Team: The Missing Semicolons

Project: Gamification

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Class: Computer Science 423

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Beta Prototype Updates:

Updates to the project functionality, overall system, and system components

During the second semester we plan to update project functionality by adding two extra games into the system to appeal to a wider number of player styles as well as add extra features to make the game more accessible and fun to play in general.

The two new games that are being added in will appeal to players who like action packed games (Daredevil player type) and to people who like puzzle games (Mastermind player type), as the puzzle game we currently support (Sudoku) is not very robust. Implementing these two games to interact with the current “mother game” will take some work making sure there is cohesion between the existing components of our game system. To elaborate, we will need to make sure that the server will be able to properly save progress in the new games, as well as make sure that the amount of progress the player makes by playing the two new games is balanced with the existing ones.

The next part of our team’s plans for the second semester of the project is to make sure that the game is as fun to play as possible for students, as well as accessible. We have decided at the start of this semester that if the students do not have fun playing the games, and their interest in playing is not retained, there will be no way that to prove success of the Chris Cain’s overall Gamification project. We will maintain a list of features that will need to be added (as well as bugs that will need to be fixed) at all times throughout the semester, adding to it when we get feedback from playtesting. Every week, members of our group will work to add these new features to the game and we will review the new features at our weekly meetings to evaluate if they were implemented well and achieve the purpose of making the game more fun to play.

As far as accessibility to the game is concerned, another goal of this semester for our group is to make a web version of our game that students will be able to access and play online, so that they are not forced to download a standalone version. We also plan on making it easier for users to create their account, and report bugs. This will help more players access the game and will give us more feedback to work with as we implement new features.

All of our system components will be staying the same, however we will need to monitor our server to make sure it continues to work properly as we add new features as well as our database. There were a few hiccups last year that caused the login server to go down, so it would be nice to find a way to mitigate that problem by adding some more functionality to the server as the scale of our project increases, but this is a lower priority for our team this semester, as we currently have a workaround in place in case the server goes down again.

Test and validation plans for the Beta Prototype

To test our beta prototype, and the progress we make this semester, we will have to have playtesters for our game. We are planning on having two different phases of playtesting, one on a smaller scale, and one on a larger scale.

So far during this semester our group has made a “testing” build of our game that allows for extensive testing that would not be possible playing the game as it is intended. The point of

this is to test the boundary cases for our system, to make sure it can handle everything we throw at it. By basically adding cheat commands to our game for testing purposes, it will allow us to test new content and more easily balance the game as we add more content to it.

To validate the results of the playtesting, we will come back to our select group of play testers after changes are made, and get feedback via survey.

Eventually, when we have a version of the game that is more feature-complete (such as having both new mini-games implemented), we will release it into classrooms (potentially Chris Cain's class in Montana) and get feedback from students. This version will reflect the final vision of the game (a true beta test), and will not feature the cheat codes used in our smaller playtesting group. The way in which we receive the feedback at this point of the process is not yet finalized, but a thought was to have an in-game feedback system, so students can easily use it to report bugs/give feedback, without having to go too far out of their way.

Test Data Collection/Generation Plans

Once we get feedback from the playtesting, as mentioned above, we will implement it into our game. Every week we will review suggestions by our play testers and evaluate the priority of implementing these suggestions. As a whole, our group will need to have a deep understanding of how our system works in order to efficiently prioritize the tasks so that we can make sure the game is as fun to play for the user as possible.

In our initial testing phase, the collection of this feedback will be solely up to the members of the group. As soon as we get feedback from play testers (or think of something ourselves) we will add it to our current Google Doc so that everyone can see the features that need to be added. At our weekly meetings we will prioritize the feedback currently in the aforementioned Google Doc, and create a "queue" that we will begin working on for the next week.

Once our testing gets to the second phase (student playtesters), we are hoping to have a more automated feedback collection system that our team can view whenever we please. Even though the idea for this feedback system is not entirely fleshed out yet, we will assess the data the same way we did in the first phase, and rank the priority of what is reported back at the discretion of our design team.

Scenarios for Testing and Validation

Our testing and validation of testing loop is pretty straightforward: we will get feedback from a group of playtesters, and then implement the feedback based on a priority decided on by the our team. Feedback will hopefully be in the form of surveys that we can analyze on a weekly basis.

Generally, we plan to prioritize bug fixes and things that prevent players from playing the game as we intend first, and then prioritize features. We feel these should be prioritized first because oftentimes when a player encounters a frustrating bug in their gameplay, they will want to stop immediately. To retain more players, fixing bugs first is a must.

The way features will be prioritized are as follows: We will prioritize a feature first if we decide that by implementing it, it will improve the player's experience and make them want to play more, as this is the primary goal of the project this semester. Features that increase the user's experience, but in a less meaningful way (such as adding new artwork, sound effects, etc.) will be prioritized lower, because they are easier to implement than gameplay features, and they have less impact overall on the player's experience.

Plans for Analysis and Visualization (Presentation) of Test Results

Here we will describe how to analyze our final version of the game for the semester and how we will present the results…

At the end of the semester the team plans to take yet another survey to ask our play testers what features of the game they enjoyed the most and what features they enjoyed the least. Since the survey will be multiple choice and rated we will take the results and see which games and features appealed more to play tester and which ones didn't. This will hopefully allow teams in the future to know what to focus on in their time developing and updating this project.

Our team will also do some internal analysis of the state of them. We would like to reflect on what changes and updates were made on the game that improved its functionality or made it less enjoyable for players. We will make sure to add or remove features that we felt made the game less enjoyable for players and make note of what things to improve on for other teams who may take on this project.

Summary of Work Remaining This Semester (Gantt Chart)

Gamification

PROJECT TITLE	Gamification	**TEAM**	Missing Semicolon
TEAM MENTOR	Chris Cain	**DATE**	8/19/18

WBS NUMBER	TASK TITLE	TASK OWNER	START DATE	DUE DATE	PCT OF TASK COMPLETE
1	**Starting Out/Analysis**				
1.1	Project Update Presentation	group	8/16/18	8/20/18	100%
1.2	First Team Meeting/Regrouping	group	8/20/18	8/20/18	100%
1.3	Document Current Bugs	group	8/20/18	8/31/18	100%
1.4	Weekly Meetings	group	8/20/18	12/7/18	8%
1.5	Feature Gathering	group	8/20/18	12/7/18	10%
2	**Design**				
2.1	Design Minigame Integration into Mongo	Nigel, Stefon, Brendan	9/3/18	9/7/18	0%
3	**Develop**				
3.1	Daredevil Game Development (stand alone)	Stefon	9/3/18	10/8/18	100%
3.2	Mastermind Game Development (stand alone)	Brendan	9/3/18	10/8/18	50%
3.3	Space Game Development	Kevin	9/3/18	10/8/18	0%
3.4	RPG Game Development	Nigel	9/3/18	10/8/18	0%
3.5	Balancing	Ash	9/3/18	12/3/18	0%
3.6	Minigame Integration	group	10/15/18	10/29/18	25%
3.7	Online Deployment	group	10/29/18	11/5/18	0%
4	**Testing**				
4.1	Unit Testing (play testers)	play testers and group	9/3/18	10/8/18	0%
4.2	Integration Testing (play tes	play testers and group	10/29/18	11/12/18	0%