# **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**: \_\_\_\_\_\_\_\_\_\_\_6\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Members Present**:

|  |  |
| --- | --- |
| 1.Hansol Nam | 4.Chia-yu Chien |
| 2.Wai Bong Yung | 5. |
| 3.Fang Lin | 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** |
| Chia-yu Chien | **Main Implementation, Debugging, White box testing** |  |
| Hansol Nam | **FindTruckForShipment – whitebox test, refelction, git prepush hook** |  |
| Wai Bong Yung | **FindTruckForShipment implementation, git prepush hook, fix bug in isTruckCanShip** |  |
| Fang Lin | **Main Implementation, White box testing** |  |
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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 |
| Assigning tasks | The group was divided into two teams. Each team conducted white-box tests for the some functions and implementation as well. ( 4 functions, 3 functions each ) | **Work assigned fairly** |
| Presentation plan | **Discuss how to write presentation slid, and assigned which part per each member** | **Work assigned fairly** |
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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 |
| Implementatins | 4 functions for Phily and Fang |
|  | 3Functions for Hansol and Wai as one function expects longer time than others, this team take one less |
| Whitebox Test | Hansol- one function (FindTruckForShipment) and refelction as it was the long function, only one Whitebox test assigned. |
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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? |
| Hansol Nam | **-whitebox test (FindTruckForShipment), refelction, githook, jira update** | **4** | **Yes** |
| Chia-Yu Chien | **Tasks assigning** | **1hr** | **Yes** |
| Fang Lin |  |  | **Yes** |
| Wai Bong Yung |  |  | **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 |
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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 |
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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 |
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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 |
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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?

The reason we waited for the white box test till the fourth milestone is because, by this stage, the code and functions would be more defined and well analysis then. These steps help us to reduce frequent test revisions and time consuming. Since whitebox tests is a method involving understanding the internal structures and how the program executed. f we wrote the whitebox code earlier without implementing the code yet, we would not know the exact code for testing and also would have to revise the code unnecessarily. Besides that, as the project advances, team members can gain a better understanding of the code and are enabled to design the solution. Previous milestones were mainly about ensuring basic functionality and integration.

1. 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.

During this milestone, we worked simultaneously, with some team members focusing on code implementation and others on whitebox testing. The Agile model facilitates cross-functional collaboration and continuous integration. It allows us to merge our work frequently and detect issues early. This practice keeps the development process smooth. Regular meetings and chats allowed us to discuss progress and plan the next tasks efficiently. When issues arose, we addressed them promptly without long delays to ensure detect and resolve problems quickly. This approach reduces the waiting time between our team members. We can obtain a consistent team engagement throughout the software development process for this project.

1. What is a shell script and how are we going to utilize a hook script in this project?

Shell script is a script for execution designed to be run by a Unix shell. After executed, computers will create a program to run the script. It can perform more complex configurations. For example, it is often used to automate repetitive tasks to resolve batch processing, system administration and application deployment needs.

Git hooks are scripts installed in a git repository. Git executes the script before or after events such as committing, merging, and receiving pushes. It allows us to automate tasks and enforce policies within your repository. To use Git Hook, you simply edit the existing executable script in the git hooks directory of your Git repository, and make sure the permission is granted for execution. The script should be named after the Git Hook event they correspond to, such as *pre-commit, pre-push, post-merge.* The purpose of using it in this project is allowing the developer to check for any possible errors and quality of code before deploying.