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# Revision History

# Project Description

## Introduction

## Context

## Business Goals

## Domain Model



As can be observed from the model above, our user is a Player. Player can play a Game on a Map of his choice and earn a Score. In a Game, Player purchases and places Structures on the Map. Structures act as defenses: they shoot Projectiles that damage Enemies which move along the Path. When an Enemy is killed, Player earns a given amount of Score Points that he can use to purchase Structures.

There are many types of Structures, Projectiles and Enemies. Each type has specific parameters that make it unique.

Player can also use Map Manager to manage Maps. Player can create, edit or delete Maps.

## Actors

Player is a User who plays the game.

# Functional Requirements

## Overview



## Use Cases

### Use Case: Manage Maps

**Successful Outcomes:**

|  |  |
| --- | --- |
| **Use Case Package** | Map Management |
| **ID** | UC-MM\_01 |
| **Use Case Goal** | Primary actor successfully enters Map Manager |
| **Actors** | Primary Actor: Player |
| **Level** | User-Goal |
| **Precondition** | User has launched the game |
| **Domain Entities** | User, Player, MapManager, Map |

**Main Success Scenario:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |
| 1 | Primary Actor indicates intention to enter Map Manager |  |
| 2 | System launches Map Manager |  |
| 3 | System prompts Player to select desired map management options |  |

**Alternative Flows:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

### Use Case: Create new map

**Successful Outcomes:**

|  |  |
| --- | --- |
| **Use Case Package** |  |
| **ID** |  |
| **Use Case Goal** |  |
| **Actors** |  |
| **Level** |  |
| **Precondition** |  |
| **Domain Entities** |  |

**Main Success Scenario:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

**Alternative Flows:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

### Use Case: Edit map

**Successful Outcomes:**

|  |  |
| --- | --- |
| **Use Case Package** |  |
| **ID** |  |
| **Use Case Goal** |  |
| **Actors** |  |
| **Level** |  |
| **Precondition** |  |
| **Domain Entities** |  |

**Main Success Scenario:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

**Alternative Flows:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

### Use Case: Edit scenery

**Successful Outcomes:**

|  |  |
| --- | --- |
| **Use Case Package** |  |
| **ID** |  |
| **Use Case Goal** |  |
| **Actors** |  |
| **Level** |  |
| **Precondition** |  |
| **Domain Entities** |  |

**Main Success Scenario:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

**Alternative Flows:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

### Use Case: Edit path

**Successful Outcomes:**

|  |  |
| --- | --- |
| **Use Case Package** |  |
| **ID** |  |
| **Use Case Goal** |  |
| **Actors** |  |
| **Level** |  |
| **Precondition** |  |
| **Domain Entities** |  |

**Main Success Scenario:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

**Alternative Flows:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

### Use Case: Save map

**Successful Outcomes:**

|  |  |
| --- | --- |
| **Use Case Package** |  |
| **ID** |  |
| **Use Case Goal** |  |
| **Actors** |  |
| **Level** |  |
| **Precondition** |  |
| **Domain Entities** |  |

**Main Success Scenario:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

**Alternative Flows:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

### 

### Use Case: Delete map

**Successful Outcomes:**

|  |  |
| --- | --- |
| **Use Case Package** |  |
| **ID** |  |
| **Use Case Goal** |  |
| **Actors** |  |
| **Level** |  |
| **Precondition** |  |
| **Domain Entities** |  |

**Main Success Scenario:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

**Alternative Flows:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

### Use Case: Start new game

**Successful Outcomes:**

|  |  |
| --- | --- |
| **Use Case Package** |  |
| **ID** |  |
| **Use Case Goal** |  |
| **Actors** |  |
| **Level** |  |
| **Precondition** |  |
| **Domain Entities** |  |

**Main Success Scenario:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

**Alternative Flows:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

### Use Case: Select map

**Successful Outcomes:**

|  |  |
| --- | --- |
| **Use Case Package** |  |
| **ID** |  |
| **Use Case Goal** |  |
| **Actors** |  |
| **Level** |  |
| **Precondition** |  |
| **Domain Entities** |  |

**Main Success Scenario:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

**Alternative Flows:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

### Use Case: Play game

**Successful Outcomes:**

|  |  |
| --- | --- |
| **Use Case Package** |  |
| **ID** |  |
| **Use Case Goal** |  |
| **Actors** |  |
| **Level** |  |
| **Precondition** |  |
| **Domain Entities** |  |

**Main Success Scenario:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

**Alternative Flows:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

### Use Case: Start enemy attack

**Successful Outcomes:**

|  |  |
| --- | --- |
| **Use Case Package** |  |
| **ID** |  |
| **Use Case Goal** |  |
| **Actors** |  |
| **Level** |  |
| **Precondition** |  |
| **Domain Entities** |  |

**Main Success Scenario:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

**Alternative Flows:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

### Use Case: Sell structure

**Successful Outcomes:**

|  |  |
| --- | --- |
| **Use Case Package** |  |
| **ID** |  |
| **Use Case Goal** |  |
| **Actors** |  |
| **Level** |  |
| **Precondition** |  |
| **Domain Entities** |  |

**Main Success Scenario:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

**Alternative Flows:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

### Use Case: Buy structure

**Successful Outcomes:**

|  |  |
| --- | --- |
| **Use Case Package** |  |
| **ID** |  |
| **Use Case Goal** |  |
| **Actors** |  |
| **Level** |  |
| **Precondition** |  |
| **Domain Entities** |  |

**Main Success Scenario:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

**Alternative Flows:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

### Use Case: Place structure

**Successful Outcomes:**

|  |  |
| --- | --- |
| **Use Case Package** |  |
| **ID** |  |
| **Use Case Goal** |  |
| **Actors** |  |
| **Level** |  |
| **Precondition** |  |
| **Domain Entities** |  |

**Main Success Scenario:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

**Alternative Flows:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

### Use Case: Load game

**Successful Outcomes:**

|  |  |
| --- | --- |
| **Use Case Package** |  |
| **ID** |  |
| **Use Case Goal** |  |
| **Actors** |  |
| **Level** |  |
| **Precondition** |  |
| **Domain Entities** |  |

**Main Success Scenario:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

**Alternative Flows:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

### Use Case: Exit game

**Successful Outcomes:**

|  |  |
| --- | --- |
| **Use Case Package** |  |
| **ID** |  |
| **Use Case Goal** |  |
| **Actors** |  |
| **Level** |  |
| **Precondition** |  |
| **Domain Entities** |  |

**Main Success Scenario:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

**Alternative Flows:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

### Use Case: Save game

**Successful Outcomes:**

|  |  |
| --- | --- |
| **Use Case Package** |  |
| **ID** |  |
| **Use Case Goal** |  |
| **Actors** |  |
| **Level** |  |
| **Precondition** |  |
| **Domain Entities** |  |

**Main Success Scenario:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

**Alternative Flows:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

### Use Case: View score

**Successful Outcomes:**

|  |  |
| --- | --- |
| **Use Case Package** |  |
| **ID** |  |
| **Use Case Goal** |  |
| **Actors** |  |
| **Level** |  |
| **Precondition** |  |
| **Domain Entities** |  |

**Main Success Scenario:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

**Alternative Flows:**

|  |  |  |
| --- | --- | --- |
| **Step** | Action | Notes |

## User Story Conversion

## Business Rules

### BR type 1

### BR type 2

# Non-Functional Requirements

# Design Constraints

# Glossary

## Business Entities

|  |  |
| --- | --- |
| **Business Entity** | **Description** |
| Player | User of the application able to play games and create or edit maps. |
| Map Manager | System that allows Player to create or edit maps. |
| Game | System that allows Player to play on an existing map. |
| Map | Description of the game world on which Player plays on. |
| Path |  |
| Score |  |
| Score Point |  |
| Structure |  |
| Projectile |  |
| Enemy |  |

# References