

November 21, 2016



CMPE 202 - TEAM PROJECT - WEEK #8

TEAM 8: ILLUSION

Project Group #8

Team Illusion

Name	Section	Github Id
Ashna Sebastian	04	AshnaSebastian
Neha Kumar	04	nehasingh2102
Rakesh Datta	04	rakeshdatta
Vaishampayan Reddy Pathuri	03	vaisham92
Vimal Muraleedharan Nair	03	vimalnair88

Team's GitHub Repository:

<https://github.com/cmpe202-team8/courseproject>

Team's Task Board:

<https://waffle.io/cmpe202-team8/courseproject>

Team's Sprint Burndown Google Sheet:

<https://docs.google.com/spreadsheets/d/1hWOQLq6E-2FrsQg6gd6JcvweN0vdCQ-lkXzAxPu0m7w/edit - gid=0>

Contents

Journal Update from Team Members	3
1. Ashna Sebastian	4
2. Neha Kumar	5
3. Rakesh Datta	5
4. Vaishampayan Reddy Pathuri	6
5. Vimal Muraleedharan Nair.....	7

Journal Update from Team Members

1. Ashna Sebastian

Core Value: Communication

This is the last week for Class Project. Communication has played an important role in improving the efficiency of the team. The primary way of communication is by having meetings where we can openly express our ideas and come to a single opinion. Communication plays a vital role in building respect and trust among team members and it creates a platform to resolve the differences in our opinions or for clearing our doubts or even for sharing knowledge. Our team decided to have two meetings every week for status discussion and another meeting for demo and planning for next week. During the first 4 weeks we followed Kanban and now we are following Scrum. The Sprint Planning meeting, the Daily Scrum meeting, Sprint review meeting and the Sprint Retrospective meeting are all mandatory in a Scrum.

This week the first meeting was conducted on Tuesday and the second meeting on Thursday. During the first meeting we went through the initial requirement list we had made during the first two weeks. This helped us in understanding some of the minor requirements which we missed. During the second meeting we integrated the rest services and the angular scripts and conducted integration testing. During testing we identified a few bugs. Some of the bugs required code fixing in node js part and some required code fixing in angular js. We also made sure that all the design patterns are implemented. To be specific, me and Vaish completed the html pages for the online binary learning game. We also wrote the angular js scripts for all the html pages which completed all the AJAX calls to the backend server. Some of the bugs which were identified during integration testing was resolved by us. One issue was that the user profile data which was send from backend REST service as a json had different parameter names which we expected. After discussion we agreed that it should be corrected from front-end as the correction in back end would be complicated. Also during the meeting many suggestions regarding the pages we created were given by the other team members some of which we will be implementing. Overall we are following the plan we initially created and we can complete the project in the next week.

2. Neha Kumar

Core Value: Simplicity

This week we met to integrate all the work we have done. This was pretty busy week, since we had all the integration to do and complete the documentation to be submitted as part of deliverable.

Like always, we distributed the documentation work and started preparing presentation to be showed during project demo. I have worked on implementing the class diagram which mostly invoked the backend code. Creating a class diagram gives an overview of the complete project. It can be shown to anyone, and while looking at it anyone can get an idea of the project and how task is segregated in different classes.

Design pattern used was:

1. Factory – For creating different services, we have different services like login, binary test, scoreboard and depending on the UI click, service, or particular class object is created
2. Observer: This was required to be used for Scoreboard, whenever a user submits his Binary Test, the observer module keeps checking if there is new score submitted and if there is any new score, it updates the scoreboard, if there is any change in order of scoreboard.

After completing the integration and documentation, we have come to an end of the project. In the coming weeks, we have decided to teach Binary learning using our game to non-Computer Science background people and also to the kids in the library/nearby schools. This will not only prepare us for the project demo but also if there are any changes, we can also take care of that before our actual presentation.

XP core value: Simplicity

By following the XP core value Simplicity, we have not only completed the project on time but have also made sure that we have also met all the client requirements. We have successfully created the game for Binary Learning as part of CS Unplugged activities. I hope that we will be able to make it to the next level during presentation.

3. Rakesh Datta

This week I have finished the development of the single sign on module. It consists of the below features.

1. The home page of the webapp has the login button. user may choose to login here and then it goes to step 4.
2. User does not login and selects a multi-player game. user is prompted for a page
3. which says 'login or continue as a guest'. If user chooses the option of login, he is prompted to step 4.

4. Guest login creates a dummy user and uses this login to log in the score temporarily. This score is not persistent.
5. When user decides to login a page with certain options are rendered. It has a login (with user name and password) text field and a Sign Up (with email, password, confirm password, first name and last name) portion. It also has a 'login with google, login with Facebook' option at the lower side of the page, which invokes single sign-on. This will allow the user avoid creating a new login credential, instead use an existing Gmail or Facebook credential.

To design and implement this whole feature I have used node.js, passport.js, express.js and bootstrap. The node module created in last iteration, called game login, is improved. And more features are integrated to the module. All the different types of login strategies, vis-a-vis local login, Facebook login and Gmail login are enabled through this module. In case local login is used mongo dB is used to store the credentials as well as associated historical score statistics. In case other identity verifiers like google or Facebook is used, the user name is stored in the mongo dB and also the associated historical score statistics.

XP Value (Feedback):

=====

Last week we have continuously worked together. Since this is the final week of the project, we have decided to sit together and finish rest of the project. As deadlines were approaching and there are lots to integrate, collaborate and test, we met every day and worked together. The contract that all the team member agreed to is everybody will show a working demo at the end of the day and while working everybody will continuously seek suggestion and feedbacks from the other team-mates. At the end of the day all the team-mates have got feedbacks about what went well and what went wrong. This viewpoint helped all the members plan their next day much better. This was week we noticed the highest amount of delivery just because of this continuous review and feedback model. This made sure that man-hours are not wasted and all the team members are on the right track. We learned how the mechanism of sitting together as a team and working together increases the delivery manifold. Continuous review and feedback is key to the fast delivery. By adopting this mechanism in this week we are able to increase our confidence, reduce confusion, increase the deliverables and produce a quality product. According to me this is a great exhibition of the XP core value 'feedback'.

4. Vaishampayan Reddy Pathuri

Core Value: Courage

This week is the final week for all of us. We had an excellent stretch of eight weeks where we had a lot of fruitful discussions, some mostly based on R&D for the project while some were based on some design decisions. Overall it was a lot helpful to follow the agile methodologies and XP core values in our discussions to have a good understanding and productive work.

This week was the last week and hence we were spending a lot of time on integrating all the work done and doing the testing. A bunch of test cases were generated by me and Vimal. We enumerated all the possibilities and came up with an exhaustive list of test cases. These cover almost all aspects of our system. Also, during the test case execution we faced bugs and it was left to us whether we will continue with the bug fix or not. Thus we had discussions over this as we were about to ship a product. So our team showed a lot of courage during these meetings and helped us well. We had a good number of bugs that we fixed as a part of our bug fixing. The game flow was flawless and we are hopeful of winning the prize and making this an open source contribution by winning the MIT license prize. Also, we have implemented the design patterns as a part of one design pattern for one student rule. We had a good understanding of all the design patterns and the different scenarios that can be addressed or the more number of features that can be added for future works. The front end part was done by me and Ashna where we did the HTMLs, JS - angularJs controllers, Ajax libraries, JQuery Effects etc. The backend part was done by Neha, Vimal and Rakesh. They worked on various modules like Database layer, Authentication, Rest apis, single sign on etc. Overall we are happy with our progress and work. We have deployed our application on Heroku so we all were able to see our changes real time. These changes helped all of us know at what state we were and gauge our progress every day of the week. Also if there are any broken builds we were intimated immediately as the Heroku app would not work.

5. Vimal Muraleedharan Nair

Core value: See the Whole

We have almost completed the integration testing of our product and we are almost working on the beautification of our product. There are lot of small things that we have to work on the coming weeks before we prepare for the final demo. Session handling showed some issues intermittently which needs to be looked into. The session gets dropped in a few instances which has to be looked into. Also we need to prepare our self for the demo and also the presentation for the non CS batch of students. We have identified the list of students who are going to use our product as part of the demo. There have been some issues in the fetching of hall of fame results which has also to be looked into. Apart from that almost all the functionalities are working fine and we completed our first set of integration testing. There are few more changes that will be committed by the UI team as well as by the backend team, after which a final round of integration testing has to be done. Once the integration is over we would be moving the executable to cloud. We are also planning to have some real users registered to get the real feel of the game.

We are also planning to deploy the solution on cloud which would be a scalable solution. So all the activities involved I felt that we foresee all the issues well ahead of its occurrence and worked on the issues in advance so that it won't appear any time in future.

The database is also setup in cloud, which is called Mongo labs which is scalable option of storing data in cloud. Apart from SSO, all the login related services are hitting the Mlabs service which is hosted at the mongo cloud. This service is highly scalable and elastic so that we can scale it as and when needed. When at some future time when we want the application to be used by lot of users, we should not restrict our services in way it restricts scalability. So we took care of that concern in our design. This way we can make sure that the data stored as part of our application is highly available and scalable. This is very good from a design point of view. Throughout the week I felt that we are foreseeing all the problems before they even arise and try to fix it so that it's not a problem in future. So in this I would say "See the whole" core value is retained to its best during our agile development process.