

# SUPER TUX KART PROTOTYPE BUSINESS REQUIREMENTS

Version 1.0 01/03/2016

# **VERSION HISTORY**

Version #	Implemented By	Revision Date	Reason
1.0	Mr. R. Engineer	01/03/2016	Initial version

## Super Tux Kart Prototype

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#### 1 INTRODUCTION

#### 1.1 PURPOSE

This document provides the main Business Requirements for the Super Tux Kart Prototype project. The intended audience of this document are all project members and all project stakeholders, including the Customer, company management and the project teams.

#### 1.2 SCOPE

This document only describes the agreed business requirements It does not cover any detailed software requirements or software design. It merely states to what requirements the end product must comply to.

#### **2 CUSTOMER REQUIREMENTS**

#### 2.1 FUNCTIONAL REQUIREMENTS

ID	Description	Rationale
BRF-01	The game should support more than 20 tracks and arenas.	The game should be fun to play for many hours. The deviation in the multiple tracks should make sure that the game does not become boring.
BRF-02	The game must support split-screen multiplayer support.	In this version we do not support multiplayer over network, but we do want to support multiplayer on the same computer.
BRF-03	The game must support the following game modes: Career Mode, Grand Prix, Single Race, Time Trial, Follow-the-leader, 3-Strikes Battles, Easter Egg hunt and Capture the flag.	The game should be fun to play for many hours. The deviation in the multiple game modes should make sure that the game does not become boring.
BRF-04	The game should provide a plugin framework, so that players can create their own content, like tracks, arenas, karts, etc.	The game should be fun to play for many hours. Players being able to add their own content should make sure that the game does not become boring.
BRF-05	The game should have a Tutorial	So new players can be introduced to the game easily
BRF-07	The game should support tracks in reverse mode.	The game should be fun to play for many hours. The deviation in the multiple tracks should make sure that the game does not become boring
BRF-08	The game should support bumping of karts	Bumping means that the player can use his kart to bump away a competitor

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BRF-09	The game should support skidding (sliding) of the kart	Gives a more natural and fun feeling if the player can slide through bends.
BRF-10	The game should use the latest version of the Bullet physics engine	To stay update with the latest 3d technologies and advances
BRF-11	To make sure performance is high Level of Detail (LOD) should be included in the design.	Level of Detail(LOD) means that objects in the playfield, which are far away, are generated with a lower pixel density (lower detail), and objects closer by will be generated with higher pixel density (higher detail).
BRF-12	The game should support items (gadgets), which boost the performance of the player's kart in defined ways	The game should be fun to play for many hours. Items, which increase the player's abilities will make sure that the game does not become boring.
BRF-13	The game should support different karts, which have different characteristics/physics.	The game should be fun to play for many hours. Supporting different karts will make sure that the game does not become boring.
BRF-14	The game should support items (gadgets), which boost the performance of the player's kart in defined ways	The game should be fun to play for many hours. Items, which increase the player's abilities will make sure that the game does not become boring.
BRF-15	The game should support Achievements	The game should be fun to play for many hours. Achievements will give the player the feeling he/she progresses through the game. It also allows the player to have something to talk about with other players, aiding to the community feeling.

BRF-15	Objects which produce sounds, should produce the sound with a volume level relative to the distance the object is away from the player.	For more realism. For example: when a plane passes by, the sound level of the plane's engines will increase as the plane gets closer to the player and fades away when the plane moves away from the user.
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#### 2.2 NON-FUNCTIONAL REQUIREMENTS

ID	Description	Rationale
BRNF-01	The game is a prototype	The game is meant to be a prototype.
BRNF-02	The quality level must be high and the game should perform well.	The quality level must be high and the game must perform well.
BRNF-03	The game must have fictional funny characters	The game should be fun to play for many hours. The deviation in the characters should make sure that the game does not become boring.
BRNF-03	The game must run on Windows, Linux and OS X	Support on multiple platforms is good for increasing the player base.
BRNF-04	Follow-up projects will be granted.	We will see how successful the game will be and accordingly we will grant you follow-up projects to improve the game.