# CS408: Project Charter

project name: Break!

### **Problem Statement**

Many students have troubles when they have an hour rest between the classes. As time goes by, going Starbucks is now bored and studying is not fun at all. Therefore, we decided to create a mobile application which allows users to spend their time enjoyably by breaking blocks and competing with other users how many blocks they broke. Even though there are some similar apps, but the games in market are very iterative, boring, and not creative. Break has many different modes that allows users to have a different experience every time they feel like playing the game. Now, play, break, and try to clear all modes in game and stop get suffered on waiting for next class with **Break!** 

## **Objectives**

- To create a web application which helps people to spend their time enjoyably by breaking blocks.
- Allow users to create their account to list their score on leaderboard.
- Allow users to link their Facebook profile.
- Create different play modes in the game to make it more appealing for users.
- Allow users to view their Facebook friends' scores who play the game.
- Create a user-friendly UI that allows users to want to play the game.

#### Stakeholders

- Project Leader: Jisoo Cha
- Project owners: Jisoo Cha, Shivan Desai, Youshin Kim, Akhil Agrawal, Nick Minnella, Alex Geier
- Project developers: Jisoo Cha, Shivan Desai, Youshin Kim, Akhil Agrawal, Nick Minnella, Alex Geier
- Users: Anyone who needs to kill time.
- Project Coordinator: Harsh Parakh
- Potential Advertisers

## **Deliverables**

- A website-based application that relieve user's boredom by breaking blocks.
- Play games, and let users post their score on leaderboard using real-time database in Firebase.
- Easy sign in and log in with user authentication using Firebase/OAuth.
- Multiple levels of difficulty when reaches to specific scores.
  - Ex) if user scores over 1000, blocks generate faster, and if user scores over 2000, blocks' health points get expanded, etc...
- Multiple modes within game such as:
  - o Timed mode: Get high score with unlimited balls until time runs out.
  - o Classic mode: Break as many blocks as you can with a limited amount of balls.
  - o Item mode: Same with classic mode, but let users have items to help to break the blocks.

- Firebase database to store user's information relating to the game.
  A leaderboard in the game to view friends' scores.