# UNIVERSITAT POLITÈCNICA DE CATALUNYA School of Professional & Executive Development

# **Advanced Programing for AAA Video Games**

## **VS1: Scenario and props**

This exercise will lay the foundations of the structure of the final project. It will represent the first version of what the game will be. That is, a playable sketch, layout or prototype. We will visualise the world where the game goes, we will navigate through it, and we will be able to win and lose. The navigation between the different states/windows of the game must be complete. The GUI must be complete in terms of functionalities. The design of the GUI may suffer changes in the next submissions but should not be made with simple placeholders.

We distribute the topics we should face into the next sections.

## 1. Application

- Skeleton of complete application with the chosen technology.
- Start menu with options to play, help (keys!), credits and exit.
- By playing we can die and end the game. We must show the relevant information (you win/you lose) and return to the start menu. Winning and losing conditions can be easy to achieve but not simple as pressing a key. To go from point A to point B, for example.
- The GUI in functionalities must be complete, and the design must follow the artistic direction.
- Although its design may not be the definitive one, placeholders should be used.

#### 2. Scenario

- Blockout of the first level (Bar and underground). A specific part with art and textured.
- Include props, characters, and some animated elements as a test (2D and/or 3D). Make the number of elements on the stage (repeated, as many instances as needed) close to the final version of the game. You cannot use third-party models, except for animated models, if necessary.

### 3. Navigation

It should be possible to navigate the entire scenario using:

- God mode camera (keep it)
- Player camera: third-person view, it will be used for testing.
- Static cameras, strategically placed to see the whole scenario from different points of view, either to play or to debug.

## 4. Main character

- First approach of the main character, textured and with walking animation.
- Physical interaction with the level.

#### 5. Debug

- Display debug mode: fps, tri/s, solid/wireframe, physical models (colliders)
- Other relevant hints that you consider useful: locations, coordinate system, areas of interest, frustum views (vision volumes for characters), etc.

### **Submission**

There must be a Release in GitHub with two zip files, binaries and source code.

Use a serious file nomenclature ready to support future milestones. The last build will be the 1.0 version.

The web page or GitHub wiki must include the GVD document.

The binaries must run the game release version. The release version is just the game, without the editor code, and with all assets packed into a zip file.

The game release must run at least at 60 fps.

There must not be memory leaks.

#### Presentation

Presentation date: 28th March

For the presentation in the classroom, you will download the build from it.