# **Milestone 4 Scrum Report**

All students are expected to attend the scrum meetings and to participate. Failure to do so will result in greatly reduced grades.

**GROUP**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_3\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Members Present**:

|  |  |
| --- | --- |
| 1. Chaerin Yoo | 4. Ahram Lee |
| 2. Jeongmin Ahn | 5. |
| 3. Kyeongin Park | 6. |

## Milestone 4 Tasks

* Finish implementing/coding the functions.
* Finish implementing/coding blackbox tests. Store in repo, executed, results in Jira (and on corresponding test documents, and debugged.
* A set of whitebox tests as test documents (in an Excel file) with test data for the functions you created. At least 4 sets of test data are required for each function. You must have test cases for at least 6 functions (including all your custom function). Stored in the repository.
* Whitebox tests implemented (in the C++ testing project), stored in repository, executed, results in Jira and on corresponding test documents, and debugged (at least 1 SET is required).
* Updated requirements traceability matrix stored in the repository.
* Completed hook file (for EACH team member) for test automation stored in the repository.
* Completed scrum report including reflection questions answered.

**Rubric:**

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| --- | --- | --- |
| **Individual** | Group participation (includes GitHub commits and Jira usage) | 80% |
| Teamwork | 20% |
| **Group** | Implemented functions and main (well-designed, and documented) | 10% |
| Finish coding blackbox code (well-designed, written, and documented) | 5% |
| Whitebox test case document (well written, complete, good test data) | 10% |
| Whitebox test code (well designed and documented) | 10% |
| Updated requirements traceability matrix | 10% |
| Test execution (performed, results recorded, issues created) | 10% |
| Debugging (bugs fixed, documented, Jira updated) | 5% |
| Hook files | 10% |
| Git usage (used properly with good structure) | 5% |
| Jira usage (creates issues, tracks progress) | 15% |
| Scrum report & reflections | 10% |
| **Deadline** | 20% deduction for each day you are late |  |

**Scrum Report**

**Summary of Tasks Completed or Delayed in the last week:**

Here you can list all of the tasks completed in the last week along with any tasks which could not be completed with a reason why they could not be completed.

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| **Member** | **Tasks Completed** | **Tasks Delayed/Blocked** |
| Chaerin Yoo | Implemented 'findForShipment' function, completed blackbox coding, updated traceability matrix | None |
| Jeongmin Ahn | |  | | --- | | Implemented 'calculateRemainingCapacity' function, created whitebox test project |  |  | | --- | |  | | None |
| Kyeongjin Park | |  | | --- | | Implemented 'calculateDiversionDistance' function, completed debugging |  |  | | --- | |  | | None |
| Ahram Lee | |  | | --- | | Implemented 'isTruckOverloaded' function, created whitebox test cases |  |  | | --- | |  | | None |
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For every task delayed or blocked, describe the reason for the delay or block, how it impacts the project and the proposed solution or workaround**.**

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| **Delayed or Blocked Task** |  |
| **Reason for delay or block** |  |
| **Impact on Project** |  |
| **Solution or work-around** |  |
|  |  |
| **Delayed or Blocked Task** |  |
| **Reason for delay or block** |  |
| **Impact on Project** |  |
| **Solution or work-around** |  |

**Summary of Meeting:**

A summary of the main points discusses in the meeting and the outcomes of the discussions.

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| --- | --- | --- |
| Topic | Discussion Summary | Outcome |
| Task Review | Review of individual tasks and progress updates. | |  | | --- | | Tasks assigned for completion and progress noted. |  |  | | --- | |  | |
| Test Cases | |  | | --- | | Discussed the adequacy of blackbox and whitebox test cases. |  |  | | --- | |  | | |  | | --- | | Test cases adjusted to cover edge cases. |  |  | | --- | |  | |
| Traceability Matrix | |  | | --- | | Importance of maintaining the matrix discussed. |  |  | | --- | |  | | |  | | --- | | Ensured traceability matrix is current. |  |  | | --- | |  | |
| Hook Scripts | |  | | --- | | Discussion on the creation and implementation of hook scripts for automation. |  |  | | --- | |  | | Plans made to implement hook scripts for each team member. |
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**Summary of Decisions Made:**

This will include major architecture and design decisions, testing decisions, prioritization of tasks, dealing with problems encountered and other major outcomes from the meeting.

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| Decision | Rationale |
| |  | | --- | | Assign specific functions and test cases to each member. |  |  | | --- | |  | | |  | | --- | | Ensure even workload distribution and accountability. |  |  | | --- | |  | |
| |  | | --- | | Create and maintain a C++ testing project. |  |  | | --- | |  | | |  | | --- | | Facilitate the execution and validation of test cases. |  |  | | --- | |  | |
| |  | | --- | | Regularly update the requirements traceability matrix. |  |  | | --- | |  | | Track the coverage of requirements and ensure completeness. |
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**Tasks Attempted During Meeting:**

Each member is assumed to participate in the scrum meeting and contribute to the completion of the scrum report and reflections. Since the scrum meeting will not take more than 20-30 minutes, there is lots of time left to undertake some of the actual work tasks. In the table below, each member should list what they did to complete the scrum report, the reflections, and 1-4 other tasks they completed during the class period. If a task could not be completed, the student should indicate why this was not possible.

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| --- | --- | --- | --- |
| Member | Task Attempted | Time Spent | Complete? |
| Chaerin Yoo | Implemented whitebox tests in the C++ testing project, stored and executed the tests, documented results in Jira and corresponding test documents | 4 hrs | Yes |
| Jeongmin Ahn | Wrote and stored blackbox tests in the repository. Executed the tests, documented the results in Jira and corresponding test documents | 4 hrs | Yes |
| Kyeongjin Park | |  | | --- | |  |   Ensured all functions are correctly implemented and thoroughly tested | 3 hrs | Yes |
| Ahram Lee | Created an Excel file with test data for each function. (At least 4 sets of test data for each function, test cases for at least 6 functions) | 3 hrs | yes |
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**Scrum Tasks Selected for Next Week**:

The tasks each member has selected to pursue for this class or the next week.

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| Group Member | Task Description |
| Chaerin Yoo | |  | | --- | | Write and document integration tests for new functions with at least 4 sets of distinct test cases, each with 4 distinct test data. Store in repository. |  |  | | --- | |  | |
| Jeongmin Ahn | |  | | --- | | Implement and execute integration tests, debug any issues found, and document results in Jira and test documents. Store results in repository. |  |  | | --- | |  | |
| Kyeongjin Park | |  | | --- | | Finish implementing and coding whitebox tests. Store in repository, execute tests, document results in Jira and test documents, and debug any issues found. |  |  | | --- | |  | |
| Ahram Lee | Write and implement acceptance test cases for each requirement. Add these tests to the C++ testing project, update the requirements traceability matrix, and store everything in the repository. |
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**Major Outcomes of Meeting:**

This is where you should highlight the major accomplishments of the class.

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| Outcome | Impact on Project |
| |  | | --- | |  |   Refinement and expansion of whitebox test cases. | |  | | --- | | Provides a deeper validation of internal code logic, ensuring robustness and reliability. |  |  | | --- | |  | |
| |  | | --- | |  | | Alignment on project timeline and deadlines. | |  |  | | --- | |  | | |  | | --- | | Keeps the team focused and ensures timely delivery of all milestones. |  |  | | --- | |  | |
| |  |  |  | | --- | --- | --- | | |  | | --- | | Enhanced collaboration and communication using Jira. |  |  | | --- | |  | |  |  | | --- | |  | | Facilitates efficient task tracking and issue resolution, improving overall team productivity. |
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**Things That Went Well in This Meeting:**

Here you can highlight things which worked well. This indicates that the way you worked on these items is working and should be continued.

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| Topic/Work Item | Reason for Success |
| |  | | --- | | Automated testing implementation |  |  | | --- | |  | | |  | | --- | | The team successfully integrated hook scripts, enabling automatic test execution and enhancing code quality assurance. |  |  | | --- | |  | |
| |  | | --- | | Detailed review of whitebox tests |  |  | | --- | |  | | |  | | --- | | Comprehensive discussion and refinement of whitebox test cases ensured thorough testing and higher code reliability. |  |  | | --- | |  | |
| |  | | --- | | Clear communication and task alignment |  |  | | --- | |  | | |  | | --- | | Effective use of Jira and regular communication kept everyone on the same page, minimizing misunderstandings and ensuring smooth progress. |  |  | | --- | |  | |
| |  | | --- | | Efficient problem-solving |  |  | | --- | |  | | Quick identification and resolution of issues during the meeting led to uninterrupted workflow and maintained project momentum. |
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**Things That Did NOT go Well in This Meeting:**

This is where you can list things which did not go well in the class. You should analyze why this happened and suggest how you can improve it next time. This will lead to the goal of *continuous process improvement*.

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| Topic/Work Item | Reason for Problem and How to do Better |
| N/A | N/A |
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**Reflections**:

Answer the following questions using your own words. Make sure that each answer comprises a minimum of 100 words.

1. Why did we wait until the fourth milestone to write the whitebox tests?
2. How does the Agile methodology ensure that all team members are consistently engaged throughout the software development process, avoiding downtime due to dependencies on others? Provide an example to illustrate your point.
3. What is a shell script and how are we going to utilize a hook script in this project?