

## Work Packages:

ID: WP1

Title: Requirements Elicitation

ID: WP2

Title: Requirements Write-up

ID: WP3

Title: Design

ID: WP4

Title: Implementation

ID: WP5

Title: Testing

ID: WP6

Title: Deployment

## Tasks:

ID: T1.1

Description: Create github domain and website

Start Date: 15/10/2020

ID: T2.1

Description: Reading of brief

Start Date: 15/10/2020

ID: T2.2

Description: Meeting with Javier asking him questions about the requirements.

Start Date: 20/10/2020

ID: T2.3

Description: Writing up requirements into requirements tables

Dependencies: Requires tasks T2.1 and T2.2 to be finished

Start Date: 22/10/2020

ID: T3.1

Description: Mapping of user experience with the software in UML. Sequence diagram that describes the flow of the program from start to finish and the interaction between each system.

Start Date: 1/11/2020

ID: T3.2

Description: Abstract representation of the data structures, with no thought given to implementation. This will give us an idea of the interaction between the agents in the game.

Start Date: 29/10/2020

ID: T3.3

Description: Concrete representation of the data structures, reflecting implementation related decisions and giving a more detailed and thorough depiction of the way the objects in the program will be set up and therefore helping us in the implementation of the game.

Start Date: 30/10/2020

ID: T3.4

Description: Justification for the representation of the data structures, both abstract and concrete and how they link together. Explanation of how they relate to the requirements.

Start Date: 05/11/2020

ID: T4.1

Description: Creation of project schedule. (Aka this document) Including tasks, deliverables and start/end dates.

Start Date: 15/10/2020

ID: T4.2

Description: A description of the software engineering methods chosen (e.g agile, RAD etc.) and the plan for how the entire project will proceed in terms of how work will be divided and managed.

Start Date: 29/10/2020

ID: T4.3

Description: Outline of the tools used by the group to aid in collaboration, planning and development of the program as well as a justification of the chosen tools.

Start Date: 29/10/2020

ID: T4.4

Description: Description of our approach to the organisation of the team, in reference to the leadership and management of the team and a justification.

Start Date: 30/10/2020

ID: T5.1

Description: Decide upon and write about a format for the risks and why we chose it.

Start Date: 05/11/2020

ID: T5.2

Description: Compile the risks, their likelihood and the way we will mitigate them. Put all these into a table format.

Start Date: 05/11/2020

ID: T6.1.1

Description: Creation of Entity, Boat, Obstacle as shown on the UML diagram.

Start Date: 06/11/2020

ID: T6.2.1

Description: Creation of Stage as shown in UML Diagram.

Start Date 06/11/2020

ID: T6.2.2

Description: Stage split into 2 classes, one "GameLevel" that contains information about each level (i.e. stationaryObstacles, number of opponents etc.) and one that controls and creates said obstacles as well as boats: "PlayScreen".

Start Date: 12/11/2020

ID: T6.1.2

Description: Creation of Stationary and Moving obstacle classes, with their different sprites and different behaviours.

Start Date: 13/11/2020

ID: T6.1.3

Description: Creation of Player and Enemy boat classes.

Start Date: 13/11/2020

ID: T6.3.1

Description: Creation of background sprites, one grassy, one urban, one volcano.

Start Date: 12/11/2020

ID: T6.3.2

Description: Creation of obstacle sprites, each matching the theme of the level it is for (i.e. lilypad for level 1, traffic light for level 3, rockfall for level 4)

Start Date: 16/11/2020

ID T6.2.3

Description: Creation of MainMenu and BoatSelect screen classes, with buttons that start the game and select the boat.

Start Date: 19/11/2020

ID: T6.2.4

Description: Creation of a class to generate the obstacles all in one go. "ObstacleGenerator".

Start Date: 20/11/2020

ID: T6.1.4

Description: PlayerBoat and EnemyBoats are generated at the start of each level.

PlayerBoat can then be controlled by the player and it accelerates at a reasonable pace and caps in speed at a similarly reasonable max limit.

Start Date: 19/11/2020

ID: T6.1.5

Description: EnemyBoats travel to the right of the screen, avoiding obstacles when they are in the way.

Start Date: 22/11/2020

ID: T6.3.3

Description: Sprites for boats, 5 different types

Start Date: 19/11/2020

ID: T6.4

Description: Finish line at the end that takes you to the next level

StartDate: 22/11/2020

ID: T6.3.4

Description: Separation of background sprites into the dividers in order to allow for collisions with the boats

Start Date: 19/11/2020

## Deliverables:

ID: D1

Title: Website

Due Date: 22/10/2020

Description: Website that is able to link to all associated documentation and to the actual game.

Relevant Tasks: T1.1

ID: D2

Title: Requirements

Due Date: 29/10/2020

Description: A succinct introduction explaining how requirements were elicited and negotiated, and why they are presented as they are. A compiled and systematic of requirements split into three categories: Functional, Non-Functional and User requirements. Each requirement will be assigned an ID and both functional and non-functional requirements will link to a specific user requirement

Relevant Tasks: T2.1, T2.2, T2.3

ID: D3

Title: Architecture

Description: An abstract representation of the software as well as a concrete one with a description of the language and tools used to make the representation. A systematic justification for both architectures including how the abstract developed into the concrete representation.

Relevant Tasks: T3.1, T3.2, T3.3

ID: D4

Title: Method selection and Planning

Description: Outline and justification of the team's software engineering methods and any development or collaboration tools that the team uses. Justify the use of the selected tools and include alternatives. Outline the approach to team organisation and finally give a

systematic plan for the project, including key tasks, start/end dates and priorities. Provide weekly snapshots of the plan as it develops.

Relevant Tasks: T4.1, T4.2, T4.3, T4.4

ID: D5

Title: Risk Assessment and Mitigation

Description: Introduction explaining the format used to present the risks and the level of detail included. Systematic tabular presentation of risks to the project, including their likelihood, impact and mitigation.

Relevant Tasks: T5.1, T5.2

ID: D6

Title: Implementation

Description: Documented code for a working implementation of the part of the game that meets the remit, requirements and concrete architecture for Assessment 1. An executable JAR of the game, that includes all external dependencies, must also be included. State explicitly any of the features required for Assessment 1 that are not (fully) implemented, using your requirements referencing for identification, and consistent naming of constructs to provide traceability.

Relevant Tasks: T6.1.1, T6.2.1, T6.3.1, T6.1.2, T6.2.2, T6.1.3, T6.3.2

## Milestones: