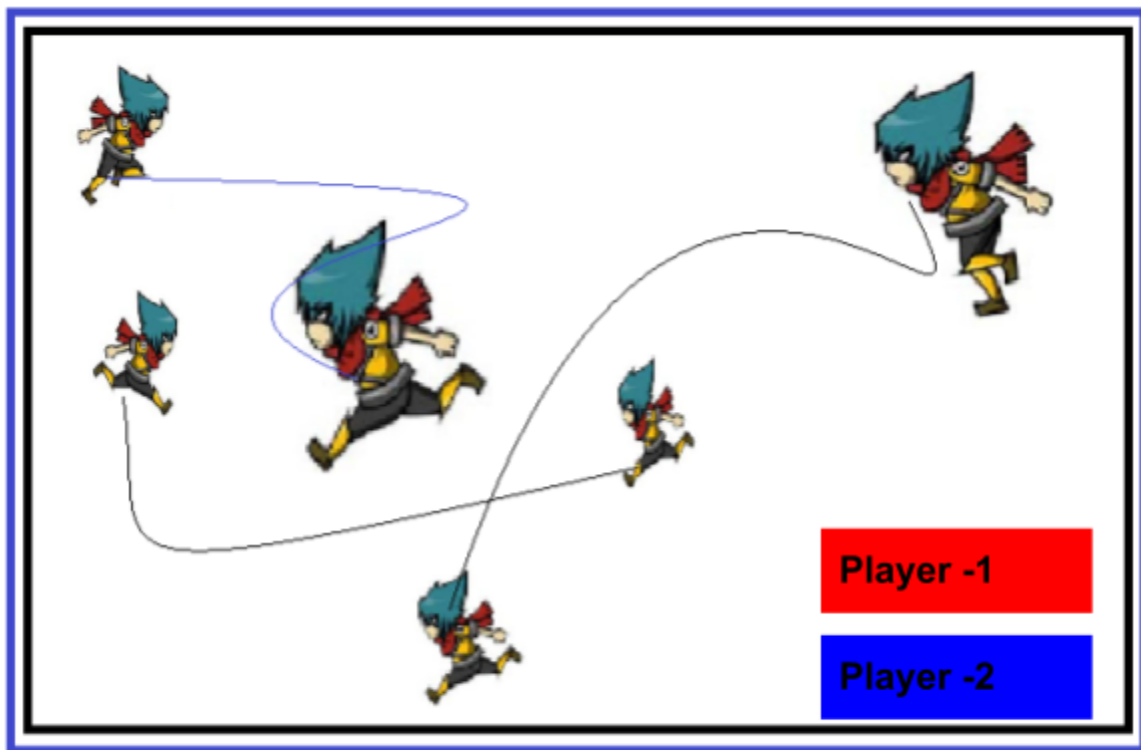


# Game Specification

## CS-451

### The idea of the Game: -

In accordance with the theme of our project (Bézier Motions), we decided to go with a 2-D game design. It will be a two-player game. In which each player will choose their army of characters, which will then move under bezier motion until they collide with the enemy character and split into two half-size similar characters. The split character will then continue to move in a random direction in bezier motion. As given in the project, the characters will bounce off the boundary of the screen. The threshold for the maximum no. of collisions of the character will be 4 times (We can also set the threshold value manually). The score for each player will be presented on the screen after each round. Each round will be time-based. We can set the no. of rounds and the winner will be decided at the end of all the rounds.



Snapshot of the game

### Modifications: -

1. The Army can consist of 3 different characters each having specific powers.

When opponent will collide with: -

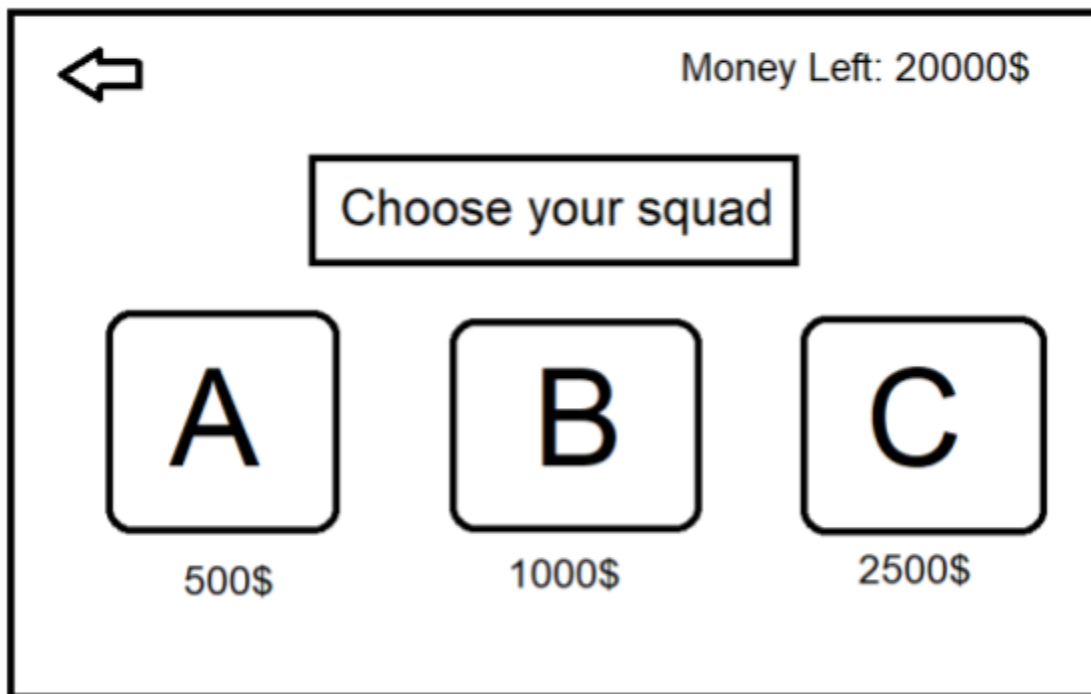
- The First character, it will split into  $\frac{1}{4}$  .
- The Second character, it will split into  $\frac{1}{3}$  .
- The Third character, it will split into  $\frac{1}{2}$  .

2. We can even vary the speed of the splitted character after the collision.

Here is an example for the same (Speed of the characters after collision):

- First character : 2X
- Second character: 3X
- Third character: 0.5X

Each player will be given some initial fund which they can use to purchase out of these characters.



Window to select characters