

Overview of all functional and visual features:

- Start menu
 - Game start
 - High Score
 - How to Play (buttons and text explanation)
 - Exit game
 - Click sound
- Spaceship:
 - Optically equipped with two additional laser cannons
 - Functionally it can move forward/backward and sideways with the arrow keys
 - Rotational movement in the direction of flight
- Laser weapon:
 - With the space bar, the spaceship first shoots a simple laser
 - A laser sound is emitted with every shot
- Enemies:
 - Slimes: Appear randomly and fly vertically through the picture. Can be eliminated with one hit. The player loses a life in the case of a collision with the spaceship. Player gets one score point in case of destruction. Sound effects appear in the event of a collision and a hit.
 - Shells: When a score of 20 is reached, this enemy appears randomly and moves in lines across the playing field. It can be eliminated with three hits and extinguishes one life if it collides with the spaceship. Player gets one score point in case of destruction. Sound effects appear in the event of a collision and a hit.
 - Boss enemy: Warning display + sound effect before appearing. Particularly difficult to destroy (100 laser hits or 50 missiles needed) and appearing at a score of 150. Flies back and forth between the right and left edges at the top of the playing field. Shoots thick strong laser beams with light effect again and again, which take a life of the player in case of a hit on the spaceship. It fires torpedoes with flame effects at longer intervals, which cause more damage (2 lives) and fly in curved trajectories with rotation. After a certain number of hits, the boss moves faster. When the boss is destroyed, the score increases by 50 and the game is won. Different sound effects when appearing, colliding, and destroying.
- Lives:
 - Life indicator in the upper right corner
 - Life in form of heart symbols
 - Unlimited number of lives upwards, if you lose the last life you lost the game (redirect to "Game Over" menu)
 - Similar to the aliens, heart symbols appear randomly on the playing field. When these are collected (collision), the number of lives increases and the heart display grows by one.
- Power Ups

- Rocket: This is a customized *Blender Model*. Display power up. Shoot with missiles instead of laser beams. when a missile hits an enemy, not only is the enemy eliminated, but an explosion is triggered in a certain radius around the collision, wiping out all enemies located there. Accompanied by sound effects and flame effect when missile is moving. Valid for a limited time, visible on the running time bar.
- Burst: Power Up indicator. Instead of the simple laser, the spaceship now shoots a laser beam with a broader width, allowing a larger area to be hit. Visually represented with three laser balls. Sound effects. valid for a limited time, visible on the running time bar.
- Shield: Power Up indicator. Shield appears as a bubble around the spaceship, protecting it from collisions with enemies (so no life can be lost during this protection phase). Collisions destroy enemies and therefore score. Sound effects. Valid for a limited time, visible on the running time bar.
- Level Ups
 - Starting from a score of 30: permanent upgrade of two lasers instead of a single one. Brief display of the new upgrade.
 - Starting from a score of 50: faster firing - Keep pressed corresponds to continuous firing. Brief display of the new upgrade.
 - Starting from a score of 100: scatter shot (for more range per shot). Brief display of the new upgrade.
- Score
 - Score display at the bottom left
 - Score increases by the corresponding number of points when enemies are eliminated (Alien +1, Bowser +3, etc.)
 - Score serves as a level upgrade barrier
 - Score is used for the Game Over menu with ranking
- Background in space design + background music throughout the game
- Background music volume bar in start and game screen
- Game Over menu
 - Game Over menu appears after losing the last life
 - Achieved score is displayed; possibility to enter names for the ranking; display & saving of ranking (persistent highscore based on CSV)
 - Game Over sound effect when menu appears
 - Shortcut for restarting the game
 - Quit button
- Victory screen
 - Appearing when final boss enemy is defeated
 - Sound effect
 - Same functionalities as game over screen

Background music by Kevin MacLeod (https://freemusicarchive.org/music/Kevin_MacLeod)

Sound effects source:

- <https://www.salamisound.de/fx-sound-sounds>
- <https://freesound.org/>