Ceros Ski

Test Strategy

Introduction

1.1 Objectives

Quality Objective:

- Ensure the Ceros Ski conforms to functional and non-functional requirements
- Ensure the AUT meets the quality specifications defined by the client
- Bugs/issues are identified and fixed before go live

This is a Test Plan to test the following features of the Ceros Ski Game:

- The game options game start , game pause, skiing through the rocks and trees is seemless
- The event/object triggers, and the scoring.
- New Feature: Jump , with the below acceptance criteria;

  Acceptance Criteria

  - Have the skier jump by pressing a key
  - Have the skier jump whenever he hits a ramp.
  - The skier should be able to jump over some obstacles while in the air.
    - Rocks can be jumped over
    - Trees can NOT be jumped over

Team Members

Resource Name	Role
Team Member 1	Test Strategy Author
Team Member 2	QA Analyst

2 Scope

These are requirements I am including in the tests:

1. Create a manual test with as many steps as necessary
2. Save it
3. Retrieve it and have the ability to view it when running the test
4. Enter results and appropriate comments
5. View results

Load testing will not be considered part of this project since the user base is known and not an issue.

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Assumptions / Risks

2.1 Risks

The following risks have been identified and the appropriate action identified to mitigate their impact on the project. The impact (or severity) of the risk is based on how the project would be affected if the risk was triggered. The trigger is what milestone or event would cause the risk to become an issue to be dealt with.

#	Risk	Impact	Trigger	Mitigation Plan
1	Scope Creep – as testers become more familiar with the tool, they will want more functionality	High	Delays in implementation date	Each iteration, functionality will be closely monitored. Priorities will be set and discussed by stakeholders. Since the driver is functionality and not time, it may be necessary to push the date out.
2	Changes to the functionality may negate the tests already written and we may lose test cases already written	High – to schedule and quality	Loss of all test cases	Export data prior to any upgrade, massage as necessary and re-import after upgrade.

3 Test Approach

Exploratory testing will play a large part Tests for planned functionality.

3.1 Test Automation

Basic JavaScript/Protractor framework Protractor framework has been used to procure the automated tests for SwagLabs

4 Test Environment

A new server is required for the web server, the application and the database.

5. Test Methodology

Agile test methodology because:

Developers and client are emphasized rather than processes and tools. The agile methodology focuses on responding to change rather than extensive planning and this would ensure that any bugs in the game "Ceros Ski " are fixed before new releases.

The agile methodology uses incremental testing hence every release of a new feature in the game "Ceros Ski" has undergone thorough testing.

This minimizes risks and it is possible to make changes in the project at any time to comply with the requirements.

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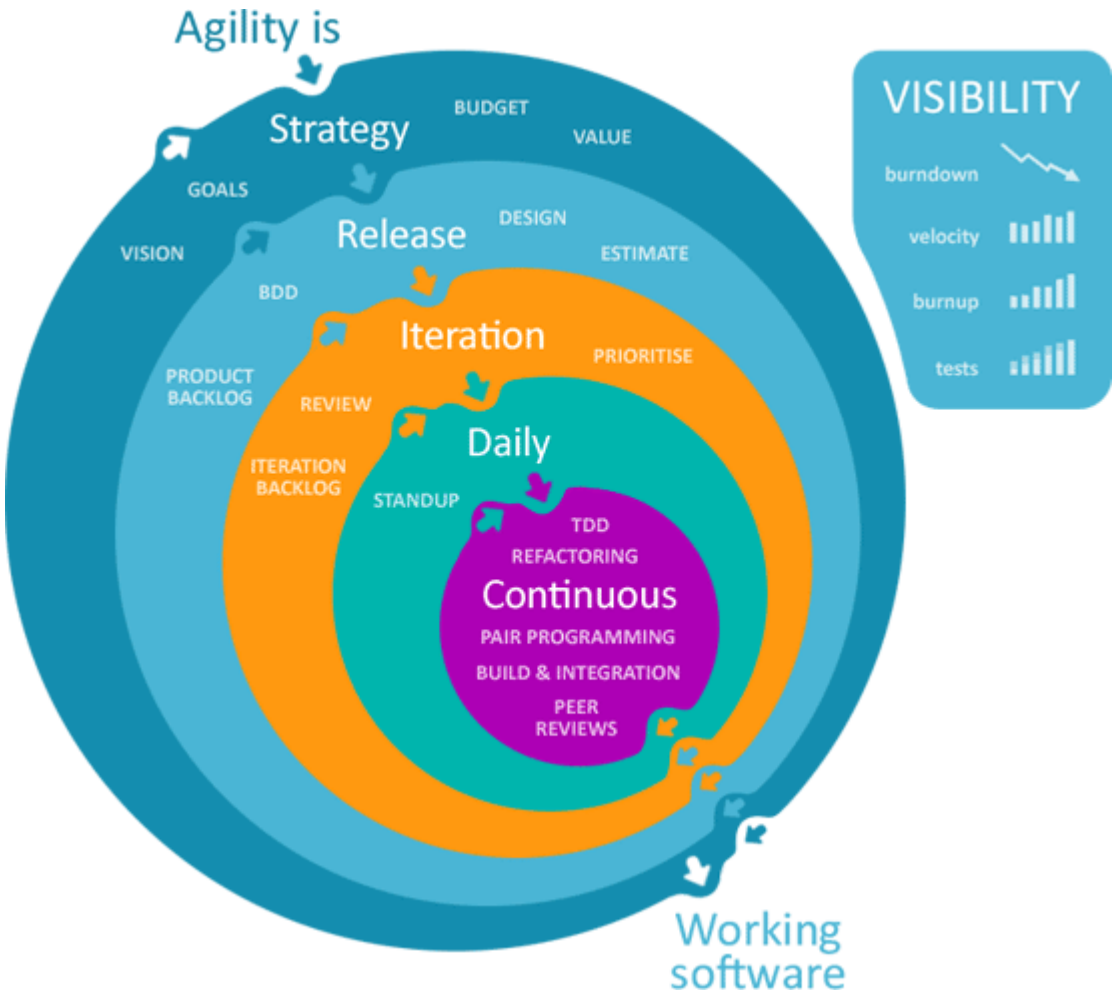
Below is an illustration of the agile methodology:



Test Levels

Build Tests

Level 1 - Build Acceptance Tests

These test cases simply ensure that the application can be built and installed successfully.

Test Case	Description	Expected result
Ceros Ski can successfully launch on the browser	ensure that the ceros ski can be built and installed successfully	Ceros Ski launches successfully in multiple browser types

N/B **If any Level 1 test case fails, the build is returned to developers un-tested.**

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Level 2 - Smoke Tests

These tests cases verify the major functionality a high level.

Test Case	Description	Expected results
The game options game start , game pause, skiing through the rocks and trees is seemless	This is to test the major functionality of the game "Ceros Ski"	Up,down,left and right arrows allow player to have a smooth user experience Skiing through the rocks and trees

Milestones / Deliverables

a. **Test Schedule**

Task Name	**Start**	**Finish**	**Effort**	**Comments**
Test Planning				
Review Requirements documents				
Create initial test estimates				
First deploy to QA test environment				
Functional testing – Iteration 1				
Iteration 2 deploy to QA test environment				
Functional testing – Iteration 2				
System testing				
Regression testing				
UAT				
Resolution of final defects and final build testing				
Deploy to Staging environment				

Performance testing				
Release to Production				

b. Deliverables

Deliverable	**For**	**Date / Milestone**
Test Plan	Project Manager; QA Director; Test Team	
Traceability Matrix	Project Manager; QA Director	
Test Results	Project Manager	
Test Status report	QA Manager, QA Director	
Metrics	All team members	

Version History

Version #	Date	Author	Changes Summary	Review Comments Location
1.0	07/04/2021	Tester1	Initial test case	

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Functional test cases

Number	Action	Comments
1	General	
2	Access Ceros Ski on internet explorer	
3	Access Ceros Ski on Chrome	
4	Access Ceros Ski on Mozilla	

Object: Access via explorer, chrome, Mozilla in Interactions in game **"Ceros Ski"**

Testing type: Functional testing

Pre-requirements: Browser

Pre-conditions: human-tester

sUser Interface test cases

Number	Action	Expected result	Test result
1	**General**		
1.1	**Open game**		
	Pre steps: 1. Kill the process of game on browser 2. Launch game		
1.1.1	Steps: 1. Check that splash screen "Ceros Ski" is loaded	N/A	
1.1.2	Steps: 1. Check that splash screen "Ceros Ski" is loaded	N/A	
1.1.3	Steps: 1. Check that Start view is loaded	Start view is loaded	
1.2	**View changing (forward back)**		
1.2.1	Steps:	Start View is loaded	

	1. Click on Back Button "←" 2. Check that Start view is loaded		
1.2.2			
1.2.3			

Usability test cases

1.3			
1.3.1			
1.3.2			
1.3.3			
2			
2.1			
2.1.1			
2.1.2			
2.1.3			

Test Completeness

Testing will be considered complete when the following conditions have been met:

Standard Conditions:

- When Adopters and Developers, agree that testing is complete, the game is stable, and agree that the game meets functional requirements.
- Script execution of all test cases in all areas have passed.
- Automated test cases have in all areas have passed.

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- All priority 1 and 2 bugs have been resolved and closed.
- Each test area has been signed off as completed by the Test Lead.
- 50% of all resolved severity 1 and 2 bugs have been successfully re-regressed as final validation.
- Ad hoc testing in all areas has been completed.