**Validation**:-Lesson learned and best practices

Team member:-

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The validation team has been working on implementing validation on various pages in the clubUML. The main goal of our team is to check ClubUML design so that it satisfies the intended use i.e software meeting requirements of the user. Our team had to do process of evaluating ClubUML during development process in order to determine whether it satisfies specified requirements.

**Subject Matter:-**

* Validation is used to ensure that the product actually meets the user's needs, and that the specifications were correct in the first place.
* Validation can be used to during start or end of the development stages so as to satisfy user needs.

Validation is most important part in software development process which helps user design software and rectifies errors developed in the software. Related to existing project entity, user was able to create his identity on software without any security. User was also able to upload the any diagram into software without having knowledge about any particular file to upload in software. Therefore criteria's were necessary so that accessibility for the user will be easier. The criteria’s like what should be user name or what should be password or which file to upload in the software address those requirements. Because this information is prompted to the user, user has more understanding about the software and his identity is secured.

There are a wide variety of decisions made during development process. Most of the focus of our team was providing correct validation and protect user identity. . Javascript was closely woven throughout the existing project, so the team had to learn more about the formatting and syntax of javascript, but also about how it interacts with html, css, and the java enterprise project via jsps. all the components played a key role in the process. Understanding the flow of the program was very essential, because all the files are linked together and it has to be facilitated with more complex codebase structure like centralized css. A learning curve also came up for a lot of the class in the use of git technologies. There were some areas were code was not working and we could validate those sections. But through github we had better success rate with integrating work and mitigating development risks.

**Process and Technologies:-**

* Lightweight processes help to speed development time, but this was done with communication and documentation .
* Agile techniques and collaboration were essential for creating good work.
* Chrome and Firefox were used for testing the jsp pages and eclipse to debug and testing the errors on the local jsp pages.

Software lifecycle that was discussed in software engineering class could be ideal was way for the long term project but it tend to make processes heavy weight. The processes gave us exposure to the project and let us explore new possibilities. Biggest advantage for us was productivity . Our team was able to produce the result in stipulated amount of time. Agile development played a crucial role for our team. Agile organized our schedule clearly and showed us the progress we made though out the semester. Semester of four months is very short and therefore team has to be well organized in order to achieve this task. With the help of agile roles were assigned to each team member and all the roles were successfully done by team members with good commitments. Agile also provided us logical stops and break up in the work so that work was easily manageable. Good communication was very important because it help binds the team together and it leads more collaborative environment. We increase our number of meeting which helped us to share our expertise, integrate our work and move one step closer to our goals. Informal meeting via phone and informal documents was also done to track the progress of the team members. It's very difficult to maintain up to date documentation because it's quite different from the exisitng codebase. But a well up to date documentation help you organized in your work and it will also help the future team to continue the work form where we left off.

Debugging has been key component of our team. Whatever we implemented in the codebase first it has to be tested whether it's working or not. Codebase has been relatively complex and our team had to add some new code and also debug those code. Our team used Eclipse as a debugging tool for codebase. Eclipse was the tool that provided us with localized perspective of the code and it also provided quick trial and error method to those codes which our team were uncertain about it. Eclipse also provided us functionality of java classes so that our team member could review the step by step and have clear vision of about working of the codebase. Chrome and Firefox were used for debugging process and understanding the key component of the HTML,CSS and javascript.