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Software Quality Assurance Plan (SQAP)

Project/Product Name: Ballistics App

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1. Purpose and Scope

Purpose:

The goal of this Software Quality Assurance Plan (SQAP) is to establish the processes and policies to ensure the Ballistics App is of the highest quality. This document outlines the quality assurance (QA) processes, tools, metrics, and resources that will be used to create and deliver a high-quality product.

Scope:

The scope of this SQAP includes testing all functional and non-functional aspects of the Ballistics App. Much of the testing for this project as covered by this document will be user testing.

2. Definitions and Acronyms

Term Definition

QA: Quality Assurance: Ensures that software quality meets defined standards.

UI: User Interface: The graphical layout of an application.

SQA: Software Quality Assurance: A set of standards put in place to ensure the quality of the product.

SDLC: Software Development Life Cycle: The cycle in which software is designed, developed, tested, etc.

3. Reference Documents

• Ballistics App Test Plan

• Ballistics App Contract/Customer Agreement

• IEEE 730-2014 Standard for Software Quality Assurance Plans

4. SQA Plan Overview

4.1 Organization and Independence

The QA team for the Ballistics App project operates hand in hand with the development team to ensure issues are taken care of. User testing will reduce the bias that may be introduced by the teams working together. Roles and responsibilities are as follows:

• QA Lead: Coordinates testing efforts and oversees test execution.

• QA Engineers: Conduct user tests and other testing methods.

• Developers: Responsible for unit testing.

• UX Designer: Will work with QA Engineers to conduct user tests and other testing methods. Will suggests changes based on test results.

4.2 Software Product Risk

Potential risks associated with the Ballistics App project include but are not limited to:

• Project Risks: time restraints, inaccurate requirements, and miscommunication between development teams, stakeholders, etc.

• Product Risks: Inaccurate data, there are many brands of ammunition, these slight differences could produce inaccuracies in product function.

4.3 Tools

The following tools will be used in the QA process:

• JIRA: For test case management and bug tracking.

• Katalon: For test automation.

• Github: For version control.

4.4 Standards, Practices, and Conventions

• Testing Standards: IEEE 829 (Test Documentation) and IEEE 730 (SQA).

• Practices: Agile development and testing methodology.

4.5 Effort, Resources, and Schedule

5. Activities, Outcomes, and Tasks

5.1 Product Assurance

5.2 Process Assurance

6. Additional Considerations

6.1 Contract Review

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6.5 Risks to Performing SQA

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7. SQA Records

7.1 Analyze, Identify, Collect, File, Maintain and Dispose

7.2 Availability of Records