Introduction to Game Development

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Quests & Challenges

Main quests

- Make it so that the space ship slows down when you are not holding down any keys
- Add asteroids when creating galaxy
- When pressing space, shoot a projectile
- Write the update function for projectiles
- Call game over when player collides with asteroid
- Add an audio loop

Side quests

- Add a final boss
- Add different stages
- Print out the score





Quest Guide





Quest: Slowing down the space ship

Specification

- The space ship will accelerate when you press down any of the arrow keys
- Make sure the space ship slows down if you release the keys

Hints

 The position of the space ship is updated in the player file





Quest: Adding asteroids

Specification

 When the galaxy is created a number of asteroids should be spawned into the galaxy





Quest: Shoot projectiles

Specification

- Check if the space button is pressed and if so shoot out a projectile
- The projectiles are owned by the player

Hints

Do this in the update function of the player





Quest: Write the update function for projectiles

Specification

- The projectile's position should be updated
- Make sure the projectile disappears after a while in space
- The projectiles should stay within the "walls"

Hints

- The position can be updated by using the direction, speed and delta time
- The projectile has an age that can be used to decide how long they exist
- There is a function in the engine utils that can be used to keep the projectiles within the walls





Quest: Game over

Specification

 If the player hits an asteroid the game should be over

Hints

• Use the game states





Quest: Add an audio loop

Specification

- Add an audio loop to the game
- Either use the soundtrack in the assets folder or find your own asset online

Hints

Use google to find out how to do this!



