

Space Invaders

Application flow

1. App launch and Splash screen should be shown (additional to unity's default splash screen). Logo or text must be persistent at least 3 seconds.
2. Title screen is an entry point to the rest of the game (Selector screen and credits)
3. Selector screen must boot the gameplay with a predefined layout determined by the selected option.
4. Game scene is the actual gameplay.
5. Once the user is defeated End Screen will be displayed with the player's score and the button options shown in the image 1.1
 - a. The Retry button starts a new game with the same level layout.
 - b. The Title screen button goes back to the Title screen.

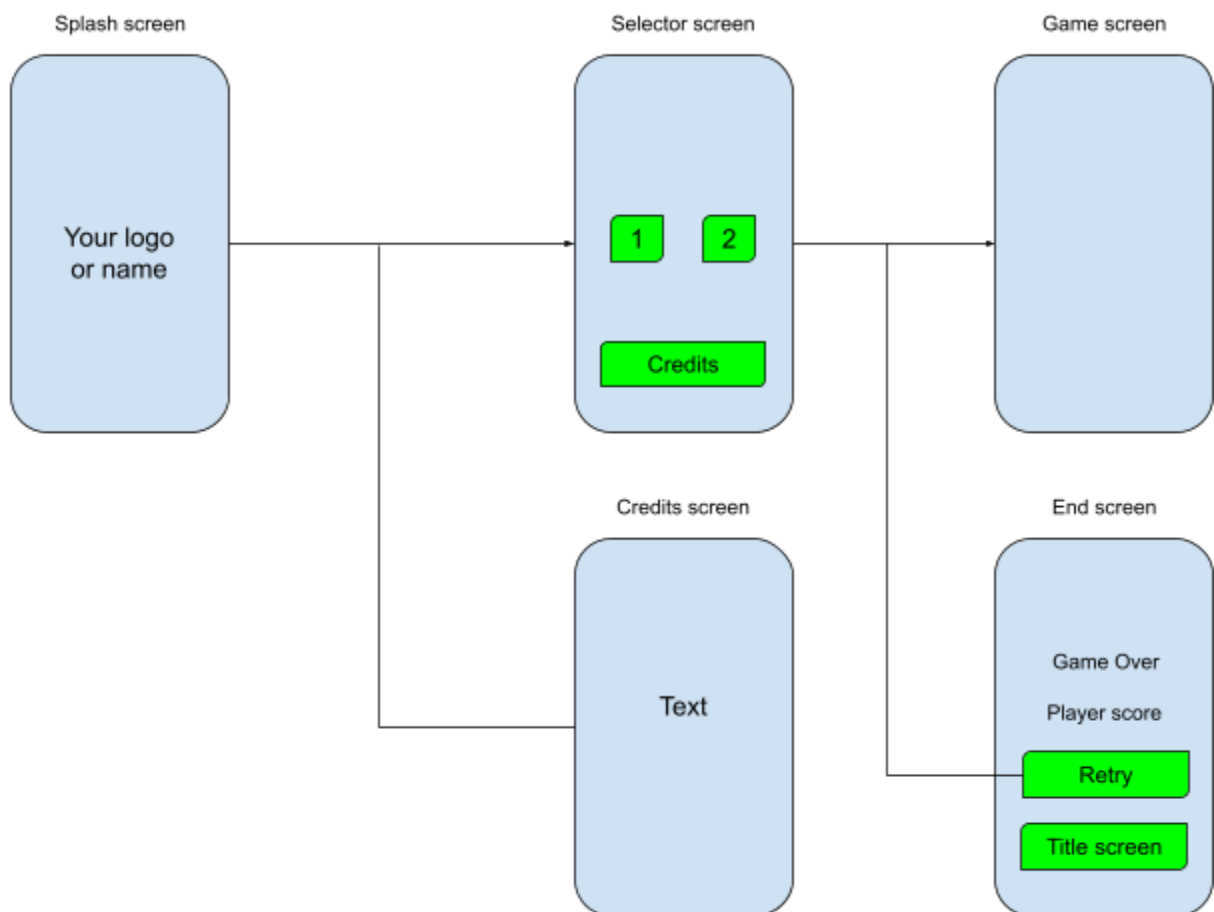


Image 1.1

Gameplay

Movement:

A-D keys and Left-Right arrow keys

Shoot:

W key and Up arrow key

1 bullet deals 1 damage

Enemies:

Green, 1 hp

Blue, 2 hp

Red, 3 hp

Score:

Green enemy gives 1 point

Blue enemy gives 2 points

Red enemy gives 3 points

Rules:

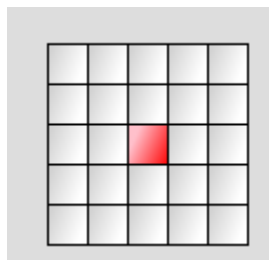
All enemies move down at a constant rate defined per level

If at least 1 enemy reaches the player, game is over

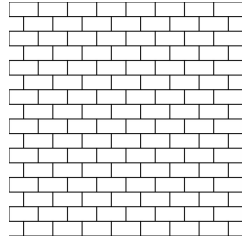
The player beats the level when all enemies are defeated

Constraints

- Must use Unity version 2019.x or above with C# language.
- There must be only one unity scene for all the levels, such a scene needs to load a metadata file to set up the level layout.
 - Lvl 1 layout: grid based, example:



- Lvl 2 layout: brick wall, example:



Deliverables

- The Unity project needs to be uploaded to a repository, so the engineering team can review the final source code.

Extras (not required):

- Android or iOS build (with proper input for touch screen)
- Different weapons dropped by enemies randomly (more damage and/or different shooting patterns)
- The closer to the player the enemy is when destroyed, the less points it gives:
 - On top of the screen score multiplier: 3x
 - On the bottom of the screen score multiplier: 1x