# **MILESTONE 2** -- SFT221 Scrum Report and Reflection

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

**GROUP**: \_\_\_\_\_\_\_\_\_\_\_\_A\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Members Present**:

|  |  |
| --- | --- |
| 1. Heungbin Oh | 5. Hiu Fung Chan |
| 2. Tien Vu To | 6. Trung Kien Phan |
| 3. Arshia Keshavarz Motamedi | 7. Ying Cheung Ellis Fung |
| 4. Aditya Tambe |  |

## Milestone 2 Tasks

Some of the software for the project has already been written for you and is available on Blackboard. You must use this in your project and every team should add it to the source code for their repository. Anything in the main function is simply for demonstration purposes and can be replaced. The software you are being given has not been tested and you will need to test it.

You need to study the problem and the code provided for you and then:

* Add any new data structures you will require This will require a thorough analysis of the problem and the existing software. This should be done by creating a new header file in the directory where the rest of the source code has been placed. You do not want to go back and modify it later if you can avoid it as it will slow the project.
* Create a test plan for the project by replacing the text in the supplied test plan template with your test plan.

**Deliverables due 4 days after your lab day:**

* An analysis of the problem (no written artifacts produced).
* A series of data structures created as header files and stored in the repository.
* A test plan stored in the repository.
* Completed scrum report including reflection questions answered.

**Rubric**

|  |  |  |
| --- | --- | --- |
| **Individual** | Group participation (includes GitHub commits and Jira usage) | 80% |
| Teamwork | 20% |
| **Group** | Data structures (complete, correct, and well-designed, & project updated) | 25% |
| Test plan (complete, well-written) | 25% |
| Git usage (used properly with good structure) | 10% |
| Jira usage (creates issues, tracks progress) | 20% |
| Scrum report & reflections | 20% |
| **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 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.

|  |  |  |
| --- | --- | --- |
| **Member** | **Tasks Completed** | **Tasks Delayed/Blocked** |
| Arshia Keshavarz Motamedi | **writing test strategy making sure all the deliverables are finalized** | **-** |
| Heungbin Oh | **Test Plan\_5\_Execution Strategy** | **-** |
| Tien Vu To | Coming up with a test plan | **-** |
| Aditya Tambe | **Was assigned to create scrum report and track on the updates of the work done by others** | **-** |
| Hiu Fung Chan | **Check data structures and implement a new property in DS.** | **-** |
| Trung Kien Phan | **Check data structures and implement a new property in DS.** | **-** |
| Ying Cheung Ellis Fung | **Studying the Shortest Path Algorithm and checking data structures and implementing a new property in DS.** | **-** |

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.

|  |  |
| --- | --- |
| **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 discussed in the meeting and the outcomes of the discussions.

|  |  |  |
| --- | --- | --- |
| Topic | Discussion Summary | Outcome |
| Test planning strategy | **It was then distributed amongst each other based on the expertise each member has in.** | **Everyone raised the issue according to task pick by them** |
| Test Plan | **It was then distributed amongst each other based on the expertise each member has in.** | **Everyone raised the issue according to task pick by them** |
| Checking on data structure | **It was then distributed amongst each other based on the expertise each member has in.** | **Everyone raised the issue according to task pick by them** |
| Implementation of new property in data structure | **It was then distributed amongst each other based on the expertise each member has in.** | **Everyone raised the issue according to task pick by them** |
| Studying the shortest length path algorithm | **It was then distributed amongst each other based on the expertise each member has in.** | **Everyone raised the issue according to task pick by them** |
|  |  |  |
|  |  |  |

**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.

|  |  |
| --- | --- |
| Decision | Rationale |
| Test planning strategy | It was mutually decided for the task and thus would be executed accordingly |
| Test Plan | It was mutually decided for the task and thus would be executed accordingly |
| Checking on data structure | It was mutually decided for the task and thus would be executed accordingly |
| Implementation of new property in data structure | It was mutually decided for the task and thus would be executed accordingly |
| Studying the shortest length path algorithm | It was mutually decided for the task and thus would be executed accordingly |
|  |  |
|  |  |

**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 cannot be completed, the student should indicate why this was not possible.

|  |  |  |  |
| --- | --- | --- | --- |
| Member | Task Attempted | Time Spent | Complete? |
| Arshia Keshavarz Motamedi | **writing test strategy, writing strategy part of test plan and making sure all the deliverables are finalized** | **3.5hr** | **Y** |
| Heungbin Oh | **Test Plan\_5\_Execution Strategy** | **7hr** | **Y** |
| Tien Vu To | Coming up with a test plan | **6hr** | **Y** |
| Aditya Tambe | **Was assigned to create scrum report and track on the updates of the work done by others** | **2hr** | **Y** |
| Hiu Fung Chan | **Check data structures and implement a new property in DS.** | **6hr** | **Y** |
| Trung Kien Phan | **Check data structures and implement a new property in DS.** | **7hr** | **Y** |
| Ying Cheung Ellis Fung | **Studying the Shortest Path Algorithm and checking data structures and implementing a new property in DS.** | **6hr** | **Y** |

**SCRUM Tasks Selected for Next Week**:

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

|  |  |
| --- | --- |
| Group Member | Task Description |
| Arshia Keshavarz Motamedi | writing test strategy making sure all the deliverables are finalized |
| Heungbin Oh | Coming up with the test plan executing and drafting it and waiting for approval. |
| Tien Vu To | Combining the planning and executing and building up the final test plan. |
| Aditya Tambe | Tracking the meeting help by testers and programmers, recording the activities and noting down the time for the execution of work done by others |
| Hiu Fung Chan | Implementation of new data structure and checking the data structure as well |
| Trung Kien Phan | Implementation of new data structure and checking the data structure as well |
| Ying Cheung Ellis Fung | Analyzing the studying the shortest path for the algorithm and implementation of new data structure and checking the data structure as well |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**Major Outcomes of Meeting:**

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

|  |  |
| --- | --- |
| Outcome | Impact on Project |
| Creating their own issues and assigning it to themselves | **Everyone has picked the topic they have expertise in it and is being working on the topic they picked** |
| Completing the issues and leaving nothing in to do list | **Assigning and raising the issues in Jira and mentioning it in Jira so that everything goes well and smoothly** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**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.

|  |  |
| --- | --- |
| Topic/Work Item | Reason for Success |
| Creating issues | **We selected the topic we have expertise on** |
| Meeting the deadlines | **As per agreement and topic chose by us, It became easy to deliver the topics on time by providing and submitting it on the time discussed and said in the meeting** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**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*.

|  |  |
| --- | --- |
| Topic/Work Item | Reason for Problem and How to do Better |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**Reflection Questions:**

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

1. In this milestone you have been asked to analyze a problem and design software (functions) to complete the solution without writing the software.
   1. Is this process more difficult than just writing the software to complete the project? If so, why is it more difficult? If not, why is it easier than just writing the software?  
        
        
      I believe that analyzing the problem and building and designing the software function without actually writing the software could be more difficult than writing the software directly. This process requires a thorough and complete understanding and analyzation of the problem on hand first as well as the ability to visually imagine and then plan the solution accordingly without going with there and start to code. This procedure also involves considering some factors like: system requirements, edge cases, issues.

Moreover, designing the software without implementation will lead to an increase in time consumption as it would involve multiple iteration of refining the design for ensuring to meet all the requirements.

* 1. Describe two advantages of developing software in this manner rather than just moving on to writing the functions without writing specifications first.  
       
       
       
     Developing the software with a well thought of design before writing function has some major advantages. These are:
     + It will help with better clarification in defining the scope and requirements of the project. This will help to ensure the final product meets its desired specification and requirements.
     + Designing the software, before hands will help in better collaborating and co-ordination amongst the team members as everyone will be having a better idea of how the project goals are leading and thus how different components of the projects are involved in it.
     + This is a more efficient way as it will improve and clear misunderstanding and lead to better efficient development.
     + It will also help to keep track of minute details of tasks which are assigned to each individual and will lower the risk if any issue or bug would come up in the process, thus saving time and resources during the phase of the development.

1. Why is it a good idea to create a test plan? Describe at least 3 advantages of test plans.

I believe it is a good idea to build the test plans because this will ensure us the quality and reliability of the application we would be working on. The advantages of creating test plans are:

* + - This will help us to determine the efforts needed to validate the quality of the application under tests.
    - It will serve us as a blueprint to conduct software testing activities as a defined process.
    - This will be also the instruction of manual for the testing process.

1. Describe the process you used to analyze and understand the existing software.

The process we used to analyze and understand the software which was already existed was:

* + - Firstly, we used the existing documentation regarding the software, for instance we had documentation available on the blackboard for the project. This helped a lot by gaining a basic understanding of the purpose and functionality of the software we are dealing with.
    - Secondly, we conducted the code review to analyze the actual implementation of the software like what all algorithm is used, what are the areas which will be required of room of improvement, or for better optimization.
    - We then came us building a test strategy, test plan and a final draft of both where we decided what all tests should be done and executed accordingly.