**TEST PLAN FOR [ShipRealWind Calculator 3.0]**

*Change Log*

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| **Version** | **Change Date** | **By** |
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**1** **INTRODUCTION 2**

1.1 Scope 2

*1.1.1* *In Scope 2*

*1.1.2* *Out of Scope 2*

1.2 Quality Objective 2

1.3 Roles and Responsibilities 2

**2** **TEST METHODOLOGY 3**

2.1 Overview 3

2.2 Test Levels 3

2.3 Bug Triage 3

24 Test Completeness 4

**3** **TEST DELIVERABLES 4**

**4** **RESOURCE & ENVIRONMENT NEEDS 4**

4.1 Testing Tools 4

4.2 Test Environment 4

**5** **TERMS/ACRONYMS 5**

# Introduction

The scope of the ShipRealWind Calculator testing is to check as much as possible of the components in order to assure that the application is properly functional and ready to use both on Windows and Raspberry Pi OS’s.

## Scope

### In Scope

The features that will be tested:

* input, output and plotting parameters both on the Windows OS and on the Raspberry Pi OS
* "ON" button, the "PLOT" button on Windows and Raspberry PI OS’s as well as the area dedicated to the plot graph just on Windows OS.

### Out of Scope

The features that will not be tested:

* The as the area dedicated to the plot graph on Raspberry PI.
* The main window design.

## Quality Objective

* Ensure the Application Under Test conforms to functional and nonfunctional requirements
* Ensure the AUT meets the quality specifications defined by the client
* Bugs/issues are identified and fixed before go live

## Roles and Responsibilities

|  |  |
| --- | --- |
| Role | Specific Responsibilities/Comments |
| Test Manager | Provides management oversight  Responsibilities:   * Provide technical direction * Acquire appropriate resources * Management reporting |
| QA Analyst /Test Designer | Identifies, prioritizes, and implements test cases  Responsibilities:   * Generate test plan * Generate Test Suite * Evaluate effectiveness of test effort |

# Test Methodology

## Overview

Mention the reason for adopting a particular test methodology for the project. The test methodology selected for the project is Agile methodology because it is focuses on :

* Writing Test Cases to express the behavior of the system.
* The business value is clearly articulated (in the format of “As [*a type of user]*  I want [*some]* goal so that [*some reason]*”).
* The story follows the INVEST model.
* The story has a 2 – 3 word short summary.
* The story is small enough to fit in one sprint.
* Early Defect Prevention, detection and removal.
* Ensuring that the right test types are run at the right time and as part of the right test level.

## Test Levels

**Test Levels define the Types of Testing to be executed on the Application Under Test (AUT**).

The Testing Levels primarily depend on the scope of the project, time and budget constraints.

## Bug Triage

The goal of the triage is to

* To define the type of resolution for each bug
* To prioritize bugs and determine a schedule for all “To Be Fixed Bugs’.

## Test Completeness

Criteria to check Test Completeness :

* 100% test coverage
* All Manual Test cases executed
* All open bugs are fixed or will be fixed in next release

# Test Deliverables

Here mention all the Test Artifacts that will be delivered during different phases of the testing lifecycle.

Here are the sample deliverables

|  |
| --- |
| * Test Plan * Test Cases * Requirement Traceability Matrix * Bug Reports * Test Strategy * Test Metrics * Test Completion Reports (2) |

# Resource & Environment Needs

## Testing Tools

Tools like

* Jira
* TestCaseLab
* PowerToys
* Bandicam
* Windows Screen Ruler
* Kazam screen recorder for Raspberry Pi

Required to test the project

## Test Environment

It mentions the minimum **hardware** requirements that will be used to test the Application.

Following **software is** required in addition to client-specific software.

* OS: Windows, Raspberry Pi
* MS Office, etc.

# Terms/Acronyms

|  |  |
| --- | --- |
| **TERM/ACRONYM** | **DEFINITION** |
| APP | application |
| AUT | Application Under Test |
| INVEST | Independent, Negotiable, Valuable, Estimable, Small, Testable |
| UI | User Interface |
| OS | Operating System |
| TC | Test Case |
| TR | Test Run |
| US | User Story |