TEST PLAN FOR

SCRATCH WEBSITE

ChangeLog

Version	Change Date	By	Description
V1	2/2/2023	Lam Chong Chit	Document Complete

1 Introduction

Scratch is a high-level block-based visual programming language and website aimed primarily at children as an educational tool for programming, with a target audience of ages 8 to 16. Users on the site, called Scratchers, can create projects on the website using a block-like interface. The service is developed by the MIT Media Lab, has been translated into 70+ languages, and is used in most parts of the world.

Scratch has set up an online community, and sharing and creativity are the most important concepts of Scratch. Users can upload projects to online communities for sharing. Members of the online community can freely download the project. In addition, members are free to comment, tag, and "like" different projects and express and share opinions.

This document is the test plan of the regression test designed for the Scratch Website.

1.1 Scope

The regression testing of the Scratch Website is a crucial step in ensuring the quality and stability of the system after any changes or updates have been made. The objective of this regression testing is to verify the functionality of existing features and tools and identify and resolve any issues that may arise due to the changes.

1.1.1 In Scope

- Verifying the functionality of all existing features and tools, including project creation, sprite creation, programming blocks, animation, sound, etc.
- Identifying and reporting any bugs or issues found during the testing process
- Verifying the compatibility of the system with the following:
    - OS: Windows 7 or above
    - Browsers: Google Chrome, Microsoft Edge
    - Mobile devices: Android phones

1.1.2 Out of Scope

- Creating new functionalities or features.
- Security testing.
- Automation testing.
- The coding language.
- User’s published content.
- Offline Android app.
- Windows Vista or earlier operating systems.
- Operating systems older than Android 5.1.1.

1.2 Quality Objective

- Verify the Functionality of Scratch.
- Testing the Scratch Website operation such as Account Management, Creating projects, Running the project…etc.
- Ensure the Application Under Test 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 going live.
- Guarantee all these operations can work normally in the real business environment.

1.3 Roles and Responsibilities

The project has 2 membes.

No.	Member	Tasks
1	QA Analyst	● Manage the whole project. ● Define project directions. ● Acquire appropriate resources. ● Identifying and describing appropriate test techniques/tools verify and assess the Test Approach. ● Execute the tests, Log results, and Report the defects. ● Implement the test cases, test program, test suite, etc. ● Builds up and ensures the test environment and assets are managed and maintained. ● Take charge of quality assurance. ● Check to confirm whether the testing process is meeting specified requirements.
2	QA Lead	● Supervise the project progress. ● Approve the document.

2 Test Methodology

2.1 Overview

The regression testing will be performed using manual testing methods. Manual testing will be used to test the functionalities, UI, and user experience.

2.2 Test Levels

The regression testing will be performed at one level:

1. System testing to verify that the components work together as expected.

2.3 Bug Triage

Any issues or bugs found during the testing will be triaged and prioritized based on their impact on the system and the users. The QA Analyst will report the issues in a timely manner.

2.4 Suspension Criteria and Resumption Requirements

If the QA Analyst meets below anyone:

1. Report that 40% of test cases failed.
2. The test environment is unavailable.
3. The build provided by the development team is unstable.

If the regression test is suspended, the test will be resumed as soon as the problems are considered fixed.

2.5 Test Completeness

1. Specifies the criteria that denote successful completion of a test phase
2. The run rate is mandatory to be 100% unless a clear reason is given.
3. The pass rate is 80%, achieving the pass rate is mandatory

Then the regression testing will be considered complete.

2.6 Project task and estimation and schedule

Task	Estimate effort
Show the website	0.5 man-hour
Create the test specification	1 man-hour
Register account	0.5 man-hour
Login Account	0.5 man-hour
Cross Platform testing	Long Term
UI/UX Experience	Long Term
Collect environment evidence	Long Term/Passive
Change Language	0.5 man-hour
● Build New Project	30 man-hour
● Start with empty	1 man-hour
● Start with template	2 man-hour
● Coding	12 man-hour
● Sprite & Costumes(Draw picture)	9 man-hour
● Sounds	5 man-hour
● Save & Load	0.5 man-hour
● See the project page	0.5 man-hour
Remove a project	0.5 man-hour
● Tutorials	8 man-hour
● Watch movie	2 man-hour
● Read instructions	6 man-hour
● Share the project	3 man-hour
● Share	1 man-hour
● Use another device to watch project	1 man-hour
● Unshare	1 man-hour
● Explore	2 man-hour

• Projects	1 man-hour
• Studios	1 man-hour
Search	1 man-hour
• Run the project	12 man-hour
• Run	5 man-hour
• See inside(Read Source)	2 man-hour
• Remix(Save Source)	5 man-hour
• Comment, tag, and "like"	6 man-hour
• Comment	2 man-hour
• Tag	2 man-hour
• Like	2 man-hour
Test Report	10 man-hour
Test Delivery	20 man-hour
Total	156.5 man-hour

3 Test Deliverables

Before testing phase

1. Test plans document.
2. Test case documents
3. Test Design specifications.

During the testing

1. Test Data
2. Test Trace-ability Matrix – Error logs and execution logs.

After the testing cycle is over

1. Test Results/reports
2. Defect Report
3. Release notes

4 Resource & Environment Needs

4.1 Test Environment

Hardware:

- Computer: 2 computer runs at least Windows 7, Ram 2GB, CPU 3.4GHZ
- Smartphone: Samsung Galaxy Note 5

Software:

- Windows 7 or above
- Android 5.1.1 or above
- Google Chrome v97.0.4692 or above
- Microsoft Edge v98 or above