B.Sc Computer Games Development, Year 3, HTML5 and Android

Technical Design Document

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**“Multiplayer Breakout”**

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# **Features**

* Move player
* Use of Box2D bodies to handle collision detection
* Removal of Box2D bodies

# **CRC Cards**

|  |  |
| --- | --- |
| SceneManager |  |
| Switches between scenes | Splash Scene  Menu Scene  Game Scene  Game Over Scene |

|  |  |
| --- | --- |
| Game Scene |  |
| Collisions  Changing levels | Player  Ball  Bricks[] |

|  |  |
| --- | --- |
| Resource Manager |  |
| Loads resources | Textures  Music  Sound Effects |

|  |  |
| --- | --- |
| Player |  |
|  | Lives  Score  Position |

|  |  |
| --- | --- |
| Ball |  |
|  | Velocity  Position |

|  |  |
| --- | --- |
| Brick |  |
|  | Position  Colour  Health |

# **Tasks**

**Move Object**

Task: Move Player

* List the conditions required:
  + Is Touch Left of player if(true) move left
  + Is Touch Right of player if(true) move right
* Extra Features
  + The further you touch away from the character the faster the players paddle will move

**Collision**

Task: Collision Detection

* List the conditions required:
  + Check players position with other objects with built in physics using contactListener.

**Sound**

Task: Load Sound

* List the conditions required:
  + If current scene is the Main menu then the Main Menu music will play.
  + If the ball bounces the boing sound will play.