Software Test Plan (STP)

Software It Counts (SWIC)

CMSC 447

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Table of Contents

[1 Scope 3](#_Toc432634202)

[1.1 Identification 3](#_Toc432634203)

[1.2 System overview 3](#_Toc432634204)

[1.3 Document overview 3](#_Toc432634205)

[2 Referenced documents 3](#_Toc432634206)

[3 Software test environment 3](#_Toc432634207)

[3.1 Name of test site(s) 3](#_Toc432634208)

[3.2 Software items 3](#_Toc432634209)

[3.3 Hardware and firmware items 3](#_Toc432634210)

[3.4 Other materials 3](#_Toc432634210)

[3.5 Proprietary nature, acquirer’s rights, and licensing 4](#_Toc432634210)

[3.6 Installation, testing, control 4](#_Toc432634210)

[3.7 Participating organizations 4](#_Toc432634210)

[3.8 Personnel 4](#_Toc432634210)

[3.9 Orientation plan 4](#_Toc432634210)

[3.10 Tests to be performed 4](#_Toc432634210)

[4 Test identification 4](#_Toc432634211)

[4.1 General information 4](#_Toc432634212)

[4.1.1 Test levels 5](#_Toc432634213)

[4.1.2 Test classes 5](#_Toc432634214)

[4.1.3 General test conditions 5](#_Toc432634215)

[4.1.4 Test progression 5](#_Toc432634215)

[4.1.5 Data recording, reduction, and analysis 5](#_Toc432634215)

[4.2 Planned tests 5](#_Toc432634212)

[4.2.1 Items to be tested 5](#_Toc432634213)

[4.2.1.1 Project-unique identifier of a test 5](#_Toc432634213)

[5 Test schedules 6](#_Toc432634216)

[6 Requirements traceability 6](#_Toc432634216)

[7 Notes 7](#_Toc432634217)

[A. Appendixes 7](#_Toc432634218)

# Scope

This section shall be divided into the following paragraphs.

## Identification

This paragraph shall contain a full identification of the system and the software to which this document applies, including, as applicable, identification number(s), title(s), abbreviation(s), version number(s), and release number(s).

## System overview

This paragraph shall briefly state the purpose of the system and the software to which this document applies. It shall describe the general nature of the system and software; summarize the history of system development, operation, and maintenance; identify the project sponsor, acquirer, user, developer, and support agencies; identify current and planned operating sites; and list other relevant documents.

## Document overview

This paragraph shall summarize the purpose and contents of this document and shall describe any security or privacy considerations associated with its use.

# Referenced documents

This section shall list the number, title, revision, and date of all documents referenced in this report. This section shall also identify the source for all documents not available through normal Government stocking activities.

# Software Test Environment

## Name of test site(s)

The software testing site shall be UMBC’s campus, its library and Fine Arts Hall Room 215 being the specific locations.

## Software items

All of Team SWIC will bring his or her laptop to conduct testing on individual ends; the operating systems are either Windows 7 and onwards, or Linux. Each laptop which, regardless of operating system, has either the latest (as of November 2015) version of Fire Fox, Internet Explorer, Chrome, or any combination of the aforementioned browsers. All laptops will also have access to GitHub, where the code is stored.

## Hardware and firmware items

No other outside devices, such as Ethernet cables, are necessary.

## Other materials

The Parable of The Polygons web site comes with its own manual/instructions and does not require additional reading to aid in understanding. Finally, neither The Parable of The Polygons nor related materials raise a security/privacy concerns due to project nature.

## Proprietary nature, acquirer’s rights, and licensing

The code will not need any licensing to use—it is readily available to view and use on GitHub. The code will also not gain any monetary profit.

## Installation, testing, control

In order to set up the software testing environment, all laptops must have one or more of the latest (as of November 2015) versions of Fire Fox, Internet Explorer, and Chrome. All laptops used to code the software must also have the desktop or shell version of GitHub, as well as be a contributor to The Parable of The Polygons repository. All of these programs can be found on their official web sites. In order to “test”/prepare the software components, all that will need to be done is make sure Internet access is possible, and that laptop’s GitHub can access, push, and sync to the correct repository. For maintenance, each laptop must update its browsers and/or GitHub if updates to either software are released.

## Participating organizations

No other facility/team outside of Team SWIC will partake in the testing or preparation thereof.

## Personnel

At least one person should test code, but potentially as many people as available can help to test the code. (However, the sandbox does not allow for multiple computers to see what one computer has for input.) The person must have the capability to read at the level of at least a fourth grader, perform simple fractions (e.g. 1/8, 2/5), and understand concepts such as bias, discrimination, and segregation. No other special skills will be needed. Between Team SWIC, all team members must be present from September 14th, 2015 to December 7th, 2015 to test code. Otherwise personnel from the team or otherwise will not be necessary.

## Orientation plan

The Parable of The Polygons already provides a brief overview/training of how to use it. No outside sources will be needed to aid further understanding in the code, nor will a specialized team be needed to assist in understanding the code.

## Tests to be performed

The tests to be performed are as follows: a red circle behaving like the yellow triangle and blue square (shakes, moves based on neighbor preference); three radio buttons which allow the user to select a desired algorithm; a triangularly-shaped slider which permits the user to change the relationships between the red circle, yellow triangle, and blue square; a second algorithm calculating how happy a polygon feels around its neighbors and moving to a spot where it would be happier; a third algorithm which is similar to algorithm 2, but also considers how its neighbors feel about it; and that the code works on the latest versions of Fire Fox, Internet Explorer, and Chrome.

# Test identification

## General information

### Test levels

### Test classes

### General test conditions

### Test progression

### Data recording, reduction, and analysis

## Planned tests

### Items to be tested

#### Project-unique identifier of a test

# Test schedules

# Requirements traceability

# Notes

This section shall contain any general information that aids in understanding this document (e.g., background information, glossary, rationale). This section shall include an alphabetical listing of all acronyms, abbreviations, and their meanings as used in this document and a list of any terms and definitions needed to understand this document.

1. Appendixes

Appendixes may be used to provide information published separately for convenience in document maintenance (e.g., charts, classified data). As applicable, each appendix shall be referenced in the main body of the document where the data would normally have been provided. Appendixes may be bound as separate documents for ease in handling. Appendixes shall be lettered alphabetically (A, B, etc.).