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**JoinSports**

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**JoinSports Application  
Master Test Plan**

**Version <1.0>**

## Revision History

Date	Version	Description	Author
14.05.2017	1.0	Created Test Plan	Dominik Schmitt

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## Test Plan

### 1. Introduction

#### 1.1 Purpose

The purpose of the Iteration Test Plan is to gather all of the information necessary to plan and control the test effort for a given iteration. It describes the approach to testing the software, and is the top-level plan generated and used by managers to direct the test effort.

This *Test Plan* for the Android App supports the following objectives:

- Unit Testing with JUnit (app code)
- Espresso UI Testing (GUI/ frontend)
- User Testing (user experience)

#### Scope

The combination of the test types specified above is used to get a full code coverage.

#### 1.2 Intended Audience

Developer and Enduser

#### 1.3 Document Terminology and Acronyms

n/a

#### 1.4 References

n/a

### 2. Evaluation Mission and Test Motivation

#### 2.1 Background

n/a

#### 2.2 Evaluation Mission

- find bugs
- verify functionality
- improve user experience

### 3. Target Test Items

The listing below identifies those test items \_software, hardware, and supporting product elements \_that have been identified as targets for testing. This list represents what items will be tested.

- only software is tested (app/mysql adapter)

### 4. Outline of Planned Tests

#### 4.1 Outline of Test Inclusions

n/a

#### 4.2 Outline of Other Candidates for Potential Inclusion

n/a

## Outline of Test Exclusions

n/a

## 5. Test Approach

see 1.0

### 5.1 Initial Test-Idea Catalogs and Other Reference Sources

n/a

#### 1.1 Testing Techniques and Types

##### 5.1.1 Data and Database Integrity Testing

##### 5.1.2 User Interface Testing

Technique Objective:	• <i>UI Testing with Espresso</i>
Technique:	<i>Test all Activities</i>
Oracles:	<i>n/a</i>
Required Tools:	<i>Travis / Espresso</i>
Success Criteria:	<i>all tests pass</i>
Special Considerations:	<i>n/a</i>

##### 5.1.3 Installation Testing

n/a

## 6. Entry and Exit Criteria

### 6.1 Test Plan

#### 6.1.1 Test Plan Entry Criteria

code changes and travis CI detects a commit on github

#### 6.1.2 Test Plan Exit Criteria

reports get generated by testing tools in travis CI

#### 6.1.3 Suspension and Resumption Criteria

n/a

### 6.2 Test Cycles

#### 6.2.1 Test Cycle Entry Criteria

*new commit on github will start a new test run.*

#### 6.2.2 Test Cycle Exit Criteria

reports will be generated automatically

#### 6.2.3 Test Cycle Abnormal Termination

travis CI will report if the test was cancelled or something failed

## 7. Deliverables

### 7.1 Test Evaluation Summaries

Can be found in Travis CI log or on coveralls.

### 1.1 Reporting on Test Coverage

*Code coverage is generated by coveralls.io which is triggered by travis CI automatically*

### 1.2 Perceived Quality Reports

badge is generated automatically and displayed in github repository

### 1.3 Incident Logs and Change Requests

*Travis CI and Coveralls.io*

### 1.4 Smoke Test Suite and Supporting Test Scripts

n/a

### 1.5 Additional Work Products

n/a

## 8. Testing Workflow

*commit code to github*

*travis CI detects commit*

*travis starting build and test suite*

*reports get generated automated and displayed on github / coveralls / travis CI*

### Environmental Needs

- **Travis CI**
- **Coveralls**
- **Github**

### 8.1 Base System Hardware

The following table sets forth the system resources for the test effort presented in this *Test Plan*.

n/a

### 8.2 Base Software Elements in the Test Environment

The following base software elements are required in the test environment for this *Test Plan*.

n/a

### 8.3 Productivity and Support Tools

The following tools will be employed to support the test process for this *Test Plan*.

Tool Category or Type	Tool Brand Name	Vendor or In-house	Version
Test Management	Travis CI		



Test Coverage Monitor or Profiler	Coveralls.io		
Project Management	JIRA		
DBMS tools	phpMyAdmin		

## 8.4 Test Environment Configurations

The following Test Environment Configurations needs to be provided and supported for this project.

n/a

## 9. Responsibilities, Staffing, and Training Needs

### 9.1 People and Roles

This table shows the staffing assumptions for the test effort.

Human Resources		
Role	Minimum Resources Recommended (number of full-time roles allocated)	Specific Responsibilities or Comments
Test Manager	Dominik Schmitt	Provides management oversight. Responsibilities include: <ul style="list-style-type: none"><li>• planning and logistics</li><li>• agree mission</li><li>• identify motivators</li><li>• acquire appropriate resources</li><li>• present management reporting</li><li>• advocate the interests of test</li><li>• evaluate effectiveness of test effort</li></ul>
Test Analyst	all group members	Identifies and defines the specific tests to be conducted. Responsibilities include: <ul style="list-style-type: none"><li>• identify test ideas</li><li>• define test details</li><li>• determine test results</li><li>• document change requests</li><li>• evaluate product quality</li></ul>

Test Designer	all group members	Defines the technical approach to the implementation of the test effort. Responsibilities include: <ul style="list-style-type: none"><li>• define test approach</li><li>• define test automation architecture</li><li>• verify test techniques</li><li>• define testability elements</li><li>• structure test implementation</li></ul>
Tester	Travis CI Family members	Implements and executes the tests. Responsibilities include: <ul style="list-style-type: none"><li>• implement tests and test suites</li><li>• execute test suites</li><li>• log results</li><li>• analyze and recover from test failures</li><li>• document incidents</li></ul>
Test System Administrator	Dominik Schmitt	Ensures test environment and assets are managed and maintained. Responsibilities include: <ul style="list-style-type: none"><li>• administer test management system</li><li>• install and support access to, and recovery of, test environment configurations and test labs</li></ul>

## 9.2 Staffing and Training Needs

This section outlines how to approach staffing and training the test roles for the project.

## 10. Iteration Milestones

n/a

## 11. Risks, Dependencies, Assumptions, and Constraints

Dependency between	Potential Impact of Dependency	Owners
Travis CI - Coveralls	high	Dominik Schmitt
Github - Travis CI	high	Dominik Schmitt

## **12. Management Process and Procedures**

### **12.1 Measuring and Assessing the Extent of Testing**

*n/a*

### **12.2 Assessing the Deliverables of this Test Plan**

*n/a*

### **12.3 Problem Reporting, Escalation, and Issue Resolution**

- *Travis CI will generate a log.*
- *The error gets reported by Email to all group members if a test starts failing or the build is unstable.*

### **12.4 Managing Test Cycles**

*n/a*

### **12.5 Traceability Strategies**

- *Coveralls will keep track of the code coverage*

### **12.6 Approval and Signoff**

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