**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   |  | | --- | | *Spaceship* | | in this   |  |  | | --- | --- | | *top Down* | game | |
|  | where   |  | | --- | | *The arrow keys and spacebar* | | makes the player   |  | | --- | | *Move sideways and shoot bullets* | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **2** **Basic**  **Gameplay** |  | During the game,   |  |  | | --- | --- | | *Enemy characters and powerups* | appear | | from   |  | | --- | | *Top of the screen, falling down* | |
|  | and the goal of the game is to   |  | | --- | | *Defeat as much enemies possible before you get hit by one of the enemies to put on a high as possible highscore.* | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **3** **Sound**  **& Effects** |  | There will be sound effects   |  | | --- | | *When you hit an enemy, get a powerup, shoot a bullet and when you are gameover.* | | and particle effects   |  | | --- | | *When an enemy is hit.* | |
|  | [*optional*] There will also be   |  | | --- | | */* | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **4** **Gameplay**  **Mechanics** |  | As the game progresses,   |  | | --- | | *There will be more enemies coming more frequently* | | making it   |  | | --- | | *More difficult to stay alive and get a big highscore* | |
|  | [*optional*] There will also be   |  | | --- | |  | | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **5** **User**  **Interface** |  | The   |  | | --- | | *score* | | will   |  | | --- | | *increase* | | whenever   |  | | --- | | *You kill an enemy* | |
|  | At the start of the game, the title   |  |  | | --- | --- | | *Astro Shooter* | will appear | | | and the game will end when   |  | | --- | | *You are hit by an enemy* | |

|  |  |  |  |
| --- | --- | --- | --- |
| **6** **Other Features** |  | |  | | --- | | *I'm going to implement a feature that splits the larger enemies into 2 and a feature that makes the game more difficult as time goes on. In the easy and medium difficulty levels, more enemies will appear on the screen and in the difficult version the enemies will also fall down faster.* | |

# **Project Timeline**

|  |  |  |
| --- | --- | --- |
| **Milestone** | **Description** | **Due** |
| **#1** | |  | | --- | | * *Create canvas, spaceship and enemies falling down* | | |  | | --- | | *12/09* | |
| **#2** | |  | | --- | | * *Create code making enemies fall down and spaceship moving sideways* | | |  | | --- | | *12/10* | |
| **#3** | |  | | --- | | * *Create code spaceship shooting bullets and enemies registering bullet hit* | | |  | | --- | | *12/10* | |
| **#4** | |  | | --- | | * *Implement score system + game over screen when hit; game loop init* | | |  | | --- | | *12/11* | |
| **#5** | |  | | --- | | * *Make a main menu with difficulty system* | | |  | | --- | | *12/12* | |
| **Backlog** | |  | | --- | | * *Add sounds for when you’re being hit by enemy, when you hit the enemy with bullet, when you start the game, when you get an upgrade.* * *Add particle effects when you hit an enemy that it shows a small explosion.* | | |  | | --- | | *12/17* | |

# **Project Sketch**

Afbeelding met Hemellichaam, (kosmische) ruimte, ruimte, Universum

Automatisch gegenereerde beschrijving