# **QUALITY ASSURANCE PLAN / TESTING PLAN**

AUT R&D Project - Weekly Planner (Bulletproof)

Date	Version	Authors	Notes
11/06/2018	1.0	Tristan Kells	First draft
15/06/2018	1.1	Dan Wood	Grammar, added document QA
27/06/2018	1.2	Tristan Kells	Changed software testing procedure

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# 1.0 Quality Assurance Plan

#### 1.1 Introduction

This is a document for documenting how our R&D team will carry out quality assurance practices and procedures, for ensuring our project achieve a high level of software and documentation quality. It describes the processes as well as the roles each team member will carry out to reach set quality standards.

# 1.2 Purpose

This Quality Assurance Plan (QA) describes the steps and approach to Quality Assurance for developing a weekly planner application for Bulletproof (LTD).It details how this project will maintain quality for both the documentation and development stages. This will create a process that will produce high-quality documents and prevent errors from occurring.

# 1.3 Scope

These procedures will be used through every document produced by and for the project. Any document unrelated to the project is out of scope and void, this will include communications as this falls under proof and management instead of explicitly being documentation.

# 2.0 Management

The following steps describe the organizational structure of the team in reference to QA and the specific roles each are subject to.

# 2.1 Organizational Structure

#### 2.2 Roles

Role	Task	Group Member
Project Manager	Defines the Quality Expectancy of both the Project and requirements from the Client.	Tristan Kells
Product Owner	Ensures Quality Assurance during the project through monitoring and user tests. Is responsible for the definition of done of all user stories.	Daniel Wood

QA Analyst	Performs Quality Assurance tests and	Junha Yu
	provides documentation	

# 3.0 Required Documentation

Documentation that will be required throughout our assignment for Quality Assurance will be:

- A minimum of one code review on the code base
- A teaming agreement where the quality expectations are to be outlined so that team members will be aware of the quality standards expected of them.
- Evidence outlining Quality Assurance has been undertaken (Revision Histories, Communication Screenshots, Meeting Minutes)
- An up to date Quality Assurance Plan
- A Testing Plan (Outlined inside the QA Plan)

# **4.0 Quality Assurance Procedures**

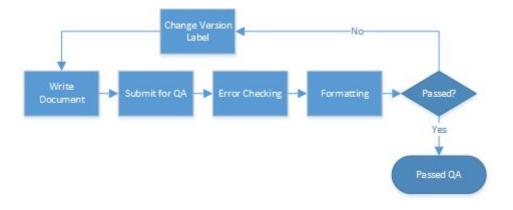
The following steps explain the procedure the team will be following for maintaining quality assurance for the duration of the project.

# 4.1 Walkthrough Procedure

The document will be submitted for QA, where it is checked for errors and formatting issues. If the document passes these checks, it will have officially passed QA.

If the document does not pass these checks, it will be sent back to development and the version number will be incremented

Minor grammatical or spelling errors in documents are easily fixable and may be completed by QA if possible.



#### **4.2 Review Process**

The main process that the team will follow is to pass on documents to team members based on their roles and allow them to review these documents in their own times as early as possible.

If required, the weekly meetings can be utilised to review these documents as a team, as to make a more guaranteed approach to repairing the document.

#### 4.3 Audit Process

The audit process will be completed by the markers of are work at the stage of a project proposal, project status report, poster presentation and final portfolio.

#### 4.4 Evaluation Process

When the documents are complete, the team will come together and review the documents. If all is complete, the documents will be handed over to our mentor to receive feedback. Weekly meetings with our mentor should be held to discuss this.

#### 4.5 Process Improvement

During the weekly meetings, a review will be held of the process to ensure the best practice is being followed to produce the highest quality deliverables. If the required amendments will be made to the process.

# **5.0 Problem Reporting Procedures**

In the event of a problem occurring, it will be brought up and addressed in the weekly meeting and a decision will be made as to what the next steps will be. It will be documented in the issue log. If no decision can be reached, contact will be made to the mentor to discuss if this is an issue that should be brought up with the client.

# **5.1 Non-compliance Reporting Procedures**

If too many errors are being encountered when reviewing the submitted documents, the next meeting will include an agenda to discuss these errors and potential improvements. Further Non-compliance WILL result in the disciplinary process being followed outlined as per the team agreement.

# **6.0 Quality Assurance Metrics**

Appropriate indicators and their metrics will be identified as the project proceeds. Separate metrics will be used for documentation and development. These are important to measure performance, so to determine where a problem is occurring or where it will occur.

Important metrics that have already been identified within the project:

- Percentage of documents that have been completed
- Documents which have been placed under revision
- Compliance with due dates

# 7.0 Testing Plan

Below will be the testing plan information with various key points of information such as the testing strategy we will be using, discussing our testing method, scope and frequency, moving on we will describe the testing objectives then finally writing testing criteria and writing a testing schedule.

### 7.1 Test Strategy

Testing will be crucial in guaranteeing that our software solution is of a high quality and standard. To start the following will be in scope:

- Components by the software development team.
- API calls were written by the team and API functionality used by the software.
- Usability of the solution.
- How the functionality of the software aligns with the requirements and brief to the client

The following will be out of scope:

- External software and libraries integrated into the software solution.
- Additional testing outside of the Testing Plan Schedule.
- Testing of additional functionality and components that aren't included in the brief agreed to by the Development team and the client.

### 7.2 Test Objectives

In essence, test objectives have to fulfil at least two of the following categories:

- The test must guarantee repeatable desired functionality.
- The test must avoid being susceptible to no repeatability or false positives.
- The test must align with the desired functionality agreed upon in the brief.
- The test must be completable in the project time limit

The main objective of testing will be to better the software and to mitigate the number of bugs, security issues and undesired effects.

### 7.3 Schedule & Estimation

Attached here is the schedule and estimation that needs to be confirmed with the team during the project charter creation.