Bilkent University

Department of Computer Engineering

CS319 PROJECT – GROUP #2

Design Report

CS 319 Project: Bombalamasyon

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Design Report

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# Introduction

## Purpose of the system

## Design goals

# Software Architecture

## Subsystem decomposition

## Hardware/software mapping

## Persistent data management

Files are stored in the hard disk drive. The game keeps names and top ten scores in plain text file in order to display to the player in “High Scores” section. To provide better gaming experience to player, some image and sound files are also used at some parts of the game. When they are needed, these files are read from the disk with their specified directions as parameters. In addition, level data is stored in hard disk drive. There are different game maps for each level in hard drive.

## Access control and security

Bombalamasyon does not implement any user authentication system therefore we do not have any database that stores user credentials. Also, as mentioned earlier (in Hardware / Software Mapping), our game does not require network connection. Therefore, player who has no network connection is able to play the game. So that, there is no restriction or control for access the game. In addition, the game has no user profile, only player names and scores. Therefore, there is not security issues in Bombalamasyon.

## Boundary conditions

**Initialization**

When player execute the .jar file, the game initializes. Player does not have to install the game.

**Termination**

In order to terminate the game, player can click the “Quit Game” in the main menu. When player is playing the game, he/she wants to exit, firstly the player is need to go to “Pause menu” and then click the “Quit Game”.

Game will return to the main menu if all the levels are done. In case of finishing, high scores are updated if score is higher than 10th best score and the game returns to the main menu.

**Error**

If any file (game resources) could not be loaded such as images or sounds, the game starts without these files. If the game does not respond because of other issues such as problem at hardware, software or operating system, player lose his/her current data.

# Subsystem Services