GolfScore

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Application Release 1.1

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**Test Plan for
GolfScore**

Contents

1.0 Introduction

a.   Objective

This document is created to describe the comprehensive testing for the GolfScore Release 1.1 includes information about what to be testing ,test schedule ,test delivarables,resources,entry and exit criteria,Risks ,metrics ,test tools and test strategy .

b.   Project Description

GolfScore is a program used to generate reports of golfers' results for a golf tournament. The input to the program will consist of a file containing two types of records as described in Section 2.4 below. The output from the program will consist of up to 3 reports as described in Section 2.5 below. The program is executed via a command line interface – there is no GUI associated with the application. The program will be run as a stand-alone executable, and can be run from a command line prompt, from within an IDE (Integrated Development), etc. Input to the program will come from an input record file, and output from the program will go to output record files in a format suitable for printing.

Key Features:

- Processes golf tournament data for 1-5 courses and 2-12 golfers
- Executes via command-line interface with no GUI
- Generates three report types: Tournament Ranking Report, Golfer Report, and Course Report
- Runs as a stand-alone executable on Windows 2000 or later
- Written in C/C++
- Completes processing within one minute

Input: Formatted text file containing Course Records and Golfer Records
Output: Up to 3 text-based reports (trank.rep, golfer.rep, course.rep)

Process Tailoring

This project will use manual testing and follow a structured software testing process with the folowing approches:

Testing types Included :

b.   Functional testing :verify the program is meet all functional requiements as per SRS

c.   Boundary testing :test with minium ,maximum values (courses 1-5 ,golfers 2-12)

d.   Negative testing :test invalid inputs and error handling

e.   Compatibility testing :test on different Windows versions

f.   Performance testing :verify processing completes within one minute

Testing types exluded :

    a. GUI testing :no GUI exist in this system

    b. Network testing :Not applicable

Process modification :

    a. Unit testing

    b. Integration testing

    c. System testing

    d. Regression testing

Referenced Documents

The following document were referenced in creating this Test Plan:

GolfScore Software Requirements Specification (SRS) Rev 1.1

2.0 Assumptions/Dependencies

Assumptions :

a. All testers have access to command line interface

b. Sample input data files will be provide by development team or created by QA

c. Unit testing will be completed by developers before system testing begin

d. Regression testing will be execute after each new changes

e. Final approved SRS document

f. Test enviroment (windows operating system) will be available throughout testing period

g. Test data creation will be completed before testing execution begins

Dependencies :

a. Code completion :GolfScore executable must be code complete and delivered to QA by 1/12/2025

b. Development support :developers must be available for clarifications and bug fixes

c. BA support :business analysit must have connection wit QA team to clarify unclear requirements

d. Test data :sample input file must be ready by 5/12/2025

e. Test enviroment :windows OS must be set up and accessible by 3/12/2025

f. Defect tracking system :access to bug tracking tools must be available

3.0 Test Requirements

Features to be tested (in scope) :

Command Line Interface:

a.   Handling of filename parameter

b.   Handling output directory parameters

c.   Handling help information on the screen (-h)

d.   Generate the Course Report (-c)

Input file processing :

a.   Processing 1-5 golf courses

b.   Processing 2-12 number of golfers

c.   Input consist of a formatted text file and Individual records in the file are terminated by the end of a line.

d.   name of the input file is supplied as a parameter on the program call line

e.   Validate Each golf course has 18 holes

Report generation :

a.   GolfScore will generate up to 3 reports,

b.   The generated reports will be stored as text files

c.   Tournament Ranking report output will be (trank.rep) with descending order or In the case of ties golfers will be listed alphabetically

d.   Course report (course.rep) one section per course ,sorted by course score

Error Handling :

a.   input parameter errors, including (unrecognizable options,filename does not exist,invalid directory)

b.   Output file overwrite prompt functionality

c.   Input data errors (non-numeric data, invalid par values, duplicate golfer records)

Performance Requirements : Processing completion within one minute

Compatibility: Execution on Windows 2000 and later versions

Features not to be tested (out of scope) :

a.   Source code review (covered by developers)

b. Network functionality (not applicable)

c. GUI testing (no GUI exists)

d. Database connectivity (not applicable)

e. Multi operating system

Entry Criteria : Testing will begin when:

a. GolfScore Release 1.1 executable is delivered to QA

b. SRS document is approved and finalized

c. Test environment is set up and ready

d. Test cases are written and reviewed

e. Test data files are prepared

f. Testers are assigned and available

g. Defect tracking system is accessible

Exit Criteria: Testing will be complete when:

a. All planned test cases have been executed

b. 95% or more test cases have passed

c. All critical and high-priority defects are fixed and verified

d. No open critical or high-priority defects remain

e. Regression testing is complete after all bug fixes

f. Performance requirement (1 minute processing) is met

g. Test summary report is completed and approved

h. Sign-off from Test Lead and Project Manager

4.0 Test Tools

The following tools will be used for testing GolfScore:

Tool	Purpose
Windows Command Prompt	Excute GolfScore application
Word,GoogleDoc,notion,any text editor	Record notes (inputs ,outputs ..)
Timer	measure performance (1 minute)
Windows OS	Test enviroment
Defect tracker (jira)	Log and track defects

Excel	Document and track test cases,test scenarios,bug reports

5.0 Resource Requirements

Human Resources :

a. Business analyist :requirements clarification
b. QA lead : coordinate ,record and track over all test planning
c. Test engineer :test cases design ,execution,and defect logging
d. Developer support :fixing bugs ,apply unit testing and clarification codes

Test :

a. Hardware :Windows PC with minimum 2GB RAM, 10GB free disk space
b. Operating Systems: Windows 2000, Windows XP, Windows 7, Windows 10, Windows 11
c. Software: Text editors, Excel, defect tracking tool access

Test Data :

a. Sample input files with valid data (1-5 courses, 2-12 golfers)
b. Boundary test data files (exactly 1 course, exactly 5 courses, 2 golfers, 12 golfers)
c. Invalid data files for negative testing
d. Files with various error conditions

6.0 Test Schedule

Phase	Activities	duration	Start Date	End Date
Test Planing	Create test plan and understand requirements	2 days	25/10/2025	26/10/2025
Test Design	Write test cases ,review and prepare test data	4 days	27/10/2025	30/10/2025
Test Enviroment Setup	Set up machines,OS,configure tools	1 day	31/10/2025	31/10/2025
Test Execution Round 1	Execute all test cases ,log defects	5 days	1/11/2025	5/11/2025

Defect Recording	Write defect report and record defects	2 days	6/11/2025	7/11/2025
Defect Fixing	Developer fixes defects	3 days	8/11/2025	10/11/2025
Test Execution Round 2	Regression testing and retest	2 days	11/11/2025	12/11/2025
Total Duration	19 days			

Risks/Mitigation

The following are the list of risks possible and the ways to mitigate them:

Risk	Mitigation Strategy
Windows compatibility issues	Test on multiple windows version ear
Performance issues (> 1 minute)	Test performance early with maximum data load
Unclear error message	Document all errors scenario
Loss or Non availabile of resources	Make backup resource planning
Unclear or Incomplete requirements	Stay contact with buissiness analysis and developers
Late delivery of executable	Start test early and build buffer time into schedule
Testers unavailable	Document test procedure execution ,train another testers
Critical defects found late	Prioritize critical functionality testing early and perform daily test execution reviews
Inadequate test data	Start test data creation early
Test environment unavailable	Set up backup machines
Output file overwrites not working	Test file handling early

7.0 Metrics

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

Test progress metrics :

a. Total test cases planned (number)

b. Test cases executed (number)

c. Test cases passed (number)

d. Test cases failed (number)

e. Test execution progress (executed / planned)*100%

Quality metrics :

a. Pass percentage : (Passed / Executed) × 100%

b. Defect removal efficiency :(defect fixed /total defects) *100%

c. Retest passed :(retests passed/total retests)*100%

Defect metrics :

a. Total Defects found (number)

b. Defects by severity

    a) Blocker

    b) Critical

    c) Major

    d) Minor

c. Defects by priority

    e) Hight

    f) Medium

    g) Low

d. Defects by status

    h) New/Open

    i) In progress

    j) Fixed

    k) Verified

    l)   Closed

    m) Rejected

e.   Defects density :total defects/total test cases

Schedule Metrics :

f.   Planned vs. Actual Schedule Variance

g.   Test Execution Rate: Test Cases per Day

Performance Metrics Processing Time: Measure actual processing time must be less 1 minute

Appendix A – Detailed Resource Requirements

Test Team Structure :

Test Lead (1 person) :

a. Create and maintain Test Plan

b. Designtest strategy

c. Review test cases

d. Coordinate with development team

e. Track defects and test progress

f. Generate test reports

g. Conduct test status

h. meetings Final sign-off

Test Engineers (2 people)

i. Design and write test cases

j. Create test data files

k. Set up test

l. Execute test cases

m. Log and verify defects

n. Perform regression testing

o. Update test execution status

Developer (On-call support)

p. Clarify requirements and specifications

q. Fix reported defects Provide technical support

Hardware Requirements

a. Minimum: 2 Windows PCs for testing

b. Recommended: 4 PCs to test multiple Windows versions simultaneously

c. Specifications per PC:

d. Processor: Intel i3 or equivalent

e. RAM: 2GB minimum

f. Storage: 10GB free space

Software Requirements

      a.   Windows 2000 (if available for legacy testing)

      b.   Windows XP, Windows 7, Windows 10, Windows 11

      c.   Text editors (Notepad, Notepad++)

      d.   Excel or equivalent for data analysis

      e.   Defect tracking tool client

      f.   Test management tool (if used)

Training Needs

      a.   Orientation on GolfScore functionality

      b.   Command-line interface basics (if team is unfamiliar)

      c.   Defect tracking tool training

      d.   Test management tool training

Appendix B – Detailed Test Schedule

Phase Breakdown

Phase 1: Test Planning (25/10/2025 - 26/10/2025) - 2 days

    a. Review SRS document (Rev 1.1)
    b. Understanding project scope and requirements
    c. Write test plan document
    d. Review and finalize test plan

Phase 2: Test Design (27/10/2025 - 30/10/2025) - 4 days

a.   Write test cases for all functional areas:

    a) Comand line inCommand Line Interface (help, report options)
    b) Input file processing (course/golfer records, validation)
    c) Error Handling (parameter and data errors)
    d) Scoring Calculations (all scoring scenarios)
    e) Report Generation (all three report types)
    f) Boundary Testing (min/max values)
    g) Performance and Compatibility Testing

b.   Review and approve test cases
c.   Create test data files (valid, boundary, invalid data)

Phase 3: Test Setup (31/10/2025) - 1 day

- Set up Windows test machines (Windows XP, 7, 10, 11)

- Install required tools (text editors, Excel, Jira)
- Verify command-line access
- Set up test data folders

Phase 4: Test Execution - Round 1 (1/11/2025 - 5/11/2025) - 5 days

- Day 1: Smoke testing, CLI testing
- Day 2: Input file processing tests
- Day 3: Scoring calculations and report generation tests
- Day 4: Error handling and boundary tests
- Day 5: Performance and compatibility tests
- Log all defects in Jira

Phase 5: Defect Recording (6/11/2025 - 7/11/2025) - 2 days

- Review and categorize all defects by severity and priority
- Write detailed defect reports with steps to reproduce
- Generate Test Execution Summary Report

Phase 6: Defect Fixing (8/11/2025 - 10/11/2025) - 3 days

- Developers fix high-priority defects
- QA prepares regression test suite
- Receive updated executable

Phase 7: Test Execution - Round 2 (11/11/2025 - 12/11/2025) - 2 days

- Retest all failed test cases
- Execute regression testing
- Verify all fixed defects
- Generate Final Test Summary Report
- Obtain testing sign-off

Key Milestones

Milestone	Date	Deliverable
Test Plan Approved	26/10/2025	Approved Test Plan document
Test Cases Ready	30/10/2025	Complete test case suite and test data
Test Ready	31/10/2025	All test machines configured
First Test Cycle Complete	5/11/2025	Test execution results and defect list
Defects Fixed	10/11/2025	Updated executable delivered

Testing Complete	12/11/2025	Final Test Summary Report and sign-off

B.3 Critical Dependencies

Dependency	Required Date	Impact if Delayed
GolfScore executable delivery	1/11/2025	Cannot start test execution
Test ready	31/10/2025	Cannot execute tests
Test data files ready	30/10/2025	Cannot execute tests
Updated executable (post-fixes)	10/11/2025	Cannot complete regression testing

Document Approval:

Role	Name	Date
Test leader	layal	27/10/2025
QA Manager		
Project Manager		

Document History :

Version : 1.0

Autor : layal

Date : 27/10/2025

Changes : Initial Test Plan for GolfScore Release 1.1

End Of Test Plan