

# Assignment 3

28 MARCH 2019 / Martin Carlsson

## Features

### Features for Pass:

2. Implemented FPS counter
3. Created camera class to manage viewport matrix. Calculates ideal aspect ratio if one axis of Meters\_per\_second is not defined.
4. Implemented "little flame" for player ship during acceleration, using particle system.
5. Implemented HUD which displays: player lives (3d meshes rendered in top left corner), current level(Top Middle digit), current score( top right)
6. Implemented 3 distinct asteroids.
7. Implemented asteroid breaking apart.
8. Added particle effects for: Asteroid hits, Player movement and Player death.
10. Shader code is loaded from resources.

### For Pass with Distinction:

2. Implemented levels.
4. Got rid of auto-fire.
6. Added texture support.
7. Created shader class which loads glsl source code from file system, allows user to activate shader, set uniforms (shader class stores uniform locations once queried(flyweight)) and query attribute locations.

## Credits

Spaceship models from

<https://assetstore.unity.com/packages/3d/vehicles/space/star-sparrow-modular-spaceship-73167>

Credits to Ebal Studios