Reflective Essay

Agile Methodologies

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# Assignment Objective

The main objective of this assignment was to capture all customer requirements in user stories so that more efficient and planned system work can be achieved. With early planning project costs can be reduced as well as use of resources can be managed.

Below were the user requirements which I believe were required at this stage

* An automated newspaper management system which allows the newsagent to automate process of managing order book, delivery dockets, Invoice Journal, generate bills and bill payment status.
* To provide news agent and delivery boys which were allocated to 24 different areas with ability to log in to the system and perform their daily tasks.
* To manage Invoice Journal when newspaper or magazine is not delivered or when a customer pays due bill.
* To create logs of all newspapers and magazines to be delivered on a day and if check if they are available in stock.
* To generate bills once a month and attach is with delivery dockets at every month end.
* To create reminders for two months followed by notice in the third month which then results in suspension of delivery to that particular customer.
* To manage geographic information assigned to each delivery boy so that dockets can be printed accordingly every day.

There were many other small requirements which would be highlighted in later points. In all the assignment aimed to take out planning skills and find out if the customer requirements were feasible, incomplete or lack in process flow. And if the requirements were feasible then to present a user story backlogs which presented how system will work when it is complete.

To create user stories which briefly covered which information or data is required at every theme so that system can work without manual interference.

# Process

The early weeks focused on finding out the right users and their interaction with the system. Brief requirements were already discussed in the document and then discussion with the client brought some clear conceptions on manual work flow. We had to find out whether we should exactly copy the manual work flow or make some additions to system flow.

We decided to exactly automate the manual system flow and then begin to start working on user stories. Now we had to find out themes required for our user stories, we came up with below themes-

Authentication: To manage login and registration for different users.

Book keeping: They maintain information required in the system. The data will include orders, customers, delivery notes which would be useful in generating invoice.

Delivery: This theme will contain all the user stories required when a delivery person downloads his required document to deliver newspaper and magazines until he updates all the delivery information on the system again after delivery of items.

Billing: This theme consists of all process for invoice generation and maintaining a log of customer payments and reminders, notices followed by suspension if bill is not paid.

After deciding on with the themes we were ready to write user stories in our second meeting. In this meeting our group goal was to work on Authentication Theme whereas my individual goal was to create user story for store manager on invalid or fraud login attempts which would send notifications to shop keeper when ever someone logs in to the system to provide him with more security. I thought this was required because so many delivery persons work at the same place and there was a possible scenario when a person can look the password when shop keeper is typing it in thus sending notification would let newsagent know if anyone else other then himself has logged in. Other team members did their part of work and finally all the user stories were reviewed by all team members until finalized.

Also as decided in the first group meeting responsibilities were divided into four members but suddenly the fourth member dropped out which increased responsibilities on other three members but surprisingly it was handled very efficiently and without decreasing the pace of work.

In third meeting held we decided to work on book keeping phase where I was given the responsibility of writing user stories for delivery book. We decided to follow up manual book keeping techniques and came up with three books or which would be system features and divided equally all the books that were needed.

In fourth meeting our group goal was to analyse user requirements and create user stories for Delivery phase of newspaper system whereas my individual goal was to work on shop keeper’s requirements from the delivery persons and flow of data, after deciding to work on delivery phase we realised we don’t have a module to maintain daily logs for delivery. Then we decided to include Invoice Journal feature in book keeping to keep things subtle and update delivery status every day in Invoice Journal from delivery docket.

In fifth meeting which was supposed to be out final meeting our group goal was to analyse user requirements and create user stories for Billing phase of newspaper system and my individual goal was to create acceptance criteria for notification on unpaid bills. Customer was not an integral part of system so the only aim was to creating efficient and correct Invoices and handing them over to delivery agents. We went on to confront our client for clarification on user requirements as we had some confusion.

We concluded after talking to the client that delivery boy would also be interacting with the system which was not thought or decided earlier so our group goal for Sixth meeting was to provide delivery boy with access to the system, update journals on delivery boy interactions and any other dependencies in different themes. My individual goal was to create acceptance criteria for delivery boy user for downloading docket and updating docket daily. Most of the user stories were dependent on the new user so we decided to divide the authentication and delivery theme to two team members and one team member was chosen to review the dependent stories and make the final changes.

# Process Learning Criteria

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| **Criteria Descriptor** | **Well Achieved/Achieved/Not Achieved** | **Example (Learning Log)** | **Improvements** |
| **Setting (Plan) Achievable Goals - Group** | Group goals were well achieved as there was proper planning since the starting. | As mentioned on 10th November when a group member left or when requirements changed, they did not affect the system due to proper planning and themes decided in early planning. | Group objectives were not very clear and lacked in some customer requirements which should have been clarifies earlier. |
| **Setting (Plan) Achievable Goals - Individual** | Individual goals were well achieved, all the objectives or responsibilities were fulfilled and then reviewed again by team members. | As seen in all learning logs the objective assigned was completed with proper tasks. | Work pace could be increased as there was less work allocated on user stories to each user. |
| **Individual Role within Group (Interpersonal Skills)** | Individual frequently prompts further discussion of a topic, taking a leadership role in the discussions also encouraging other group members. Individual proved to be an active listener. | The difference can be seen in meetings of 3rd and 10th Nov were a feedback was provided when often discussion turns to arguments. After the feedback I tried to hear a lot more from the other team members before providing opinions which made me even more convincing in decision making. | More improvements are needed so that debate does not turn to arguments. |
| **Quality and content of contribution – (Group / Individual)** | Content contribution demonstrates individual’s critical thinking to analyse and relate a particular aspect within the project itself. | Each and every individual contributed with their full potential to achieve their assigned work. They provided useful points and contradicted whenever necessary. | Team members had different views on everything which resulted into delay. We need to improvise on arguments. |
| **Learning Log** | Learning Log Entry completed as per guidelines and versioned after each piece of work undertaken. | As seen in the learning log, all the guidelines were kept in mind followed by feedback and strategy to improve |  |
| **Reaching Achievable Goals - Group** | Group goals clearly reached within planned timeframe. | As seen in learning logs dated 18th Nov, group goals were achieved but due to changes in requirements the last and final changes were done which are mentioned on 22nd Nov. | Group goals could have achieved earlier with proper understanding of client requirement in early stages. We need to research more about what client needs before creating user stories. |
| **Reaching Achievable Goals - Individual** | Individual goals clearly reached within planned timeframe. | The Individual goal was to complete the assigned responsibilities in given time frame and there is not a single instance in learning log where a task is delayed due to any group member. | More efforts could be made on increasing the pace for achieving tasks. |

# Content Learning Criteria

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| **Criteria Descriptor** | **Well Achieved/Achieved/Not Achieved** | **Example** | **Improvements** |
| **Independent** | The user stories were able to stand alone. They were a feature or a component of a feature that can be tested and implemented as a unique element. To the extent possible, user stories are not dependent on other activities. Ideally, they are written so that they can be delivered in any order. | As Seen in the above images all user stories are independent and can be delivered in any order. Despite of being related they are independent. | None |
| **Negotiable** | User stories are inviting collaboration and discussion about the best way to solve the business problem that is presented. The team, the Scrum master, and the product owner are be open to conversation about available options. | As visible in above image more discussion can be done on how order book can be managed. Different views will have different solutions till they are feasible. | The stories were negotiated only by team members if reviewed by scrum master and product owner they can be improved. |
| **Valuable** | Each user story is important and relevant. Any data which is not required is reviewed and removed. | Each user story has a purpose like in above example which is required to create a delivery docket. | No |

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| **Estimatable** | Each story is estimatable. The story is not too big or too vague. It is clear enough that the developers and testers can reasonably estimate the complexity and length of time to deliver. | As the user stories are divided into themes the problem is mostly resolved. Each user story has set of acceptance criteria which can validate the resources required to complete tasks. | If we assign points to user stories then weightage can be found out which can be useful to estimate the complexity and length of time to deliver |
| **Small** | Each User story is small enough to be completed within a single sprint or iteration. | Every user story in every theme is small enough to be done in a single iteration eg. | None |
| **Testable** | User Stories are written in such a way that it can be tested to make sure it works as expected. | Acceptance criteria for each user story is complete and cover all the test scenarios that can be observed | More improvements on minutest details of an input field can be discussed but not discussed here as it becomes a matter of HOW. |
| **Who, What, and Why** | For all User Stories – The Who, What, and Why are clearly identifiable.    Who: A user story incorporates the perspective of the person who will use or benefit from the requested feature.  What: A user story is a description of the requested feature (or component of a feature) that is short and simple.    Why: A user story incorporates the “value” of the feature so the team can understand what is driving this particular request. | WHO: Admin, Delivery boy, Store Manager.  This was thought thorough before creating user stories, admin was added after some serious thoughts and discussions.  The users were added only if they had some interaction with the system or they had a reason for interaction. Possible efforts were made to decrease human interaction and automate processes wherever required like creation of different books automatically from one another.  Thus I can say that who, what and why are clearly justified and discussed among team members. | None |

# Learning Log Commit History

