SAN JOSÉ STATE UNIVERSITY

CMPE 202 - Team Project

Project Group # 3

Team Name : Magicians

Week #2

CS Unplugged Activity : Error Detection

Team Member Name	Section	GitHub ID
Miao Shi	3	MiaoS
Chen Shi	3	Chen202
Carlos Martinez	4	carlo379
Jayam Malviya	4	Jayam-Malviya
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GitHub Repository	**https://github.com/carlo379/Magicians**
Task Board	**https://waffle.io/carlo379/Magicians**
Kanban CFD Google Sheet:	https://drive.google.com/open?id=1K3FaFcE2PIlkH0KE9A4LqHVsYzxT27rZh8WfAZvw-gU

Team member: Miao Shi

XP core value: Communication

In the passing week, we had a clear scope of our project. In our weekly meeting, we broke down the error detection game into five major classes and assigned them to each members. After two-week team work, the powder of communication is really showed up. All members understood the procedure and concept of the game. However, none of us was able to think like a game designer. Our first story line is lack of the interaction with players. Luckily, in the meeting, one member pointed out that if we followed that idea, the final project would look like a video that made from program instead of the playful, interesting game that can attract kids. Also each member has his/her own game implementation. One may miss some features and other may think too much. During the face-to-face communication, once we presented our ideas, the feedback came immediately. By drawing diagrams, writing down the steps together and having a heated discussion, the final design came up that we all pleased with.

In next week, our team will start to integrate classes. Since we already defined the functions of each class well in the last meeting, I think there will be less conflict between classes. There are some communication problems in our team too. No team member notifies others when he/she do commit in GitHub, and comments are complete in the code. So far, we worked on individual classes. It didn't create anything problems. But we will focus that, making sure that all members always get the latest version.

Team member: Chen Shi

XP core value: Courage

In week 2, we completed most of the tasks assigned to us from last meeting, which is a really good progressing. We finished the first versions of the classes that we planned: Grid, Card, Scenario, and Magician in Greenfoot. We have gotten our feet wet with great courage!

In our weekly meeting, we also made a class diagram, right after we learned UML in class. Like in the first week, we were not afraid to try new things right away and to use them for our project! We setted up the attributes and operations for each class. We connected classes with appropriate relationships together. It was fun to see what we just learned from the slides help us in the real work so quickly. Class diagram is an excellent tool for team members to see the logic of the whole project clearly, to split the workload and to code.

I was assigned to work on the Scenario class and the goal is to make a curtain to do open and close operations. The curtain will hide the cards in our game to do some trick. I have to say this is a fun part to work on. My next step is to make a button to operate this open/close movement. I think I have the courage to do this part well!

Team members contributed their ideas eagerly, which was so impressive. We were full of courage to express ourselves, good ideas, or bad ideas, or anything, since everything is helpful when learning! The outcome of the meeting was impressive as well. Everything went efficiently and we got our new tasks split and assigned before we left the library.

It was a great week of teamwork.

Team Member: Carlos Martinez

XP core value: Eliminate Waste

On this week we started by establishing the user requirements of our final project "Error Detection". Using Waffle IO we created these requirements and added them to the Backlog section. On the backlog, we decided to create items for User Stories and Class Diagrams and also we defined what were the main objects in our game. These objects are: Grid Class, Magician Class, Scenario, and Card Class. The team also worked on developing the class diagram to define attributes and functions of each class. This diagram helped to eliminate waste by giving each team member an idea of how classes interact and relate to each other. From this class diagram, each developer can continue developing their classes and ensure cohesion between objects.

Using the class diagram I started working on the Grid class. This class is in charge of creating a grid where the cards will be placed for the magic trick by passing an integer parameter (int). This will establish the X side size and the Y side size of the grid and create an array of objects (Card) to hold the different cards of the grid. Another function of the grid is to place card along the established area in aligned positions relative to one another. For this, the Grid class has a function to precisely place a card in a position specified by x and y location.

These classes will be pushed to the Github repository where other members can clone and use for their development. During the development I started using the Astha application for drawing class diagrams, and used BlueJ and Greenfoot to develop the first version of my class. These tools required some time to get used to, but on the long run, they will help speed up development and eliminate waste by giving developers a clear view of the design.

Team Member : Jayam Malviya
XP core value : Simplicity

In this second week we have made good progress as a team. Initially after deciding upon the activity, we brainstormed together about the actual game. I spent time in understanding the real crux (the magic) that has to be performed in order to detect the flipped card.

I was amazed to learn that the game is inspired from actual error detection mechanism. I even created a small program myself to implement the error detection mechanism to find a faulty bit in the set of bytes that are sent across the network with the help of a checksum packet that can be attached with the actual data packet. This helped in gaining better understanding of error detection mechanism & was equally fruitful in team meeting, when I had to explain & clarify the error detection mechanism to the team.

I explained to the team how the calculating and filing the additional row & column would later help us precisely pinpoint the flipped card. The result of the meeting was great as every team member left with clear idea of the problem statement in their mind.

The second meeting was very interesting as we met right after the UML class and were excited to pin down our class diagrams. This meeting turned out to be very knowledge crunching as we discussed on each class, each property, each method and each relationship among the classes. It was very learning intense meeting as we explored and corrected our diagrams several times to finally achieve a correct well fitting class diagram. IN particular it was nice to employ the techniques & notes were very helpful while doing the relationship part of the diagram. In the end our class diagram was simple as we took the approach to build it gradually by answering very simple questions. In this week I had taken the task to add the filling part of the grid class, with that completed. We will combine & see how our code works & pick the next tasks.

Team Member: Prateek Sharma

XP core value: Feedback

In meeting on last sunday, we started with the brainstorming session on our topic. We created the user stories and I made sure we have input from everyone so that we all have a common understanding. This meeting laid the foundation for our project as we planned our target audience and how should we implement a game for them.

During this week, I saw various videos where magicians had demonstrated this trick. Kids between the age of 8-12 years being our audience, we planned to mix the computer game with the essence of our interaction with kids too.

This week's meeting was pretty intriguing as we started with suggestions from each other about any modifications in the user stories. We found our user stories to be covering most of the aspects. Then we discussed about the classes that are required for the game. Based on the feedback from Miao, we modified our class structure by adding a subclass. We synthesized feedback from each of us and did put the UML Class diagram on the paper. I have got the class Magicians who is responsible for the real trick. Magician class will have a function that will detect the anomaly and add extra row and column of cards accordingly. While the trick is happening one more class Scenario will hide the grid, do the shuffling that Magicians asks it to do and show the grid again.

This week we have the agenda of creating algorithms for the functionalities as assigned to us. We will be talking about the progress and modifications that we think is required in the coming meeting. We will also model our ideas using various UML diagrams. I have planned to include small sessions at the end of our meetings where we discuss if any member wants some attribute of other team member to be improved.