

# Test Cases

Andreas Berggren  
Gustav Freij  
Christoffer Karlsson

May 2, 2012

# Contents

<b>1</b>	<b>System</b>	<b>1</b>
1.1	Start application . . . . .	1
1.2	Exit application . . . . .	1
1.3	Show main menu on startup . . . . .	1
<b>2</b>	<b>Initiation</b>	<b>2</b>
2.1	Add a ball . . . . .	2
2.2	Add virtual arrows . . . . .	2
2.3	Add a playing board . . . . .	2
2.4	Add one wall . . . . .	2
<b>3</b>	<b>Steering</b>	<b>3</b>
3.1	Steer the ball using virtual arrows . . . . .	3
<b>4</b>	<b>Interaction</b>	<b>4</b>
4.1	Interaction between tilt of device and ball . . . . .	4
4.2	Interaction between the ball and a wall . . . . .	4
4.3	Interaction between the ball and a sink hole . . . . .	4
4.4	Interaction between the ball and the final hole . . . . .	5
4.5	No sleep mode while active game . . . . .	5
4.6	Landscape view while in active game . . . . .	5
<b>5</b>	<b>Activities</b>	<b>6</b>
5.1	Show main menu . . . . .	6
5.2	Start new game from main menu . . . . .	6
5.3	Go to highscores from main menu . . . . .	6
5.4	Go to settings menu from main menu . . . . .	6
5.5	Exit the application from main menu . . . . .	7

# 1 System

## 1.1 Start application

<b>Description</b>	The user starts the application.
<b>Precondition</b>	The application is installed.
<b>Test steps</b>	<ol style="list-style-type: none"><li>1. Locate the installed application</li><li>2. Launch application</li><li>3. Verify that the application has launched</li></ol>
<b>Related requirement</b>	Req 1.1 - The user starts the application

## 1.2 Exit application

<b>Description</b>	The user exits the application.
<b>Precondition</b>	The application is running. The user is in the main menu.
<b>Test steps</b>	<ol style="list-style-type: none"><li>1. Press the backwards button</li><li>2. Verify that the application is terminated</li></ol>
<b>Related requirement</b>	Req 1.2 - The user exits the application

## 1.3 Show main menu on startup

<b>Description</b>	Show main menu on startup.
<b>Precondition</b>	The application is started.
<b>Test steps</b>	<ol style="list-style-type: none"><li>1. Wait for the application to load</li><li>2. Verify that the main menu is shown</li></ol>
<b>Related requirement</b>	Req 1.3 - Show main menu on startup

## 2 Initiation

### 2.1 Add a ball

<b>Description</b>	Adding a ball.
<b>Precondition</b>	A new game is started.
<b>Test steps</b>	1. Verify that a ball is shown
<b>Related requirement</b>	Req 2.1 - Add a ball

### 2.2 Add virtual arrows

<b>Description</b>	Add virtual arrows.
<b>Precondition</b>	A new game is started. Debug mode is active.
<b>Test steps</b>	1. Verify that the virtual arrows are shown
<b>Related requirement</b>	Req 2.2 - Add virtual arrows

### 2.3 Add a playing board

<b>Description</b>	Add a playing board.
<b>Precondition</b>	A new game is started.
<b>Test steps</b>	1. Verify that the playing board is shown
<b>Related requirement</b>	Req 2.3 - Add a playing board

### 2.4 Add one wall

<b>Description</b>	Add one wall.
<b>Precondition</b>	A new game is started.
<b>Test steps</b>	1. Verify that a wall is shown
<b>Related requirement</b>	Req 2.4 - Add one wall

## 3 Steering

### 3.1 Steer the ball using virtual arrows

<b>Description</b>	Steer the ball using virtual arrows.
<b>Precondition</b>	The virtual arrows are added.
<b>Test steps</b>	<ol style="list-style-type: none"><li>1. Press any of the virtual arrows</li><li>2. Verify that the ball is moved in that direction</li></ol>
<b>Related requirement</b>	Req 3.2 - Steer the ball using virtual arrows

## 4 Interaction

### 4.1 Interaction between tilt of device and ball

<b>Description</b>	Have ball interact with tilt of device.
<b>Precondition</b>	A ball is added.
<b>Test steps</b>	<ol style="list-style-type: none"><li>1. Tilt the device</li><li>2. Verify that the ball is moved towards the tilted direction</li></ol>
<b>Related requirement</b>	Req 4.1 - Have ball interact with tilt of device

### 4.2 Interaction between the ball and a wall

<b>Description</b>	Have ball interact with wall.
<b>Precondition</b>	The ball is added. A wall is added.
<b>Test steps</b>	<ol style="list-style-type: none"><li>1. Move the ball to the position of a wall</li><li>2. Verify that the ball does not pass through the wall</li></ol>
<b>Related requirement</b>	Req 4.2 - Have ball interact with wall

### 4.3 Interaction between the ball and a sink hole

<b>Description</b>	Have ball interact with a sink hole.
<b>Precondition</b>	A ball is added. A sink hole is added.
<b>Test steps</b>	<ol style="list-style-type: none"><li>1. Move the ball to the position of a sink hole</li><li>2. Verify that the ball is swallowed by the sink hole</li></ol>
<b>Related requirement</b>	Req 4.3 - Have ball interact with a sink hole

#### 4.4 Interaction between the ball and the final hole

<b>Description</b>	Have ball interact with the final hole.
<b>Precondition</b>	A ball is added. A final hole is added.
<b>Test steps</b>	1. Move the ball to the position of the final hole 2. Verify that the ball is swallowed by the final hole
<b>Related requirement</b>	Req 4.4 - Have ball interact with the final hole

#### 4.5 No sleep mode while active game

<b>Description</b>	The device will not enter sleep mode while in an active game.
<b>Precondition</b>	-
<b>Test steps</b>	1. Start a new game 2. Remain idle while the new game is running for as long a time as the device needs to enter sleep mode 3. Verify that the device does not enter sleep mode
<b>Related requirement</b>	Req 4.5 - No sleep mode while active game

#### 4.6 Landscape view while in active game

<b>Description</b>	The application will only make use of landscape view while in playing mode.
<b>Precondition</b>	-
<b>Test steps</b>	1. Start a new game 2. Tilt the device to vertical position 3. Verify that the application is running in landscape mode
<b>Related requirement</b>	Req 4.6 - Landscape view while in active game

## 5 Activities

### 5.1 Show main menu

<b>Description</b>	Show main menu.
<b>Precondition</b>	The application is running.
<b>Test steps</b>	<ol style="list-style-type: none"><li>1. Go to the main menu</li><li>2. Verify that the main menu is shown</li></ol>
<b>Related requirement</b>	Req 5.1 - Main menu

### 5.2 Start new game from main menu

<b>Description</b>	Start new game from main menu.
<b>Precondition</b>	The main menu is shown.
<b>Test steps</b>	<ol style="list-style-type: none"><li>1. Press the "New Game" button</li><li>2. Verify that a new game is started</li></ol>
<b>Related requirement</b>	Req 5.1.1 - New game

### 5.3 Go to highscores from main menu

<b>Description</b>	Go to highscores from main menu.
<b>Precondition</b>	The main menu is shown.
<b>Test steps</b>	<ol style="list-style-type: none"><li>1. Press the "Highscore" button</li><li>2. Verify that the highscores are shown</li></ol>
<b>Related requirement</b>	Req 5.1.2 - Highscore

### 5.4 Go to settings menu from main menu

<b>Description</b>	Go to settings menu from main menu.
<b>Precondition</b>	The main menu is shown.
<b>Test steps</b>	<ol style="list-style-type: none"><li>1. Press the "Settings" button</li><li>2. Verify that the settings menu are shown</li></ol>
<b>Related requirement</b>	Req 5.1.3 - Settings



## 5.5 Exit the application from main menu

<b>Description</b>	Exit the application from the main menu.
<b>Precondition</b>	The main menu is shown.
<b>Test steps</b>	<ol style="list-style-type: none"><li>1. Press the "Exit" button</li><li>2. Verify that the application is terminated</li></ol>
<b>Related requirement</b>	Req 5.1.4 - Exit