

# PlatwayGame

Project Proposal  
2023/24

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## Objectives

Platway (Platforms Way – Path of Platforms) is an isometric perspective game, being worked on a plane (X,Y,0), giving the feeling that the world where the character is inserted is 3D and the character is only 2D. The objective of this game is to go through the different game levels, increasing its difficulty with moving platforms and other types of obstacles.

Platway will have an initial menu where the user can change some settings, can exit the game and select 'Play', where the game levels/phases will be later displayed. To ease the character's movement and passage to more advanced levels, as long as the player completes more basic levels, he will be given new powers and skills such as, for example, the 'double jump'.

To make the levels more dynamic and longer lasting, mechanics will also be inserted into the map where it will only be possible to progress if the player completes certain requirements, such as passing certain 'checkpoints' on the map to move on to the next level, giving the level current status as completed. Essentially, Platway is a game

designed to be simple, with an objective and mechanics that are easy to understand and execute, thus enabling anyone, regardless of age, to play and complete it without any difficulty.

## **ScientificAes**

Computer Games, Computer Graphics, HCI

## **Tals**

**T1** Literature review and gathering of code snippets over the web, in particular Unity web site (0.5 month);

**T2** Design of the game (0.5 month);

**T3** Programming of the game in Unity (1.5 months);

**T4** Testing (0.75 month);

**T5** Writing up the project report (0.75 month).

	Feb	Mar	Apr	May	June
T1	X				
T2	X	X			
T3		X	X	X	
T4			X	X	
T5			X	X	X

## **ProjectBis**

<https://unity.com>

# Technical/Academic Requirements

Computer graphics, programming, and software development skills.

## Deliverables

The student must deliver and submit the following elements before exam: source codes and project report.

## Expected Results

- Software (source codes)
- Project documentation.
- Project report.

## Bibliographic References

1. Jeremy Gibson. Introduction to Game Design Prototyping and Development, Pearson Education, 2017.
2. Victor Brusca, Advanced Unity Game Development, Apress, 2021.
3. Nicolas Borromeo, Hands-On Unity 2021 Game Development: Create, customize, and optimize your own professional games from scratch with Unity 2021, Packt Publishing (2<sup>nd</sup> edition), 2021.