System design document for the Dash project

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This version overrides all previous versions.

1 Introduction

1.1 Definitions, acronyms and abbreviations

Level: A single map with a start.
Player: The entity controlled by the user
Health: A measurement of the player's life, if depleted the player dies.
Enemy: An AI-controlled entity within the game
Power-up: A game changing effect.
Obstacle: An object interfering with the players ability to continue
MVC: A way of structuring the program to separate different parts from each other.
Projectile: The player and enemies can both shoot these to try to kill one another.

2 System architecture

The application will use the MVC design pattern to separate the model, view and controller parts from each other.
The application will run on a single desktop.
The application is divided into the following top level packages:

Dash: This is the class used as a entrypoint for the application.
Model: This is where the model of the application resides
View: This is where the different graphical elements of the application is kept.
Controller: This is the place for the different classes that controls what happens in the application.
Libgdx: A package where all of the functionality from the libgdx library is stored.

2.1 Dependency analysis

3 Subsystem decomposition

3.1 Model

The package containing the model of the application

3.2 View

The package containing the graphical components of the application

3.3 Controller

The Package containing the controllers of the application.

3.4 Libgdx

The package containing the libgdx functionality of the application.

4 Persistent data management

The application does not use any way of storing persistent data since the only thing that will be saved is a high score, which is simply kept as a number in the game.

5 Access control and security

No security implementations are used, the game is launched and exited as a normal desktop application.

6 References