**EXAMEN KEUZEDEEL**

**BASIS PROGRAMMEREN VAN GAMES**

**K0788**

**BIJLAGE 1 VOOR DE KANDIDAAT  
GAME DESIGN DOCUMENT**

**Dit examen is ontwikkeld door Bob van den Berge, coach bij de Bit Academy, en Joey Schmitz, docent Software Development bij ROC van Flevoland. Onze dank gaat uit naar Lincy Ellermeijer, game developer en docent Game Development bij de HvA, voor haar hulp bij het ontwikkelen van het theoretische deel van de lesstof.**

# **GAME DESIGN DOCUMENT**

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| --- | --- | --- | --- |
| **Project Concept** | | | |
| **1** **Player Control** |  | You control a   |  | | --- | | paddle | | in this   |  |  | | --- | --- | | Brick Breaker | game | |
|  | where   |  | | --- | | Arrow keys | | makes the player   |  | | --- | | move left or right | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **2** **Basic**  **Gameplay** |  | During the game,   |  |  | | --- | --- | | a ball | appears | | from   |  | | --- | | On the paddle | |
|  | and the goal of the game is to   |  | | --- | | remove every brick with the ball | | |

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| --- | --- | --- | --- | --- | --- |
| **3** **Sound**  **& Effects** |  | There will be sound effects:   |  | | --- | | win sound effect, lose sound effect, lose life sound effect and hitting the bricks with the ball makes a sound | | and particle effects   |  | | --- | | the ball changes colour every time it touches a brick | |
|  | [*optional*] There will also be   |  | | --- | | A unique feature to make the game more appealing. | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **4** **Gameplay**  **Mechanics** |  | As the game progresses,   |  | | --- | | the player moves to the next level | | making it   |  | | --- | | harder for the player to win | |
|  | [*optional*] There will also be   |  | | --- | | a score and lives system | | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **5** **User**  **Interface** |  | The   |  | | --- | | score/lives | | will   |  | | --- | | increase/decrease | | whenever   |  | | --- | | you hit a brick, the score will increase,  you fail to reflect the ball, the lives will decrease | |
|  | At the start of the game, the title   |  |  | | --- | --- | | Brick Breaker | will appear | | | and the game will end when   |  | | --- | | You either lose all your lives, displaying a game over screen, or you manage to break all the bricks, displaying a victory screen | |

|  |  |  |  |
| --- | --- | --- | --- |
| **6** **Other Features** |  | |  | | --- | | you can pause the game at any given moment  power ups are a unique feature.  The clone ball power up does as the name suggests and clones the ball that has been on the field for the longest amount of time and won’t decrease your lives if lost. This power up is able to stack meaning you can have as many balls on the field as you want.  The grow paddle power up makes the paddle grow double in size for approximately 10 seconds. Unlike the clone ball power up, the grow paddle power up does not stack so the paddle will never be larger than twice its regular size. | |

# **Project Timeline**

|  |  |  |
| --- | --- | --- |
| **Milestone** | **Description** | **Due** |
| **#1** | |  | | --- | | * Configure the physics for the ball and blocks. | | |  | | --- | | *06/17* | |
| **#2** | |  | | --- | | * Adding a player life system (3 lives). | | |  | | --- | | *06/18* | |
| **#3** | |  | | --- | | * Adding win and lose conditions to the game. | | |  | | --- | | *06/19* | |
| **#4** | |  | | --- | | * Implement pause menu functionality | | |  | | --- | | *06/20* | |
| **#5** | |  | | --- | | * Testing and reflecting on the game in it’s current state * Implementation of sound effects and addition of the logo. * Addition of unique features like power ups as suggested by Mrs. Jacobs to give the game a more unique feel. | | |  | | --- | | *06/23* | |
| **Backlog** | |  | | --- | | * Adding another level to make the game more difficult | | |  | | --- | | *06/30* | |

# **Project Sketch**

