**Weekly Learning Log and Reflection**

**Week4**

|  |  |
| --- | --- |
| **Student Name: Wenjing Li** | **Student Number: A00279784** |
| **Subject: Agile Methodologies 4.2 - (AL\_KSENG\_B\_4)** | **Semester Number:2** |
| **Student Signature: Wenjing Li** | **Week Number: 4** |

* What new knowledge and/or skills did I acquire this week?

This week I have learned Minimum number of test and MiniNum branch test. And I know how to use them in my development.

* What existing knowledge and/or skills, if any, did I employ and/or build upon this week?

I used Minimum number of test and MiniNum branch test in my Login component.

This week I have a clearer understanding of white box testing and black box testing.

* Describe the context within which I employed my knowledge and skills this week.

This week I will develop the login function, which involves user names and passwords, and the resources that users can access.

So I used the minimum test branch strategy to ensure the correctness of the username and password, and the path to the resource.

For example: user name and password must be 3-16 digits

The resource path must follow the /aaa/bbb format, and the length of aaa and bbb needs to be controlled within 1-10.

I designed a test class with 3 test methods. The first test method tests the username, the second method tests the password, and the third method tests the url.

Among them, the username and password, I used the same regular expression.

The URL uses a new regular expression.

After the test is completed, any information that does not satisfy the regular expression will be displayed to the user, telling them that the input is wrong.

* How much responsibility did I take, personally and in my group, for the application of my knowledge and skills this week? What role did fulfil within the group?

This week I developed the login function, which is a big feature. Including GUI interface, database design, and login function realization.

I actively participated in the meeting and discussed issues with my teammates.

* Are there still gaps in my learning? If so, identify those gaps and describe the steps that I plan to take to fill those gaps.

Test branch, I need to learn this part. And use it.

* How has my learning this week helped me to develop as a Software Engineer and in my interactions with other members of my group/class? Which interactions did I value?

This week I have learned Minimum number of test and MiniNum branch test. I know how to use them in the daily development process. Among them, drawing branch test diagrams helped me sort out the logic and make my test cases comprehensive.

**Week5**

|  |  |
| --- | --- |
| **Student Name: Wenjing Li** | **Student Number: A00279784** |
| **Subject: Agile Methodologies 4.2 - (AL\_KSENG\_B\_4)** | **Semester Number:2** |
| **Student Signature: Wenjing Li** | **Week Number: 5** |

* What new knowledge and/or skills did I acquire this week?

As a software project, the first thing to do is to unify the working environment. For example: the same Git repository, the same project structure, and the same database name.

The purpose of this is that team members follow the same rules to design the database and develop their own code. Finally, the merge of the code will not cause problems.

Daily Stand-Up Meeting is an important part of agile development, the purpose is to ensure the progress of the team's work, to find the team's difficulties. Then adjust the strategy in time to ensure the correct and effective work direction.

* What existing knowledge and/or skills, if any, did I employ and/or build upon this week?

“Driven test development” has been used in my “login” and “billing” function.

This week I build a new skill that is how to do “Daily Stand-Up Meeting”.

We need to pay attention to three issues.

What did I do yesterday?

What am I planning to do today?

Is there anything blocking my progress?

* Describe the context within which I employed my knowledge and skills this week.

This week I will redevelop the “login” function, and develop “billing” function.

Last week I did not verify the attributes in login.java.

After I read the demonstration carefully, I realized my problem. So this week, the "billing" function I developed has all followed the instructions.

* How much responsibility did I take, personally and in my group, for the application of my knowledge and skills this week? What role did fulfil within the group?

This week I developed the “Billing” function. Including Bill.java, BillExceptionHandler.java, BillMySQLAccess.java, BillTest.java and CommandLine function realization.

* Are there still gaps in my learning? If so, identify those gaps and describe the steps that I plan to take to fill those gaps.

After Sprint Review or Demo and Daily Stand-Up Meeting, we will get some feedback. How to deal with the problems found, this is what I need to continue to learn, and learn some strategies as a guide.

* How has my learning this week helped me to develop as a Software Engineer and in my interactions with other members of my group/class? Which interactions did I value?

This week, I learned how to check whether the team’s work is in the right direction and whether the progress is up to standard.

This knowledge helps me understand how to understand the team’s goals as a programmer, and when I encounter difficulties, I should give feedback and seek help in time. The problem cannot be solved in time because of burying the problem.

What did I do yesterday? What is said here is very clear, not only what you did, but also what difficulties you encountered.

**Week6**

|  |  |
| --- | --- |
| **Student Name: Wenjing Li** | **Student Number: A00279784** |
| **Subject: Agile Methodologies 4.2 - (AL\_KSENG\_B\_4)** | **Semester Number:2** |
| **Student Signature: Wenjing Li** | **Week Number: 6** |

* What new knowledge and/or skills did I acquire this week?

Use "eclemma" to find code defects and test code with insufficient coverage.

* What existing knowledge and/or skills, if any, did I employ and/or build upon this week?

Use "eclemma" to find out the code with insufficient test coverage, and then change the code to ensure 100% coverage of the necessary code.

* Describe the context within which I employed my knowledge and skills this week.

At present, the code with 100% code coverage that I can guarantee is mainly some validate functions. However, some get, set and toString methods are not covered.

* How much responsibility did I take, personally and in my group, for the application of my knowledge and skills this week? What role did fulfil within the group?

This week, Huangwei Jiang is my partner. We will fix bugs and fix the code with low code test coverage.

* Are there still gaps in my learning? If so, identify those gaps and describe the steps that I plan to take to fill those gaps.

I need to learn through learning to understand that those codes must achieve 100% test coverage, and those codes do not need. My current understanding of this issue is not clear enough.

* How has my learning this week helped me to develop as a Software Engineer and in my interactions with other members of my group/class? Which interactions did I value?

Use the "eclemma" tool in Eclipse to help me check for insufficient code coverage in my future work. This is a good feedback tool that can help me ensure my own code test coverage, thus ensuring the quality of the code.