

An Essentials Of Scrum Methodology Meetings In Web - Based Education

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ABSTRACT

The focus of scrum has been on meetings and scrum roles. How to take the meetings and scrum roles effectively in use has received less attention in an education field. One of the challenges in scrum methodology is the introduction of scrum in web-based education. To deal with this issue, we can use technologies like Skype, Face book etc. The majority of the literature says that web based learners (online learner) are self-motivated, self-disciplined and individual learners who gain more knowledge with technology. This paper proposes a contribution of scrum meetings, roles in web - based education.

Keywords:- Essentials of Scrum Meetings, Differences, The process that makes scrum beneficiary, Issues of Web-based Education, A proposal for using scrum meetings in web-based education, conclusion.

1. INTRODUCTION

Software Development Life Cycle (SDLC) contains phases like planning, analysis, design, implementation, testing and maintenance. There are many SDLC models in which one of the model is Agile. Agile consists of different methods, scrum is one of the simple and powerful methodology. SCRUM is an agile process. SCRUM was initiated by Ken Swaber in 1995. It enhances Team work. It is used at many companies with success when compare to traditional SDLC model. Using Scrum we can deliver project within short period of time. It is used to control and manage the project in an effective way. A sprint is the basic unit in Scrum. It is restricted to a duration that is mean by time boxed. Scrum roles, meetings and backlogs can be implemented in various fields like IT, Non-IT, Business, and Education and so on. The same way scrum can be implemented in web - based education also. Students can learn different subjects, different concepts from anywhere. In web - based education also we are in need of face-to-face communication with the teacher and learner. This issue can be managed using scrum methodology effectively.

2. ESSENTIALS OF SCRUM MEETINGS

Scrum is responsible to make changes in a project. To make necessary changes we are in need of communication. Lack of proper communication may leads to project failure, so definitely we are in need of good communication not only to develop quality software, communication is mandatory to development students knowledge. Scrum helps in this kind situation to conduct different meetings to avoid misunderstanding and to initiate new features in a project. Different types of meetings are explained below.

3. TYPES OF SCRUM MEETINGS

3.3 The Sprint planning meeting

The product owner, scrum master, entire team and the customers also may attend the meeting. During this meeting, the product owner describes features to the team. Team members ask many questions about product backlog and detailed tasks of the sprint backlog. Product backlog is evaluated in this meeting and will decide about how to achieve sprint goal, create sprint backlog and select sprint goal.

3.1.1 Product Backlog

It consists of list of requirements for developing the project.

3.1.2 The Sprint Backlog

It deals with the prediction regarding the features in the next version of the project.

3.1.3 Advantages

The product owner, scrum master and the team will understand about the backlog.

3.2 The Daily scrum meeting

In this meeting, issues are identified quickly, in which team members make commitments to each other and to the scrum master. In this meeting three questions are discussed,

- What you completed yesterday?
- What's your today's plan?

- What obstacles are in the way to develop project?

3.2.1. Advantages

- Team members will try to complete their work and will have a good understanding of the work.
- Work will be monitored regularly.
- Questions are answered and Problems are addressed quickly.

3.3 The Sprint review meeting

Sprint review meeting is held at the end of each sprint. During this meeting the team shows what they accomplished during the sprint, new features demo can be given by the team. The Product Owner, The Scrum Master and the Team can participate in this meeting.

3.3.1 Advantages

- New features will be produced.
- Everyone will get idea about existing features used in project.

3.4 The Sprint retrospective meeting

It is the last meeting done after every sprint. The entire team, including both the Scrum Master and the product owner should participate.

3.4.1 Advantages

- What is working and is not working will be discussed.
- Valuable project will be delivered at the end.

4. PROCESSES THAT MAKE THE SCRUM MORE BENEFICIARY.

1. The Whole Team Was Made Responsible For Face-To-Face Communication

The responsibility for quality was shifted to the whole scrum members. Each of the different scrum roles is responsible for doing some form of testing. The product owner is the main and responsible person. We compare product owner with the teacher who creates different subject content, a lot subject wise experts to answer for the learner's question. The content must be designed subject wise and they can correlate with their team members to create 'N' number of text based content, video and audio content.

2. Keep The System Running All The Time

The only practical way to establish best communication is by running the system or any mobile all time. Learners can post the question related to any subject. Experts will receive the question through scrum role of members. Experts can answer the question either in text/video/audio data as per the learner's requirements.

3. Maintain The Communication At Any Time

So far Web based learning can be said to be "From anywhere we can learn anything at all time" but with time based face-to-face teaching. This issue can be resolved using scrum, by conducting different meetings (communication tool) like Sprint, Daily scrum, Sprint Review, Sprint Retrospective meetings. In which daily scrum meeting can be utilized in web based education to improve learning capabilities of learners with teachers/experts instructions regularly. As the technology grows, like face book, what's up, twitter, many members like teachers, software professionals, Non-IT professionals, students are having ID in the above mentioned technologies. This improvement can be implemented for web based education also.

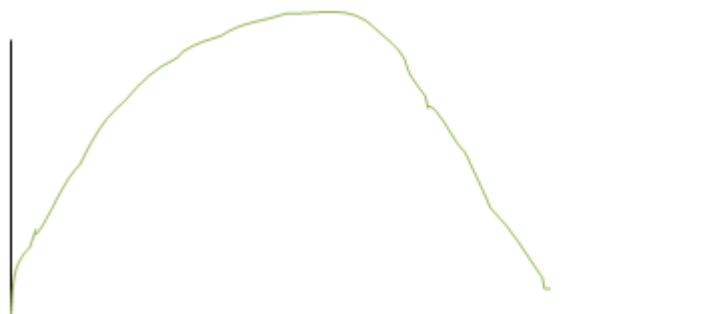


Figure 1 Proper Communication Leads to Increase software Quality



Figure 2 Improper Communication Leads to decrease Software Quality

5. ISSUES OF WEB-BASED EDUCATION

- The problem includes limited access to educational content.
- No depth information
- No proper training in complex subjects, achieving excellence in online education.
- No immediate response.
- Learners have to wait for long time to get response from the experts.

6. A PROPOSAL FOR USING SCRUM MEETINGS IN WEB-BASED EDUCATION - TO HANDLE THE ABOVE MENTIONED ISSUES

STEP 1: We can create a group in www.facebook.com (teachers, learners, software professionals, Govt. officials, learners etc). By creating this, we will get contact with different professionals. These details should be maintained separately by the product owner.

STEP 2: Create product backlog which collects requirements of learners/students (i.e) they can post the subject/topic which they would like to learn. These requirements will be analyzed by the product owner and the scrum master immediately and immediate response can be send to learner. If the requirement not processed then it is considered as backlog that should handled again by the scrum team.

STEP 3: The product owner, the team will select the subject based upon the priority and the same will be moved to the new folder. This information will be send to the concern teacher and the learner to make immediate communication.

STEP 4: Initially we can conduct sprint planning meeting using Gmail chat to store the communication, the team will assign tasks to both the teachers & learners with their delivery dates.

STEP 5: After this, we can conduct daily meeting using www.skype.com to connect few learners at a time to clarify their doubts, to get depth knowledge about the subject.

STEP 6: Apart from this, teachers can post text, audio, video based subject related contents through face book, what's app, twitter to keep constant communication with the learners.

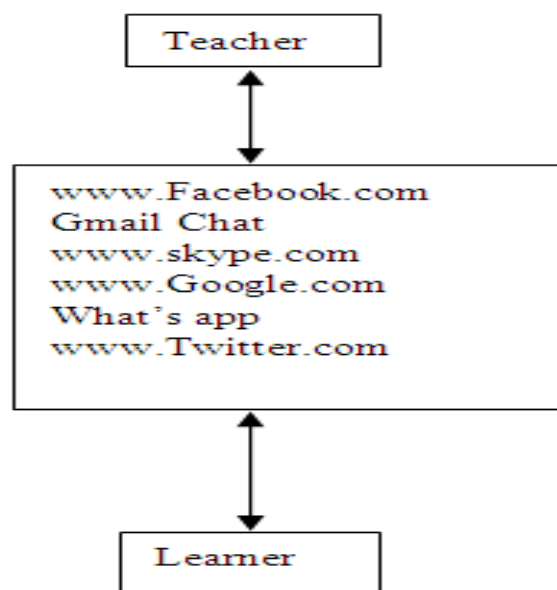


Figure 2 Outline For Proposal

6.1 Research Queries & Answers

1. Is there any possibility to connect all experts in their own busy schedule?

In this fast moving world, even though students learn many subjects through school/college. It is not enough to develop their practical knowledge, survey ensures after few years students will learn only through online to gain more knowledge. If the learners interact with many experts, the learners will receive different technical knowledge from different experts. Now-a-days, Is there anybody not using current technologies like face book, Skype, what's app, twitter etc? Almost all are having ID in the above mentioned sites. Instead of using all these for just creating friendship, why don't we make that group to involve in an education field.

Quality measure is important in all fields.

In web based education,

Quality measure = Level of communication + Good leadership (Experts) + All time availability of experts.

2. How to introduce scrum in web-based education?

We can assign the product owner (Group of Expert), the scrum master (Group of Expert) and the team (Any professionals) and the customers (learners) can be connected through face book, twitter, Gmail chat etc.

7. CONCLUSION

The Project started with a kick off meeting explaining the principles and the discipline of SCRUM. The Scrum concept is implemented in class room teaching by giving different topics to the students and spitted into team. Next day, students asked to communicate with each other about the topic. Surprisingly, received positive feedback from our students that they were comfortable in this way of teaching to develop their practical knowledge. Learning is worldwide; it is also needed IT field. If we are developing project/product, Imagine project leader in US, team leader in Chennai how they communicate all time? To improve that communication part through online we can arrange for meeting. In this wide world, many experts and learners are there, we need to connect them to learn more and to develop a lot. Research says, the best way to ensure that the web education meets the learner's needs and does the right thing is to have on-going conversations with the experts, the learners and between the developers. The most important of all is as most of the web based learning education was identified at the initial stage and the cost reduction also was high enough to implement the scrum to the learning based projects/education.

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