



# **SUPER TUX KART PROTOTYPE BUSINESS REQUIREMENTS**

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Version 1.0

01/03/2016

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## VERSION HISTORY

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

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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

## Super Tux Kart Prototype

Functional requirementsID	Description	Rationale
BRF-01	The game should support more than 20 tracks and arenas.  <b>Should be split up, not Specific, Not measurable</b>	<i>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.</i>
BRF-02	The game must support split-screen multiplayer support.  <b>Not Specific</b>	<i>In this version we do not support multiplayer over network, but we do want to support multiplayer on the same computer.</i>
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.	<i>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.</i>
BRF-04	The game should provide a plugin framework, so that players can create their own content, like tracks, arenas, karts, etc.  <b>Should be split up, Not Specific</b>	<i>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.</i>
BRF-05	The game should have a Tutorial  <b>By itself the requirement is not bad, but lower level requirements should describe what the functions of the Tutorial will be.</b>	<i>So new players can be introduced to the game easily</i>
BRF-07	The game should support tracks in reverse mode.	<i>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</i>
BRF-08	The game should support bumping of karts  <b>Not Specific</b>	<i>Bumping means that the player can use his kart to bump away a competitor</i>

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BRF-09	The game should support skidding (sliding) of the kart	<i>Gives a more natural and fun feeling if the player can slide through bends.</i>
BRF-10	The game should use the latest version of the Bullet physics engine <b>Not Specific</b>	<i>To stay update with the latest 3d technologies and advances</i>
BRF-11	To make sure performance is high Level of Detail (LOD) should be included in the design.  <b>English is not understandable, Not Specific</b>	<i>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).</i>
BRF-12	The game should support items (gadgets), which boost the performance of the player's kart in defined ways <b>Not Specific, Not Measurable (how many gadgets?)</b>	<i>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.</i>
BRF-13	The game should support different karts, which have different characteristics/physics. <b>Not Specific, Not Measurable (how many karts?)</b>	<i>The game should be fun to play for many hours. Supporting different karts will make sure that the game does not become boring.</i>
BRF-14	The game should support items (gadgets), which boost the performance of the player's kart in defined ways <b>Not Relevant (duplicate of BRF-12)</b>	<i>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.</i>
BRF-15	The game should support Achievements <b>Not Specific, Not Measurable (how many Achievements?)</b>	<i>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.</i>

BRF-15	<p>Objects which produce sounds, should produce the sound with a volume level relative to the distance the object is away from the player.</p> <p><b>Not Specific (missing unique ID)</b></p>	<p><i>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.</i></p>
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## 2.1 NON-FUNCTIONAL REQUIREMENTS

ID	Description	Rationale
BRNF-01	<p>The game is a prototype</p> <p><b>Not Relevant (is not a requirement)</b></p>	<i>The game is meant to be a prototype.</i>
BRNF-02	<p>The quality level must be high and the game should perform well.</p> <p><b>Not Specific, Not Measurable</b></p>	<i>The quality level must be high and the game must perform well.</i>
BRNF-03	<p>The game must have fictional funny characters</p> <p><b>Not Specific, Not Measurable (how many characters?)</b></p> <p><b>Also: this is a functional requirement, not a non-functional requirement.</b></p>	<i>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.</i>
BRNF-03	<p>The game must run on Windows, Linux and OS X</p> <p><b>Not Specific (no unique ID, should be split up, versions should be clear)</b></p>	<i>Support on multiple platforms is good for increasing the player base.</i>
BRNF-04	<p>Follow-up projects will be granted.</p> <p><b>Not Relevant (is not a requirement)</b></p>	<i>We will see how successful the game will be and accordingly we will grant you follow-up projects to improve the game.</i>