Advanced Games Programming

space go-fer

Sean Khanna & James Coyle

Level 6

Contents

[User Stories 2](#_Toc527725861)

[Simple 2](#_Toc527725862)

[Advanced 2](#_Toc527725863)

[Game Requirements 3](#_Toc527725864)

[Simple 3](#_Toc527725865)

[Advanced 3](#_Toc527725866)

# User Stories

## Simple

As a player I want to be able to see my ship so that I can see what my ship looks like.

As a player I can fly around in a ship because it’s a space game.

As a player I want to be able to move around the scene so that I can explore the map.

As a player I want to be able to shoot my enemies so that they don’t kill me first.

As a stakeholder I want there to be lighting effects so that the game has more personality.

As a programming I want to procedurally generate asteroids with their own trajectory because I want players to always be on their toes trying to avoid asteroids.

As a client I want to be able to see Enemies chase the player because it will make the game more immersive.

As a user I want to have good collision with walls etc. because I don’t want to be able to see in side boxes or be able to walk through walls.

As a programmer I want to use shaders because I want the characters to have shades against asteroids.

As a programmer I want my asteroids to have physics applied to them because it will give a good effect when a player collides with them and they, fly away.

As a programmer I want to apply textures to all my objects because I don’t want my objects to look boring.

As a programmer I want to use a skybox because it will help with to optimise my game.

As a programmer I want a camera because I want the player to be able to see the game.

As a player I want to have a score element because I want to be able to have a sense of achievement.

## Advanced

As a programmer I want to include sounds and music because I want the player to have another feedback source apart from visual.

As a programmer I want to use advanced shader techniques because I want to test my skills and create better looking models.

As a user I want to have a settings menu because I want to be able to adjust some settings for example screen size, volume or key bindings etc.

As a programmer I want to have shadows because my objects to have a more realistic feel to them.

As a client I want to have dialog boxes because I want the game to have a story to go with them.

As a programmer I want to give an option for the player to be able to switch the camera position because it will allow the player to play the game from a different perspective for example, first person or third person and be able to see the ship’s skins.

As a programmer I want to have particle effects because I want the player to know when the ships are moving visually.

As a client I want fonts that match the theme because I don’t want a miss match of styles.

As a player I want to have currency because I want to be able to upgrade my ship or buy new skins.

# Game Requirements

## Simple

* 3rd person
* Player is a spaceship
* Movement
* Shooting
* Lighting
* Procedural generated asteroids with own trajectory
* Enemies with AI
* Collision detection
* Shader
* Physics
* Textures
* Skybox
* Camera
* Score

## Advanced

* Sounds and music
* Advanced shader techs
* Settings
* Shadow mapping
* Dialog Boxes
* 1st person camera option
* Advanced particle effects
* Custom Font
* Currency