Reflective ESSAY FOR AGILE.

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1. **Restate in your own words what the assignment asked you to do.**

In Agile Methodologies we were asked to develop the Newspaper Delivery System using Test Driven Development according to the User Stories or the Product Backlog which we have created last semester. This was supposed to be delivered in 3 Agile Sprints. Firstly, we created a working agreement describing how the development process will work during the 3 Agile Sprints. We were asked to understand the concept of Merging and branching for Bitbucket Repositories. Then we conducted the prioritization and estimation of user stories and assigned story points to them. Also, we implemented issue tracker and pipelines for the working repository. In Sprint 1, we implemented Log in, Account Type and Customer theme for the Newspaper Delivery System. In Sprint 2, we implemented Order, Delivery Area and Subscription theme for the product. The assignment was planned to make me work on Repositories functions like issue tracker and pipelines. Also, to implement login and subscription feature using test driven development. This assignment helped me to gain knowledge in the field of agile work environment and taught me how the teams work to overcome any challenges one might face and the benefits that came with it. For the individual assignment we were asked to develop a product to convert temperature from Celsius to Fahrenheit in the range from Absolute Zero to 100 degrees Celsius, also convert from Fahrenheit to Celsius for temperatures in the range from Absolute Zero to 212 degrees Fahrenheit using TDD to develop the solution using User Stories while implementing EP and BVA to design test cases to achieve 100% test coverage which was implemented successfully. My mentor Mr. Mike guided me and the team in making us understand our challenges and difficulties and the concepts that were new to me. I didn’t know a couple of things, like how a dynamic team works.

1. **Discuss your group’s and your own processes for completing the project/your task. Reference your group’s and your individual achievable goals.**

We had very clear and composed goals and we made sure that they would be completed, we had to show our teamwork and fulfill a sequence of industrial level projects. The team built a proper strategy about how we will develop the project, and we all were assigned different tasks according to it. We made a work schedule under which the work had to be completed. We decided that each team member will give 5 hours every week to complete the required part of the development. We conducted project meetings every Wednesday, where each team member would update on the progress of the work.

We learned how the test-driven development works for agile work environment. Also, we learned the concepts of branching, merging, prioritization, estimation, issue tracker and pipelines. We gained knowledge on how to write test cases and implement them using java JUnit test cases. For the 2 Sprints, I had to work on Login and Subscription theme which were completed successfully alongside with the work on which the rest of the team were working i.e. Customer, Account Type, Delivery Area and Order. Me and the team integrated all the product code together. The goals we set were very realistic and we were assured that they would be completed in the time frame we set according to the project norms and was fulfilled accordingly.

1. **Individually justify each criterion you awarded yourself for Process Learning by providing suitable evidence/examples from your Learning Journal. Also, where appropriate, identify the criteria in which you can improve, explain why and how.**

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| **Criteria Descriptor** | **Status** | **Description** |
| **Setting (Plan) Achievable Goals - Group** | Well Achieved | **Group goals clearly achievable within planned timeframe.**  **The plan was well made and helped in reaching goals with ease.** |
| **Setting (Plan) Achievable Goals - Individual** | Well Achieved. | **Individual goals clearly achievable within planned timeframe.**  **Implemented Login and Subscription theme successfully for the Newspaper Delivery System using TDD. Wrote test cases and implemented them using Java Junit. Implemented issue tracker and pipelines for the working repository.** |
| **Individual Role within Group (Interpersonal Skills)** | Well Achieved. | **The Individual goal I had in my team was to be a member and a leader sometimes when needed, work on the tasks and also give out the Feedbacks in case any team member needed it. I was very thorough with my work and also accepted feedbacks and constructive criticism when given.** |
| **Quality and content of contribution – (Group / Individual)** | Well Achieved | **Content contribution demonstrates critical thinking to analyze and relate key points across the whole project.**  **The content was thorough and very planned so as to not leave any gaps, since we were working on it considering it as an industrial level project.** |
| **Learning Log (Refer to guidelines below)** | Achieved. | **Learning Log Entry completed as per guidelines and versioned the majority of time after each piece of work undertaken.**  **The learning log was not committed after every meeting due to some miscommunications, but was updated regularly in our local machine** |
| **Reaching Achievable Goals - Group** | Well achieved. | **Group goals clearly reached within planned timeframe.**  **The goals were set so that every group member was on the same page at the start of the new week every time. This helped in reaching goals faster and become more efficient as a team.** |
| **Reaching Achievable Goals - Individual** | Well achieved. | **Individual goals clearly reached within planned timeframe.**  **As the case with team, the individual goals were carved to make use of my highest potentials, and that was consistent throughout the project timespan.** |

**INDIVIDUAL LEARNING LOGS**

AGILE METHODOLIGIES

Learning Logs and Feedback for every meeting.

Week - 1

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| Date | 15/01/2020 12:00-13:00 |
| Group Goal | Draft a working agreement |
| Individual Goal | To Come to an agreement about the rules and regulations of the working agreement. |
| Time Spent | 1 hour |
| Tasks (What we were trying to achieve) | Make a working agreement based on everyone’s opinions. |
| Contribution  (What I did) | Gave my feedbacks and helped in making the working agreement. |
| Group Structure | Each member in the group had some ideas, we reached at an agreement with everyone’s favorable circumstances. |
| Learnings  (What did I learn) | Learned about everyone’s agreements and fixed a work agreement. |
| Learnings  (How did I learn): | Meeting was very important in making the agreement. Gained the experience on working with the working agreement. |
| Interpersonal Skills | Decision Making, Team Work and brainstorming. |

Week - 2

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| Date | 22/01/2020 12:00-13:30 |
| Group Goal | Revising and Finalizing the Working Agreement and to work on team repository. Also, to understand what is branching, merging, estimation and prioritization. |
| Individual Goal | To correct and finalize the working agreement and to explain what is estimation to all the group members. |
| Time Spent | 1.5 hours |
| Tasks (What we were trying to achieve) | Finalizing and correcting and working agreement.  To work on team repository.  To understand the concept of branching, merging, estimation and prioritization. |
| Contribution  (What I did) | Corrected the working agreement based on feedbacks from Mike. Gone through the estimation slides and explained to the group members. |
| Group Structure | We met and discussed about the team repository, what changes to be made in the working agreement and each member explained the group members about some certain topics like branching, merging, estimation and prioritization. |
| Learnings  (What did I learn) | How to propose a proper working agreement and concepts like how branching and merging works, how we can do estimation and prioritization. |
| Learnings  (How did I learn): | We organized meeting and explained each other different concepts, We shared knowledge and provided feedbacks to every member about the work they did. |
| Interpersonal Skills | Decision Making, Team Work and brainstorming. |

Week - 3

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| Date | 29/01/2020 12:00-12:30 |
| Group Goal | To make plan for sprint 1, Complete Estimation and Prioritization of user stories. Also, to complete the work on the repository like issue tracking and pipelines. |
| Individual Goal | To activate the Issue Tracker and Pipeline work environment for the repository. Also, to understand and implement how pull requests, commits and merging takes place for the branches. |
| Time Spent | 30 mins |
| Tasks (What we were trying to achieve) | Estimation and Prioritization for user stories.  Repository which will allow us to do issue tracking and pipelining.  To work on the database tables.  A complete plan for sprint 1. |
| Contribution  (What I did) | Activated Issue Tracker and created working environment for the repository by pipeline configuration, pull requests from branches, commits and merging. |
| Group Structure | Each member in the group was assigned some work to complete and would discuss what work they have completed and what they are supposed to do yet in the scrum meeting. |
| Learnings  (What did I learn) | I learned how issue tracker works, how to do branching and merging, how to create pull requests from the branches and commits, how pipeline works for the repository. |
| Learnings  (How did I learn): | We organized meeting and explained each other different concepts, We shared knowledge and provided feedbacks to every member about the work they did. |
| Interpersonal Skills | Leadership, Decision Making, Team Work and brainstorming. |

Week - 4

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| Date | 05/02/2020 12:00-13:00 |
| Group Goal | To complete the database connectivity (JDBC), Get the architecture done, Get the pipeline work done. |
| Individual Goal | To work on pipelines and try to connect database to it, Create the working environment where test cases will be run automatically when we push the project into the repository. (i.e. created a bash file to run the test cases, Bin folder where all the class files will be stored, Lib folder to store jar files). |
| Time Spent | 1 Hour |
| Tasks (What we were trying to achieve) | A functional JDBC.  The architecture of the whole system.  Estimation for the first sprint.  Completion of pipeline work. |
| Contribution  (What I did) | Created an environment by writing the bash file so that test cases can be run, created Bin and Lib folders where class files and jar files will be stored. Tried to connect database to the pipeline. |
| Group Structure | Each member in the group was assigned some work to complete and would discuss what work they have completed and what they are supposed to do yet in the scrum meeting. |
| Learnings  (What did I learn) | I learned how to write bash file to run the test cases, creation of folders to store different types of java files, tried to understand how database can be connected to the pipelines. |
| Learnings  (How did I learn): | We organized meeting and explained each other different concepts, We shared knowledge and provided feedbacks to every member about the work they did. |
| Interpersonal Skills | Leadership, Decision Making, Team Work and brainstorming. |

Week - 5

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| Date | 12/02/2020 12:00-12:15 |
| Group Goal | Design test cases for login, account type and customer. |
| Individual Goal | Implement login feature and design test cases for the same. |
| Time Spent | 2 x 15 minutes |
| Tasks (What we were trying to achieve) | Design test cases for login, account type and customer.  Use designed test cases to make tests in eclipse using Junit Test Case. |
| Contribution  (What I did) | Implemented the login feature for News Agent so that he has the access to the whole system. Designed test cases and checked whether they passed or failed. |
| Group Structure | 4 members worked in 2 teams of 2 who worked on customer and account type features and one member worked on the login section. |
| Learnings  (What did I learn) | I learned how to design test cases.  I learned how to use designed test cases to create Junit tests using eclipse. |
| Learnings  (How did I learn): | I learned by individually working on login section and by designing test cases by myself. |
| Interpersonal Skills | Leadership, Decision Making and brainstorming. |

Week - 6

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| Date | 19/02/2020 12:00-12:15 |
| Group Goal | Complete the Login, Account type and Customer theme and design Junit test cases for the same and check whether the tests are successful. |
| Individual Goal | Implement the login feature and connect it to database. Design Junit test cases for Login. Assist the team in combining different themes together. |
| Time Spent | 15 minutes |
| Tasks (What we were trying to achieve) | Design JUnit test cases for Login, Account type and Customer.  Check whether the tests are successful.  Complete Login, Account type and Customer theme and combine the modules together to complete Sprint 1. |
| Contribution  (What I did) | Implemented the login feature for News Agent and Delivery Guys and Connected it to the database so that only certified users will have access to the system. Designed Junit test cases and checked whether they passed or failed. |
| Group Structure | 4 members worked in 2 teams of 2 who worked on customer and account type features and one member worked on the login section. |
| Learnings  (What did I learn) | I learned how to design JUnit test cases.  I learned how to implement Login Feature for different users.  I learned how to use database for real time applications. |
| Learnings  (How did I learn): | I learned by individually working on Login Theme and by designing Junit test cases by myself. |
| Interpersonal Skills | Leadership, Decision Making and brainstorming. |

Week - 7

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| Date | 26/02/2020 12:00-12:15 |
| Group Goal | To fix all the issues from sprint 1 related to database, test cases and coding. Start working on Sprint 2 as planned. |
| Individual Goal | Assist the team in fixing all the issues from sprint 1 related to database, test cases and coding. Guide other members how proper test cases must be written. Start working on Subscription theme for Sprint 2. |
| Time Spent | 15 minutes |
| Tasks (What we were trying to achieve) | To fix the issues related to database.  To write the test cases properly.  To fix the coding issues that occurred.  Start working on Sprint 2 as planned. |
| Contribution  (What I did) | Assisted the team in fixing all the issues related to Sprint 1.  Started working on Subscription theme. Designed GUI for subscription and prepared the test cases to be implemented using JUnit Testing. Established the database connection. |
| Group Structure | We all worked together to fix the issues related to sprint 1 and assigned task to everyone for sprint 2. |
| Learnings  (What did I learn) | I learned how to design test cases properly.  I learned how to resolve issues related to coding, database and test cases.  I learned how to establish database connection with proper GUI and how to implement subscription feature. |
| Learnings  (How did I learn): | I learned by individually working on Subscription theme and by designing test cases by myself. |
| Interpersonal Skills | Leadership, Decision Making, Hardwork and brainstorming. |

Week - 8

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| Date | 04/03/2020 12:00-12:15 |
| Group Goal | To implement Subscription, Order and Delivery Area theme for the System by creating better GUI, test cases and implementing higher coding standards. |
| Individual Goal | Work on subscription theme for Sprint 2 as planned and make the test cases for the same alongside working on the database to keep it updated. |
| Time Spent | 15 minutes |
| Tasks (What we were trying to achieve) | To implement the Subscription theme.  To implement the Order theme.  To implement the Delivery Area theme.  Prepare the test cases and implement them using Java Junit.  Keep updating the database every time while working with it. |
| Contribution  (What I did) | Designed GUI for Subscription, Established the database connection and created subscription table, Implemented Add, Delete and View features, Prepared test cases and implemented them using Java Junit. |
| Group Structure | 4 members worked in 2 teams of 2 who worked on Order and Delivery Area features and one member worked on the Subscription feature. |
| Learnings  (What did I learn) | I learned how to design test cases properly.  I learned how to write Junit Test Cases.  I learned how to establish database connection with proper GUI and how to implement subscription feature for the Newspaper Delivery System. |
| Learnings  (How did I learn): | I learned by individually working on Subscription theme and by designing test cases and Junit Test Cases by myself alongside updating the database. |
| Interpersonal Skills | Responsibility, Decision Making, Hardwork and brainstorming. |

BITBUCKET REPOSITORY





