Name of Team:				
Pringles INC				
<b>First name:</b> Ramyan	Last name: Chelvanathan	York Email: ramyan03@my.yorku.ca	Lecture Section: N	Lab Section:
First name: Saishan	Last name: Sathananthan	York Email: saishans@my.yorku.ca	Lecture Section: N	Lab Section:
<b>First name:</b> Shawn	Last name: Sekhon	York Email: shawnsek@my.yorku.ca	Lecture Section: N	Lab Section:
First name: Andy	Last name: Quach	York Email: quach262@my.yorku.ca	Lecture Section: N	Lab Section:

## **Project Description:**

## **Project Description:**

A number guessing game where the main objective of the player is to correctly guess a number within a certain domain.

When the player opens the game, they will be a menu screen where the player will be able to select the difficulty.

There will be three difficulties Easy, Medium, Hard.

- Easy
  - only include positive integers
- Medium
  - will have both positive and negative
- Hard
  - will have both positive and negative integers and fractions

The player will have a timer of 60 secs at the start of the game, where it will start to count down. The game ends when the player runs out of time, so the objective is guessing the most amount of numbers correctly and that will be the score at the end.

For each question there will be a domain shown, such as "guess the number between x and y". There will be one hint displayed such as whether the number is odd or even, or the amount of digits that the number has or the if the number is a factor of another number and so on.

They will get a maximum of two more hints in exchange for 5 seconds off their timer per hint.

There will be four options displayed the player can pick as their answer. When answers correctly they gain 5 seconds when answer incorrectly they lose 10 seconds.

As the player progresses the domain will get bigger, and the numbers will be more complex

Scoreboard of high scores

## **Requirements Definition:**

- Main Menu with two buttons one to view score board and another start a game
- The player will have the option of changing the difficulty of their games, choosing from easy, medium, or hard. (Easy will include only positive integer, medium will include positive and negative integer, hard will include both negative and positive integer and fractions)
- The player will start each game with a timer of 60 which will start to count down
- For each question the player will be shown a domain and that the number lies within that domain, such as "guess the number between x and y".

- For each question the player will see, one hint will provide with free of charge. Such as whether the number is negative or positive or a fraction.
- The player can request additional hints in exchange for 5 seconds off their timer and they can do this for a maximum of two more hints
- The answer will be in multiple choice format, The player has four options to choose from of which one of them will be correct.
- If the player answers the question correctly, they will receive 5 more seconds to their timer, however if they answer incorrectly, they will 10 seconds off their timer
- For every question the player guesses correctly this will contribute to the player overall score, as one question they guess correctly is equal to one point.
- The game will continue infinitely until the player timer's hits zero, as the player progress the domain for each question will gradually get bigger and bigger, thus increasing the difficulty.
- Once the game ends the player score will appear as well as option to retry or return to the main menu
- The player will be able to view their high score as well the score of their previous attempts
- (optional) Create an account that would contain all the scores attempted on that account
- (optional) A Sign in page to allow the user to sign on different accounts