

# Requirements and Analysis Document for NNN

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Date:

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This version overrides all previous versions.

## 1 Introduction

### *1.1 Purpose of application*

The purpose of this project is to make a 3-dimensional game which simulates the ways of the mosquito. However some features are limited, see further below.

### *1.2 General characteristics of application*

The application will be a single-player, desktop game. The player will navigate through the 3D world using keyboard and mouse. The game will be highscore based which means the player will get a score after each run which he/she then will try to improve the next run. A run/turn will end when the player runs out of energy. Energy can be gained during a run by completing objectives. If the player runs out of energy, his/her score will be saved and then he/she can try to improve the previous score by restarting with the simple press of a button.

### *1.3 Scope of application*

The application does not support any multiplayer services. It is not possible to play over the internet.

### *1.4 Objectives and success criteria of the project*

1. Fly around in a 3D environment (a room/city) as a mosquito.
2. To be able to land on humans and different objects.
3. Have a simple menu.
4. Get points for every human that you successfully suck the blood from..
5. Save highscores.
6. Use the blood you get from humans as energy.
7. Have a few objectives that the player can complete.
8. Have some objects that can kill the player.

## *1.5 Definitions, acronyms and abbreviations*

- Java - a independent programming language
- 3D - three dimensional
- jMonkey Engine - A game engine for making 3D games in the java language.
- JRE - The Java Run time Environment, software needed to run an Java application.
- GUI - Graphical User Interface
- Blender - A drawing tool for making 3D models.
- IDE - Integrated development environment,
- Eclipse - An IDE program.
- Points - The player will gain points when sucking blood. Collect them and gain highscore.
- Energy - The player start with a full energy bar, which will successively drop while flying. By actively sucking blood from humans the player can refill the energy.
- Objective - There will be optional tasks you can follow which will give you more points.

# 2 Requirements

In this section we specify all requirements

## *2.1 Functional requirements*

Create a list of high level functions here (from the use cases).

## *2.2 Non-functional requirements*

Possible NA (not applicable).

### *2.2.1 Usability*

### *2.2.2 Reliability*

### *2.2.3 Performance*

### *2.2.4 Supportability*

### *2.2.5 Implementation*

### *2.2.6 Packaging and installation*

### *2.2.7 Legal*

## *2.3 Application models*

### *2.3.1 Use case model*

UML and a list of UC names (text for all in appendix)

### *2.3.2 Use cases priority*

1. Be able to fly around in a 3D environment.
2. Suck blood from human models.
3. Achieve score by sucking blood.
4. Complete objectives

### *2.3.3 Domain model*

UML, possible some text.

### *2.3.4 User interface*

We want people to start the game right away, so we will only use a simple menu with only a couple of buttons. The window will also be resizable to the biggest scale as well

as the smallest one. You can not edit nor change the GUI looks it is fixed.

## *2.4 References*

APPENDIX

GUI

Domain model

Use case texts