

Project Title: System Verification and  
Validation Plan for ProgName

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# 1 Revision History

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Date	Version	Notes
Date 1	1.0	Notes
Date 2	1.1	Notes

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## 2 Symbols, Abbreviations and Acronyms

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symbol	description
T	Test

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[symbols, abbreviations or acronyms – you can simply reference the SRS (Author, 2019) tables, if appropriate —SS]

This document ... [provide an introductory blurb and roadmap of the Verification and Validation plan —SS]

## **3 General Information**

### **3.1 Summary**

[Say what software is being tested. Give its name and a brief overview of its general functions. —SS]

### **3.2 Objectives**

[State what is intended to be accomplished. The objective will be around the qualities that are most important for your project. You might have something like: “build confidence in the software correctness,” “demonstrate adequate usability.” etc. You won’t list all of the qualities, just those that are most important. —SS]

### **3.3 Relevant Documentation**

[Reference relevant documentation. This will definitely include your SRS and your other project documents (MG, MIS, etc) —SS]

Author (2019)

## **4 Plan**

### **4.1 Verification and Validation Team**

[You, your classmates and the course instructor. Maybe your supervisor. —SS]

### **4.2 SRS Verification Plan**

[List any approaches you intend to use for SRS verification. This may just be ad hoc feedback from reviewers, like your classmates, or you may have something more rigorous/systematic in mind.. —SS]

### 4.3 Design Verification Plan

[Plans for design verification —SS]

### 4.4 Implementation Verification Plan

[You should at least point to the tests listed in this document and the unit testing plan. —SS]

[In this section you would also give any details of any plans for static verification of the implementation. Potential techniques include code walk-throughs, code inspection, static analyzers, etc. —SS]

### 4.5 Software Validation Plan

[If there is any external data that can be used for validation, you should point to it here. If there are no plans for validation, you should state that here. —SS]

## 5 System Test Description

### 5.1 Tests for Functional Requirements

[Subsets of the tests may be in related, so this section is divided into different areas. If there are no identifiable subsets for the tests, this level of document structure can be removed. —SS]

[Include a blurb here to explain why the subsections below cover the requirements. References to the SRS would be good. —SS]

#### 5.1.1 Area of Testing1

[It would be nice to have a blurb here to explain why the subsections below cover the requirements. References to the SRS would be good. If a section covers tests for input constraints, you should reference the data constraints table in the SRS. —SS]

**Title for Test**

1. test-id1

Control: Manual versus Automatic

Initial State:

Input:

Output: [The expected result for the given inputs —SS]

Test Case Derivation: [Justify the expected value given in the Output field —SS]

How test will be performed:

2. test-id2

Control: Manual versus Automatic

Initial State:

Input:

Output: [The expected result for the given inputs —SS]

Test Case Derivation: [Justify the expected value given in the Output field —SS]

How test will be performed:

### 5.1.2 Area of Testing2

...

## 5.2 Tests for Nonfunctional Requirements

[The nonfunctional requirements for accuracy will likely just reference the appropriate functional tests from above. The test cases should mention reporting the relative error for these tests. —SS]

[Tests related to usability could include conducting a usability test and survey. —SS]

### 5.2.1 Area of Testing1

#### Title for Test

1. test-id1

Type:

Initial State:

Input/Condition:

Output/Result:

How test will be performed:

2. test-id2

Type: Functional, Dynamic, Manual, Static etc.

Initial State:

Input:

Output:

How test will be performed:

### 5.2.2 Area of Testing2

...

## 5.3 Traceability Between Test Cases and Requirements

[Provide a table that shows which test cases are supporting which requirements. —SS]

## References

Author Author. System requirements specification. <https://github.com/...>, 2019.

## **6 Appendix**

This is where you can place additional information.

### **6.1 Symbolic Parameters**

The definition of the test cases will call for SYMBOLIC\_CONSTANTS. Their values are defined in this section for easy maintenance.

### **6.2 Usability Survey Questions?**

[This is a section that would be appropriate for some projects. —SS]