION**

1. In today’s technology-obsessed world nearly everyone carries a smartphone. It is an essential device connecting us socially (Facebook, Twitter, etc..), professionally (LinkedIn, emails, conference calls), and assisting with everyday tasks (GPS, ordering food online, looking up needed information on the web).  
   A major problem among college students is time management because classes, assignments, exams and social activities quickly creates a cluttered schedule. The basis of our project is on the fact that in the domain of smartphone applications there is nothing that will conveniently/efficiently allow students to synchronize their information into a schedule to manage their wide variety of activity.

You should see by now our application will target college students. The jump from

college to high school is a large one, a student must plan out their time efficiently or

else classes will quickly become difficult. Thus our application will allow new (and

older) students to enter all their information and control the time management process for them.

1. There are certain applications and mobile features that have a similar objective. For example: ‘Classes’ is an application that shows the entire class schedule for the user along with reminders for the next upcoming class. Also an application simply named ‘Purdue’ was created by Purdue University providing a map, bus routes, weather, new, and a calendar to students.

Specific phones (ie. a few new Samsung phones) allow the user to feed in their class schedules to easily view them.

1. Although the Purdue application sounds promising it is has bugs and does not have features such as class schedule, routes to classes, or reminders.

The smartphones that allow viewing of class schedules have the software integrated

into their operating system, so it will not be as versatile as our application (ie.

swapping classes cannot be synced to the schedule).

The general limitations of the apps/features specified are that their domain is

limited to only reminders for class times, etc. Hence, a student has to keep using a

variety of apps/tools to keep a track on his/her course schedule and task reminders.

We intend to solve this problem by integrating everything into one app which will

save time and storage space for our users. On our application the student will be

able to keep track of homework, exams, social activities, and will be able to see

directions to buildings in which the class is being held. There is no such application

available on the android platform which does all of the above - making ours

proprietary as well as superior.

**3. FUNCTIONAL REQUIREMENTS**

1. As a student/user, I can receive alerts about upcoming classes and view a map to it, it will also provide a path to reach the building.
2. As a student/user, I can view exam information after entering it.
3. As a student/user, I can quickly add homework or assignments as well as their due dates.
4. As a student/user, I can add, remove, or change the time intervals of reminders.
5. As a student/user, I can turn on notifications for exams: remind me the day before, a week before, a month before, etc…
6. As a student/user, I can turn on and off push notifications.
7. As a student/user, I will be able to submit feedback to allow developers to fix/improve upon the application.
8. (If time allows) As a student/user, I can add things other than classes such as events, social activities, or club meetings.

**4. NON-FUNCTIONAL REQUIREMENTS**

1. **Performance**

The app should perform its tasks at the same rate even if the internet speeds are slow. For example, if connection to the internet is slow and cannot load maps and the GPS system, other features should work fine regardless. The primary concern of the application will be to manage time for the student and not the GPS system.

1. **Security**

Another major concern is security. Data provided by the student will only be available to the student and not to anyone else. Data transmitted over the internet will not be sent in plaintext format. The user has the right to control the data to be sent on the internet.

1. **Reliability**

Performance of an app comes after reliability. If the app is not reliable, then performance doesn’t count. We’ll try to make the app as functional and as procedural as possible in order to make it reliable to mask off a lot of corner points.

1. **Usability**

We will also provide a website along with the android app to make it user friendly and accessible anytime and anywhere. Since feedback is an important part of building the app functionality, we will create tests and implement them when some features are implemented and we will do sample tests on different phones having Android 4.4W.

**USE CASES:**

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| --- | --- |
| ACTOR ACTIONS | SYSTEM RESPONSE |
| **1)** **Use case: Open the application**    Click on the “Schedu-Mate” icon in the applications menu of the phone,    **2)Use Case: Adding a new class to your schedule**  Click on “Add a new class” option on the home screen of the application.  **3)Use Case: Setting a reminder for a homework due for a class**  Click on “Add a new Task” option on the home screen of the application  **4)Use case: Display directions to building**  Click on “My schedule” on the home-screen.  Select the class for which you want to lookup more information  Click on “Take me there”  **5)Use Case: Display the map of the campus with all buildings and labs.**  Click on “View Campus Map”  Click on a particular building | The phone launches the application and gives the user a variety of options like  “Add a new class”  “Add a new task”  “View Your own schedule”  “View Campus Map”  The application will allow the user to add a new class to his schedule.  He/She can enter the class information such as the course number, which building the class takes place in, the class timing, etc. and the class will be saved to his schedule.  The application also has the facility to let the student keep track of homeworks.  All he has to do is, enter the class number for which the homework is due, the questions which he has to solve and the deadline for the homework assignment.  The application will save the data in an internal database and will keep sending push notifications to the student about the assignment, so that he/she doesn’t lag behind in class    The application will display the list of classes in which the student is currently enrolled.  The application will display all the information about the class in a pop up menu.  Class Name  Taught by: Professor’s Name  Class Timing  Building where the class is taking place.  The application will first obtain the user’s location using the phone’s GPS. Then it will locate the building using the Google Maps API and will show the shortest route to the building from the user’s location.  The application will collect a list of all Purdue Campus Buildings and ITaP Labs  from the ITaP Server and display the information as a campus map.  The application will collect data about the user’s precise location using the phone’s GPS and will give the best possible walking directions to that particular building which the user wants to go to. |

**ACCESSING REPOSITORY**

The repository for the project can be accessed through this link.<https://github.com/asamanta94/ScheduMate>