**DUE SEPTEMBER 29TH**

**Requirements:**

* Front End – Unser Interface (UI)
  + Utilize at least four of the following….
    - Canvas
    - Buttons
    - Labels & Textboxes
    - Sorites
    - Sensors (Clock does not count)
    - List view
* Back End – Programming (Blocks)
  + MUST utilize ALL of the following….
    - Variables – local & global
    - Conditionals
    - Procedure (Purple) – create your own purple block
    - Loops (clock is included)
    - List
    - Comment the code!!! (Automatic 10% penalty if you don’t do it)
      * Any Blocks 5 or more – explain the purpose of the blocks
      * Event handlers
      * Procedures
* User Experience
  + 10% Penalty if the app crashes.
  + Make sure to not have any yellow warnings
  + Built in tablets
  + Need directions on how to use
    - Separate screen of directions
    - Label Directions
  + No abnormal movement or layout (to the limitations of MIT)
* Bonus Opportunities
  + Based on Bander’s approval, anything we did not cover in the course
    - Firebase
    - Light sensors
    - GPS
    - Text Messaging

**Design Overview**

* Title of your app: Beach Frenzy
* User Story: Collect as many beach balls as you can! Compete against friends and become the top player! Beware, there may be a few unfortunate surprises.
* Initial Backlog Breakdown (To be configured)
  + Create a Home Screen
    - Play Button (Bring you to Game Screen)
    - Help Button (Bring you to help screen)
    - Background Image (For aesthetics)
  + Game Screen
    - Beach balls fly on and off the screen (Must be clickable for points)
      * Using the accelerometer to make the beach balls move as the screen is moved.
      * When the beach balls are clicked it adds 1 point to the total score.
    - Bombs (End the game early if touched)
      * Using Accelerometer to get x & y coordinates
      * Using x & y coordinates to move the image on and off the screen
      * When the image is touched it adds a penalty ( -10 points)
    - Option to continue playing before continuing to the End Game Screen
      * Notifier to ask if you want to continue playing
      * Yes & No option
    - Countdown till game begins.
      * Small count down before the game actually begin
    - Global High Score (Optional)
      * Global high score for all player (Allows them to compete)
    - Different Levels (Optional)
    - Option to end the game early
    - Difficulty Levels
    - Background Image (For aesthetics)
  + End Game Screen
    - Option to go to Home Page
    - Option to help page
    - Personal High Score
      * Gives detail on the players personal best
    - Global High score (Optional)
      * Shows the top 10 players
  + Help Page
    - Detailed page Explaining the gist of the game
    - Explains Controls (Users don’t understand common sense)
* App Overview
  + Collect the Beach Balls – Tilt the screen to adjust difficulty. Tap the balls on the screen to collect points. Collect as many as you can in the short amount of time. Try not to hit any of the bombs as they have a penalty.