Software Quality Assurance Plan
The BHS Group

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Acronyms & Abbreviations

WBS   *Work Breakdown Structure*
SQA   *Software Quality Assurance*

SQA Process

SQA Records

This section describes how and where your records will be kept regarding any formal or informal testing after completion.

The testings will occur during phase 2 as per our Software Scope Documents and WBS(Work Based Structure) Sheet. The records of our tests will be kept on a separate google sheets document showing all the testing that we had done before we released our product. All group members will be given to access the sheet so that they may add information to the document. The document will have sections to help organize the progress. Some examples of possible sections include the test number, the results, quantitative notes, qualitative notes, progress tracker, and also any additional notes.

Software Documentation

This section describes the process of reviewing and ensuring accurate documentation is completed (both internal commenting and formal external documentation).

In order to ensure accurate documentation we will write down any errors that were made during the creation of our website/program on our SQA records sheet. If there is an issue with a certain area or line of code, the group member may put in a comment what the issue is and someone else in the group can check it out. If no one is able to fix the problem then we will look outside our group and ask other such as Mr. Cho.

Formal Reviews

Design Walk-throughs

This section will describe how you plan to have peers review your software (can be a different team member that does not normally work on that portion of the project as well).

Throughout our work we may ask each other to review our code and give feedback. We can also try and find another group to test our program and get feedback from to see if there are

more ways we can improve it. We will be sharing our work with other groups/members either through replit, github, or any other service that can host/store programs.

Code Walk-throughs

This section will describe how you plan to have peers review your source code.

If we are making the website on Python we can use ' # ' for single-line comments in our code and ' """ ' for a multi-line comment. If we are using Java, then we can use ' // ' for single line comments or ' /* ', ' */ ' for multiple lines of comments to make it easier for our peers to understand what parts of our code does and if there is a problem, what the problem is. Comments can explain how the code works and what its function is for the program.

Formal Testing

Unit Tests

This section will describe how you plan to ensure that individual units (i.e. classes, methods, etc.) are functioning properly.

In phase 1 of our project we will have a flowchart that will help us identify and organize the individual units. We can have separate sections dedicated to classes and methods so that we can keep it organized to better understand our program.

Integration Testing

This section will describe how you plan to ensure that the different portions of code that each member of your team is working on will integrate properly without causing issues on either side.

As of now we have not decided on where we will work together on making the website/program. Some possible places where we can work together are replit and github. We decided that we will make a final decision once the class completes the data structures and algorithm unit because that will give us a better idea on how the project should work.

Validation testing

This section will describe how you plan to ensure that your software is working as intended, and how you plan to record and deal with bugs that pop up.

To see if our program is working as intended, we can run the code as many times as we need in order to find the problem. Towards the end of phase 2, we have made a specific time slot for us to test our program and get feedback from other team members and peers outside of our group. If a problem is discovered we can write it down in our SQA records document and brainstorm ways we can fix the problem.