Proposal
Team JASSHANDS

What's the app?

We want to create a **real life role-playing game <DOGE>** which will collect data about a user (such as where they are, how fast they are moving, their personal calendar, and who is nearby) to perform actions and level their in-game character.

We want to implement this game so as to blur the line between reality and game. We can gamify life through engaging the user to participate in the game outside the game as well as bring real life into the game. We also want to stress the social game aspect. People will be able to make friends, play games with them but also level up their characters and do challenges within the game. We hope our game will encourage good habits (such as going to class) while also acting as an icebreaker to introduce new friends to one another.

What's compelling/interesting about the app? Who's the target user and why would they use it?

Our app is unique in its reality mixed with social game aspect. Not only does this game have a life aspect, but it also allows you to follow up on that in order to gain experience or points in game. Our target users are CMU students who need a little more motivation to stay organized, but also want a fun way of meeting new friends and competing with them.

How is the app interesting from a technical level?

The app will utilize many techniques we've learned from class as well as outside of class. Basic app creating will be done with old technologies such as javascript, html and css, but we'll be using GPS functionality (along with Google Maps API or Foursquare API), servers such as MongoDB to store the data, and socket.IO to promote a chat system inside the game. We'll need some sort of authentication as well to let users log in. Oh the other hand, we also want the game to interact with its user on a more personal basis so we'll be looking into and using APIs to interact with a user's calender as well as technologies that will enable the game to text or email the user directly.

What are primary goals (minimum viable product)?

By the end of the project, we would like to have:

-Working Map and GPS-related events
-Basic Productivity - Quests and EXP System
-User Profiles/basic functionality in users
-Familiar 'DOGE' -allow a user to interact with the game & game to interact with the user
-Calendar integration*

Once those have been covered, our next step is to flesh out the game-portion to highlight the social aspect of the app. This includes adding:

- Friend Integration including chats
- More functionality for users and familiar
-1 or 2 simple Multi-Player Games, along with games with DOGE
- more quests that are self generated, weekly quests, daily quests, etc
-app to person communication via text or email
- NPCs
-better calendar integration
-social network connectivity that allows points for invites for snowball effect

Finally, if we still have time, we'd like to add:

-game interaction with DOGE
- some avatar customization
-a Party System of a group of friends
-more games
-quests like on-campus Scavenger Hunts, capture the flag, etc
-integration of camera into quests, games or events
- Achievements
-Easter eggs

- What's the general schedule for the development? Who's doing what?

In our team, Jolyn Sandford and Angela Qiu will mainly be in charge of the front-end - ie user interface design, implementation, and even artwork for the game as well as storylines and storyboarding. Sarah Chen and Sarah Weingarten will work primarily on back-end, such as providing a one-on-one method of communication between users using sockets, as well as setting up the server to perform any necessary calculations, such as retrieving other people around them who are using the application. However as the project progresses towards completion, both the front end people will be moved towards back end in order to implement all the aspects of the game we can in a more effective manner.

Since our project has the potential to cover limitless possibilities due to the open-ended nature of the real world, our first two weeks will focus heavily on first gamifying life and then social interactions between the game and real life in order to make sure that our application blurs the line between reality and game as much as possible. Then we will polish the rest of the game so that it's more fun for users and that there's more activities to do.

Our first order of business the GPS systems. Because most of the application depends on this, we want to make it reliable and be able to show both locations of the user and activities around the user. Next would be the task management system. We want to design this so it is beneficial to the user and positively affects the user's habits and task management skills. To establish good habits, we can implement lists containing weekly, daily, and one-off tasks. However, we want this system to be simple, as the main focus of the application is to function as a game. Calendar integration into the game should be done around this time in order for the "blur between reality and game" to happen at an early stage.

Our game system idea can be broken down further into several parts. We intend on implementing a multiplayer feature, so a user can interact with others around them. To do this,

we will be using the geolocation feature to help users initiate events between one another. In addition, we can use the geolocation feature to help analyze data about a specific user, such as how far they have traveled, as another source of experience points for the user. Another game feature we hope to implement is the calendar feature, in which a user's to-do list syncs with the user's calendar, and during some interval of time in which there is nothing scheduled, the application may alert the user to this and try to engage the user into some game or event.