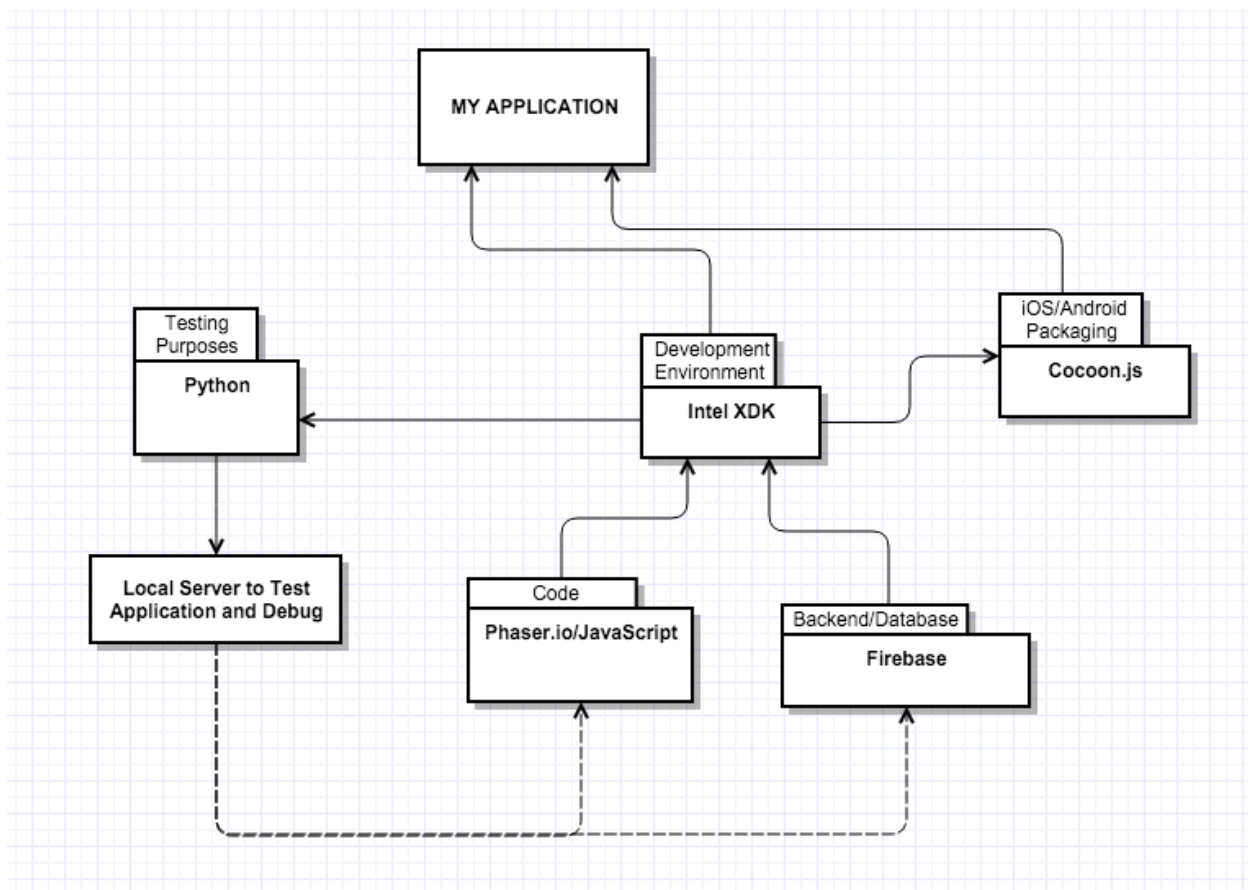


Software Requirements Specification

5.1 Introduction

Throughout this semester I will be designing a game application that will be available first on the web for functional and testing purposes, and then later will be developed for iOS and Android. The application that I will be making will be made using HTML and JavaScript. The role of JavaScript in the development of this game is very crucial and plays the biggest part. The JavaScript will be implemented using Phaser.io, which is a framework for Canvas and WebGL powered browser games that are predominantly created using JavaScript. In terms of getting the software to be fully functional, a high score database will be implemented using Google Firebase. Finally, once the game application is fully functional and working on web browsers, I will wrap it and package it into an iOS and Android app, using Cocoon.js and my game will be published to the three major platforms.



Section 5.2 contains the Functional Requirements which will further explain the features that the completed system can be expected to have, Section 5.3 contains the Performance Requirements, which will explain the performance of my application, and finally, Section 5.4 contains Environment Requirements which lists the software, hardware, and other resources needed for either the development or deployment or execution of the completed system.

5.2 Functional Requirements

The completed system can be expected to have very minimalistic interaction, as it will only be a game that is going to be played by the clicking on one button or tapping of smart phone screens. Aside from gameplay controls, it will feature a high score database in which users will be able to store user high scores and compete amongst other users.

5.2.1 Graphical User Interface

5.2.1.1 The Graphical User Interface (GUI) shall provide a menu system to access the main functions of the application, including Game Pause/Start and Settings.

- There will be a menu button on the top right corner of the screen at all time in order to give the user quick access to pausing and starting the game at their convenience. It will also include the setting button, which will allow the user to change specific settings that deal with gameplay

5.2.1.2 The GUI shall provide a set of controls to allow user interaction.

- There will be two ways to interact with this application, and it will be very simple. On web-browsers for desktop or laptops, the GUI will allow for the user to click on the mouse or press the Space Bar in order to interact with the game and allow for gameplay. On the other hand, for iOS and Android, the GUI will only allow users to tap on the screen and that should allow for user interaction with the game.

5.3 Performance Requirements

5.3.1 Access to Database will be in real time

- Using Firebase for the backend database of my application, there will be real time data sync between the user information and the database. This will allow for quicker score retrieval and storage and will optimize the application's performance

5.4 Environment Requirements

5.4.1 Hardware Requirements

5.4.1.1 The Development of this application shall have specific hardware requirements

- When developing this application, there will be environmental hardware requirements, such as a computer that has 4GB RAM or more. Mac OSX is recommended for use.

5.4.2 Software Requirements

5.2.1.1 The Development of this application shall have specific software requirements

- When developing this application, there will be environmental software requirements, specifically the programs that will be used in the development of this application. What is recommended for use is going to be Chrome Web Browser, Intel XDK or Sublime Text 2, and Terminal.