# RAD The Kangaroo Adventure

**1 Introduction**

**1.1 Purpose of application**  
The goal is to create a fun and challenging computer game for a little more advance gamers. The application is also supposed to be for everyone else but the focus is still to make it challenging for the advanced gamers.  
  
**1.2 General characteristics of application**  
  
The application will be a desktop, standalone (non-networked), single-player application  
with a graphical user interface for the Windows/Mac/Linux platforms.  
  
The game is a side scrolled 2D platform game that is level-based. The high-score will be saved when the player finish the game or more likely dies. If the game is canceled the player will have to start over from the beginning. There will be no possibility to save the game, so it has to be finished during one play through.  
  
**1.3 Scope of application**  
The application does include computer-based enemies. You can only play the game  
alone. The application does not save interrupted games or collect any statistics (high score or other). See Possible future direction  
  
  
**1.4 Objectives and success criteria of the project**   
To create a fully functional game with at least one playable level that the player can play through. The level should be a tutorial level that introduce the player to every function in the game. **1.5 Definitions, acronyms and abbreviations**  
  
GUI, graphical user interface.  
Java, platform independent programming language.  
JRE, the Java Run time Environment. Additional software needed to run an Java  
application.  
Level, one map that the player has to accomplish to get to the next level

**2 Requirements**

**2.1 Functional requirements**  
We will use Github to synchronize the project, Eclipse as a java-editor, Slick as a framework.

You shall be able to see the high score, open the option view. Also start the game and exit the game as well.

When you’ve started the game you have to be able to move. That includes jump and move to the left and to the right. In the game there will be tiles that will either be solid or non solid. That will make up the map itself. There will also be some kind of enemy. The enemy will have its own pattern where it walks. If the kangaroo collides with the enemy, either the enemy or the kangaroo will die. It all depends on from witch directionthe kangaroo and the enemy collides. When the kangaroo reaches a specific point on the map, in our case a sign, the level will be over and the high score will be evaluated.

Listaa på saker att göra i programmet  
Icke-funktionella krav

**2.2 Non functional requirements**  
The game shall be very difficult. There shall also be some different ways to finish each level. We will also have some nice animations and good background music  
**2.3.1 Use case model**  
See APPENDIX for UML diagram and textual descriptions.  
  
**2.3.3 Domain model**  
See APPENDIX