# **Introduction**

The Test Plan has been created to communicate the test approach to team members. It includes the objectives, scope, schedule, risks and approach. This document will clearly identify what the test deliverables will be and what is deemed in and out of scope.

## Objectives

My Birthstone is a program that provides users with their birthstone based on their birth date. This program is written using C++ language. Team SIA is responsible for testing the product before it is submitted to Professor Looms for further testing,

Phase 1 of the project will deliver My Birthstone V1.0 with functionality to team SIA who will create tests for each step of the algorithm, which will then identify problems which will be ameliorated and will begin constructing My Birthstone V2.0.

## Team Members

|  |  |
| --- | --- |
| **Name** | **Role** |
| Melanie Walker | Captain |
| Linda Strauss | Team member |

# **Scope**

Phase 1 will include the complete My Birthstone V1.0 to be tested. During Phase 1 Team SIA will test each block of the program by:

1. Creating a manual test with as many steps as necessary
2. Saving it for sharing and distribution
3. Retrieve it and have the ability to view it when running the test (for both team members)
4. Entering results and appropriate comments
5. Viewing results

As the team works with the product they will define the needs for the second phase.

# **Assumptions / Risks**

## Assumptions

This section lists assumptions that are made specific to this project.

1. Delivery of the product is in format that Team SIA can both use it in codeblocks IDE.

## 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 | As team SIA works on each step of the algorithm they could desire more functionality. | High | Delay in delivery date. | Team SIA will discuss and weigh the time/benefit ratio on implementing any further functions on the program before attempting to make them. |
| 2 | Changes to the program may create a need to change the test plan. | Medium | Loss of all test cases | Team SIA will ensure when mitigating the first risk to include this factor as well in the assignment timeline. |
| 3 | Delivery may not be on time because Team SIA only meets once a week. | Medium | Product did not get delivered on schedule | This responsibility lies with the team captain, she will be the sole custodian of the most recent program and test plan with comments. If the other member of Team SIA does not get the changes to her on time the captain will submit without the changes. |

# **Test Approach**

The testing will take place over three weeks, with weekly meetings of Team SIA in person to discuss changes, as well as emails communication throughout the entire time frame.

# **Test Environment**

Codeblocks IDE or codingground.com.

# **Milestones / Deliverables**

## Test Schedule

The test schedule for My Birthstone V1.0 is as follows:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Task Name** | **Start** | **Finish** | **Effort** | **Comments** |
| Test Planning |  |  |  |  |
| Create initial test estimates for each team member. |  |  |  |  |
| Functional testing – Iteration 1 |  |  |  |  |
| Each member of Team SIA will use the program and test each function herself. |  |  |  |  |
| Melanie’s test |  |  |  |  |
| Linda’s test |  |  |  |  |
| Functional testing – Iteration 2 |  |  |  |  |
| Each member of Team SIA will have a third party test the program to give user feedback |  |  |  |  |
| Melanie’s third party |  |  |  |  |
| Linda’s third party |  |  |  |  |
| Team SIA will meet in person to discuss testing results and implementing resolutions. |  |  |  |  |
| Resolution of final defects and final build testing |  |  |  |  |
| Submit My Birthstone V1.0 to Professor Looms |  |  |  |  |
| Professor Looms to provide feedback to initialize phase 2 (building My Birthstone V2.0) |  |  |  |  |

## Deliverables

|  |  |  |
| --- | --- | --- |
| **Deliverable** | **For** | **Date / Milestone** |
| Test Plan | Professor Looms | 16 March 2016 |
| Test Results | Professor Looms | 30 March 2016 |