

**MSSE SOFTWARE, INC.**

**Test Plan for  
Golf Score  
Release 1.0**

# Contents

<b>1.0</b>	<b>INTRODUCTION</b>	<b>3</b>
1.1.	Objective	3
1.2.	Project Description	3
1.3.	Process Tailoring	3
1.4.	Referenced Documents	Error! Bookmark not defined.
<b>2.0</b>	<b>ASSUMPTIONS/DEPENDENCIES</b>	<b>3</b>
<b>3.0</b>	<b>TEST REQUIREMENTS</b>	<b>4</b>
<b>4.0</b>	<b>TEST TOOLS</b>	<b>4</b>
<b>5.0</b>	<b>RESOURCE REQUIREMENTS</b>	<b>4</b>
<b>6.0</b>	<b>TEST SCHEDULE</b>	<b>5</b>
<b>7.0</b>	<b>RISKS/MITIGATION</b>	<b>5</b>
<b>8.0</b>	<b>METRICS</b>	<b>5</b>
	<b>APPENDIX A – DETAILED RESOURCE REQUIREMENTS</b>	<b>6</b>
	<b>APPENDIX B – DETAILED TEST SCHEDULE</b>	<b>7</b>

## 1.0 Introduction

### 1.1. Objective

This document specifies the functional requirements and high-level design for GolfScore Release 1.1. The purpose of the program is to process scores from a golf tournament, and produce reports showing who won the tournament and how the golfers performed on each course played. This document is intended for the GolfScore development team (software developers and test engineers), Service representatives, and Marketing personnel.

### 1.2. Project Description

GolfScore is a program used to generate reports for golfers results for a golf tournament. This program takes an input text file and produces 3 output text files as per SRS.

### 1.3. Process Tailoring

The GolfScore program requires no external dependencies. Thus the test plan is tailored along Functional and Non-Functional Testing in the framework of Design Verification and System Validation. Testing is carried out under the following phases:

- Entrance Test: To verify that the program can correctly be executed and handle input parameter errors as per SRS.  
See Appendix C for a description of the Entrance test cases and required outputs. Further, the program's handling of input data errors and output errors is checked for correctness.  
See Appendix C for a description of Main Testing test cases.
- Exit Test: To verify if the program produced the required outputs, and saved them in the correct format and in the correct location.  
See Appendix C for a description of Exit Testing test cases.
- Regression Test: After defects must have been identified during testing and processed, all tests are run again to ensure proper behavior.

The following references were used in creation of this document:

- a. Software Requirements Specification for GolfScore, Revision 1, July 18, 2017.
- b. System Verification Test Plan for Advanced Color Module, Revision 2, 22, February, 2000.

## 2.0 Assumptions/Dependencies

It's assumed that the development team unit test their code while developing the software, and also perform integration testing. Customer validation testing is as-summed to be carried out by field personnel together with the customers.

For conformation with the set schedule, the program must be made available by the development team by January 4, 2021.

### 3.0 Test Requirements

- Entrance Tests:
  - The program is written in either C or C++.
  - The program will run as a stand-alone executable.
  - The program can be run from the command line prompt.
  - The program is run with valid input parameters
- Main Tests:
  - The number of golf courses specified for the tournament must be from 1 to 5.
  - Each golfer is expected to play each course once.
  - The number of golfers entered in the tournament can be from 2 to 12.
  - Par for holes on each course must be either 3, 4, or 5.
  - Score earned by a golfer for each hole played is between 0 and 6 (0 and 6 included).
  - The first set of records in the input file (course records) exist and follow the specified format for each entry.
  - There is a delimiter record that signals the end of course records.
  - A second set of records (golfer records) exist in the input file and each entry follows the specified format.
  - There is a delimiter record that signals the end of the input file.
- Exit Tests:
  - The generated reports should be saved as text files in the specified output directory (or if not specified, in the directory of the input file) with the extension “rep”.
  - If requested, the tournament ranking report should contain a list of all golfers in the specified format. The list should be in descending order of final score and should be saved with an output filename of trunk.rep.
  - If requested, the golfer report should contain a list of all golfers in the specified format. The list should be alphabetical with respect to the golfers’ last name and should be saved with an output file-name of golfer.rep.
  - If requested, the course report should contain a section for each Golf Course listed in the input Course Records in the specified format.

### 4.0 Test Tools

To aid the testing process, the following testing tools are required:

- Defect reporting and tracking software
- Installation media for multiple Windows versions above 2000 (e.g. XP, Vista, 7, 8, 8.1, & 10)

### 5.0 Resource Requirements

The following resource would be required:

- A virtualization software
- Three Test Group personnel with at least 70% of his/her time available for this effort. See Appendix A for details.

## 6.0 Test Schedule

No.	Test	Start	Finish
1	Test Development	03/11/2021	10/11/2021
2	Program Availability	13/11/2021	--
3	Entrance Test	14/11/2021	19/11/2021
4	Main Test	20/11/2021	24/11/2021
5	Exit Testing	25/11/2021	01/12/2021
6	Regression Testing	02/12/2021	07/12/2021

See Appendix B for details.

## 7.0 Risks/Mitigation

Without having a program that enforces compliance in the structure of input data there's a high probability of input data error.

## 8.0 Metrics

The following metrics data will be collected. Some will be collected prior to, and some after product shipment.

### **Prior to shipment:**

Effort expended during DVT, SVT and Regression

# of defects uncovered during DVT, SVT and Regression, and development phase each defect is attributable to Test tracking S-Curve

### **After shipment:**

# of defects uncovered and development phase each defect is attributable to Size of software

## Appendix A – Detailed Resource Requirements

No	Processes	Priority	No of Test Cases
1	Test Development	3	30
2	Entrance Testing	3	40
3	Main Testing	3	30
4	Exit Testing	3	40
5	Regression Testing	2	40

- PCS that are capable of hosting virtual machines are required such that it can be tested on multiple versions of Windows.
- A virtualization software is required such that multiple versions of Windows can be installed to test the program.

## Appendix B – Detailed Test Schedule

### Appendix B.1 Configuration/Installation Test

No.	Test	Start	Finish
1	Test Development	03/11/2021	10/11/2021
2	Program Availability	13/11/2021	--
3	Entrance Test	14/11/2021	19/11/2021
4	Main Test	20/11/2021	24/11/2021
5	Exit Testing	25/11/2021	01/12/2021
6	Regression Testing	02/12/2021	07/12/2021

No	Test	Dependencies
1	Test Development	3 PCs 3 Persons
2	Program Availability	GolfScore Program
3	Entrance Testing	3 PCs 3 Persons Virtualization Software
4	Main Testing	3 PCs 3 Persons Virtualization Software
5	Exit Testing	3 PCs 3 Persons Virtualization Software
6	Regression Testing	2 PCs 2 Persons Virtualization Software

