
TDT4240 SOFTWARE ARCHITECTURE

GAME NAME [TO CHANGE]
Requirements
Android

Cabral Cruz, Samuel (496704)

Claessens, Bart (486346)

Ihlen, Erling Hærnes (765137)

Trollebø, Jarle (766901)

Primary Quality Attribute:

MODIFIABILITY AND USABILITY

Secondary Quality Attribute(s):

AVAILABILITY, PERFORMANCE AND INTEROPERABILITY

PRESENTED TO
ALF INGE WANG

DEPARTMENT OF COMPUTER AND INFORMATION SCIENCE
NORWEGIAN UNIVERSITY OF SCIENCE AND TECHNOLOGY
(NTNU), TRONDHEIM
SPRING 2018

Contents

Vision Statement	4
Introduction	4
Goals	4
Project Scope	4
Game Concept	5
Market Positioning	5
Business Opportunities	5
Product Position Declaration	5
Requirement Phase Description	6
Requirements Documents Description	6
Functional Requirements	7
Quality Requirements	8
COTS Components and Technical Constraints	9
Issues	10
Changes	11
Glossary	12

List of Figures

List of Tables

Vision Statement

Introduction

Goals

The objectif of this document is to collect, analyze and define the requirements and the functionalities that would justify the development of a multiplayer game called *[GAME NAME TO CHANGE]*.

In this game, the users will incarnate a gladiator trying to make its way into a labyrinth to find and defeat its opponents to accumulate points. In addition to the multi player mode, the player will also have the opportunity to play the game on a single player mode where the goal will be to survive as long as possible by resisting to different waves of ennemies spawning. A tutorial mode will also be developed to make the introduction of the game and its different components much easier to the inexperienced users. A more in-depth description of the game concept is available in the section [Game Concept](#).

Project Scope

The *[NAME OF THE GAME TO CHANGE]* will be developed in the context of the group project for the course *TDT4240 Software Architecture*. The project will be lead by a team of 4 developers that will work part-time for the next 3 months. The best case scenario would have been to find an artist to optimize the aesthetic part of the application.

The application should minimally works any Android platforms that have the necessary utilities to download and execute an [Android Package \(APK\)](#). Even if this project is mainly dedicated to an educational purpose and bounded to a learning context, the team members would like to officially publish the game and maintain it after the end of the semester.

Game Concept

Market Positioning

Business Opportunities

Nowadays, mobile applications are not seen as something really extraordinary anymore. Their easy accessibility by the end-users joint to the rapidity of their development and deployment have lead to the creation of countless number of them, especially games. It is harder and harder to find new game concept that will be completely different as something that already exists somewhere else. Nevertheless, some games are still able to stand out themselves in this ocean of pastime.

Most of these outstanding games have somewhat the following set of features:

- ▶ Easy to learn and use
- ▶ Nice graphics and animations
- ▶ Can be played for 1 minute or hours
- ▶ Have some real challenges involved
- ▶ Constantly requests the attention of the user (fast gameplay)

With our concept, we think that most of these elements have been reunited, but having those is not necessarily a direct way to success and the only way to know it will be when the game will have been published.

On the other hand, creating mobile games is still considered as an open market comparatively to console games development where only few giant companies have sufficient money and staff to try their chance.

Overall, the team does not expect to get money out of this project, but, since they are obliged to develop this game, they will make their best to have a nice final product that **may** lead to some returns through advertisements.

Product Position Declaration

[NAME OF THE GAME TO CHANGE] is developed for a very diverse clientele of any age and culture wishing to have some good moments during their spare times independently of their location. The main aspect of the game that we think will make it different from the other games available or variants of the *Bombberman* concept is the real-time interaction between the different users. Instead of trying to create any kind of sophisticated [Artificial Intelligence \(AI\)](#), users will have to compete against each others. Another trilling aspect is the tracking of the user statistics that will allow them to unlock achievements badges and the ranking of the users. We will also develop the game in such a way that the addition of

new contents and features will be easy to perform. This modifiability will allow us to keep the active users interested in the game and to have new things to exploit and discover along their play time.

Requirement Phase Description

Requirements Documents Description

Functional Requirements

Quality Requirements

COTS Components and Technical Constraints

Commercial off-the-shell (COTS)

Issues

Changes

This section records the changes brought to the current document since its creation.

Date	Version	Description
2018/02/21	1.0	Initial draft

Glossary

Representation binaire Le système binaire est le système de numération utilisant la base 2. C'est cette représentation en combinant les 1 et les 0 qui est à la base de nos systèmes numériques.
[?, [Representation binaire](#)].

Bibliography