## Description:

We are going to make a space invaders. The player controls a ship which can move horizontally and shoot a bullet to kill the incoming enemies. The player loses the game if he/she does not have any lives left, initially he/she has 3 lives. Whenever an enemy ship's bullet hits the player's ship the player loses one life.

### Goal:

Kill all the enemy ships. We are going to have 2 waves of enemy ships and one boss to defeat.

#### Tasks:

#### Enemies:

We are going to have static enemies that move left and right but don't shoot. We also want to implement enemy ships that shoot and a final boss of the game that shoots multiple bullets at a time and would have a larger hp. (Benjamin)

- Menu:
  - 1 New Game -> starts a new game
  - 2 Tutorial -> a static screen informing the player about the controls and the purpose of the game
  - 3 Difficulty selection -> the player can choose between easy, medium and hard based on some keyboard input. The hp of the enemy ships might increase in medium/hard mode.
  - 4 Quit Game -> quits the game (Nick)
- Scores:

Every enemy ship killed gives the player points. Each ship gives a different amount of points based on the type of the ship (some don't shoot, some have more hp, boss) (Benjamin)

- Collision Detection:
  - We are going to have a friendly rocket that shoots the enemies and checks if it collided with one of the enemies and also an enemy rocket that checks if it collides with the player. (Piotr)
- Player ship:

Key A moves ship to the left and key D moves the ship to the right and W key is for shooting. You cannot go out of the window boundaries. The player has some health points and we are going to display it somewhere near the current score of the current game. (Piotr)

# ASCII art:

We want to make something similar to this. The enemy ship can change color when it gets hit, the same for the player ship. (Nick)

