Project Plan: Dbate

Prepared By: Red Team

Group Members:

Christian Flores-Rogel 013924454 (Team Leader)
Deivis Leung Liang 014110497
Luis Meza 014325959
Keanna Mae Vitug 014699514
John Cayton 014108690

Professor: Vatanak Vong

Date: March 25, 2019

Table of Contents

Introduction

The purpose of this document is to provide detailed information and define goals that our team aims to achieve over the course of this project. In this document, our team has provided the estimated time and costs involved with this project, as well as an overview of potential risks that can affect our end product. This document is intended primarily for the development team.

The overall goal of the development team is to create a single page application called DBate that provides a platform for users to be able to develop, improve, and exercise their debating skills in an online environment. DBate will allow users to debate on randomly selected prompts in a moderated setting using a chat system that implements game-like features and functionalities. This includes the use of debate-specific roles, such as judge and debater.

Project Scope

The initial version of our web application will be a single page application that uses Web API. This version will support the latest version of Google Chrome, which includes Version 68.0 and 69.0. Our application will only be in the English language and available exclusively in North America, specifically Canada, Mexico, and the United States, for its initial release.

The role functionalities for our application will include general users, administrators, and system administrators. General users have access to the basic functionalities of the web app. In addition to inheriting rights from a general user, an administrator has access to various user management functionalities, the usage analysis dashboard, and other functionalities; whereas, a system administrator inherits the rights of an administrator and has access to all functionalities.

Our security consists of user authentication, protection of user passwords, and password resets that require a user to answer three security questions created during registration. The IP ranges in our application will include those covering the United States (1.22.56.0 to 223.197.44.239), Canada (2.17.218.0 to 217.221.47.95), and Mexico (2.20.70.0 to 216.251.76.254).

Resources

Project Team

Christian Flores-Rogel

Roles

- Team Leader: As the team leader, Christian will speak on behalf of the team to the client while also making sure that everyone is on track with their tasks. As the team leader, Christian will make sure that everything is done correctly.
- Project Manager: As the project manager, Christian will make sure that the project will be delivered on time, on budget, while also meeting all the specifications needed so the client can be satisfied with the web app.
- Developer: As one of the developers in the team, Christian will aid in implementing the functionalities needed so the web app an function properly. As a developer he will focus more the back-end side of the app.

Skills

- HTML
- CSS
- C# in .NET Framework

John Cayton

Roles

- Lead Developer: As a lead developer, John will be the one in charge in developing the correct solution for the functionalities needed for the web app. He will also work closely with the project manager in order to help in finishing the project on time.

Skills

- HTML
- CSS
- C# in .NET Framework

Luis Meza

Roles

- Developer: As one of the developers in the team, Luis will help in programming the functionalities needed so the app can function properly. His main focus will be to work on the back end side of the app.
- Business Analyst: As a business Analyst, Luis will be the one in charge in converting the clients needs and wants into the requirements needed for the web app.

Skills

- HTML
- CSS
- Java

Deivis Leung Liang

Roles

- Developer: As one of the developers in the team, Deivis will help in programming the functionalities needed for the web app. Although he will aid in every aspect of the development, he will focus more on the front end side of development.
- QA: As one of the main QA's in the team, Deivis will make sure that the app is working with minimal errors by testing the app through methods such as unit testing.

Skills

- HTML
- CSS
- C# in .NET Framework

Keanna Mae Vitug

Roles

- Developer: As one of the developers in the team. Kia will help in programming the functionalities needed for the web app. Although she will aid in every aspect of the development, she will focus more on the front end side of development.
- QA: As one of the QA's in the team, Kia will make sure that the app is working with minimal errors by testing the app troughly.

Skills

- HTML
- CSS
- Java

Budget

Resource	Cost	Purpose
Cloud	$0 - $60.00	Place where the web app will be deployed. It is used so it can be online and receive HTTP requests so the web app can run. Our Choice is Azure which is free for one year if service limits aren't surpassed.
Developers	$0.00	Developers will be the ones in programming the web app. Since we are the developers, the cost will be minimal.
Miscellaneous	$0-$100	Costs that are minor and not related to those listed above. An example of this would be printing.
Total Cost: $0.00 - $210.00		

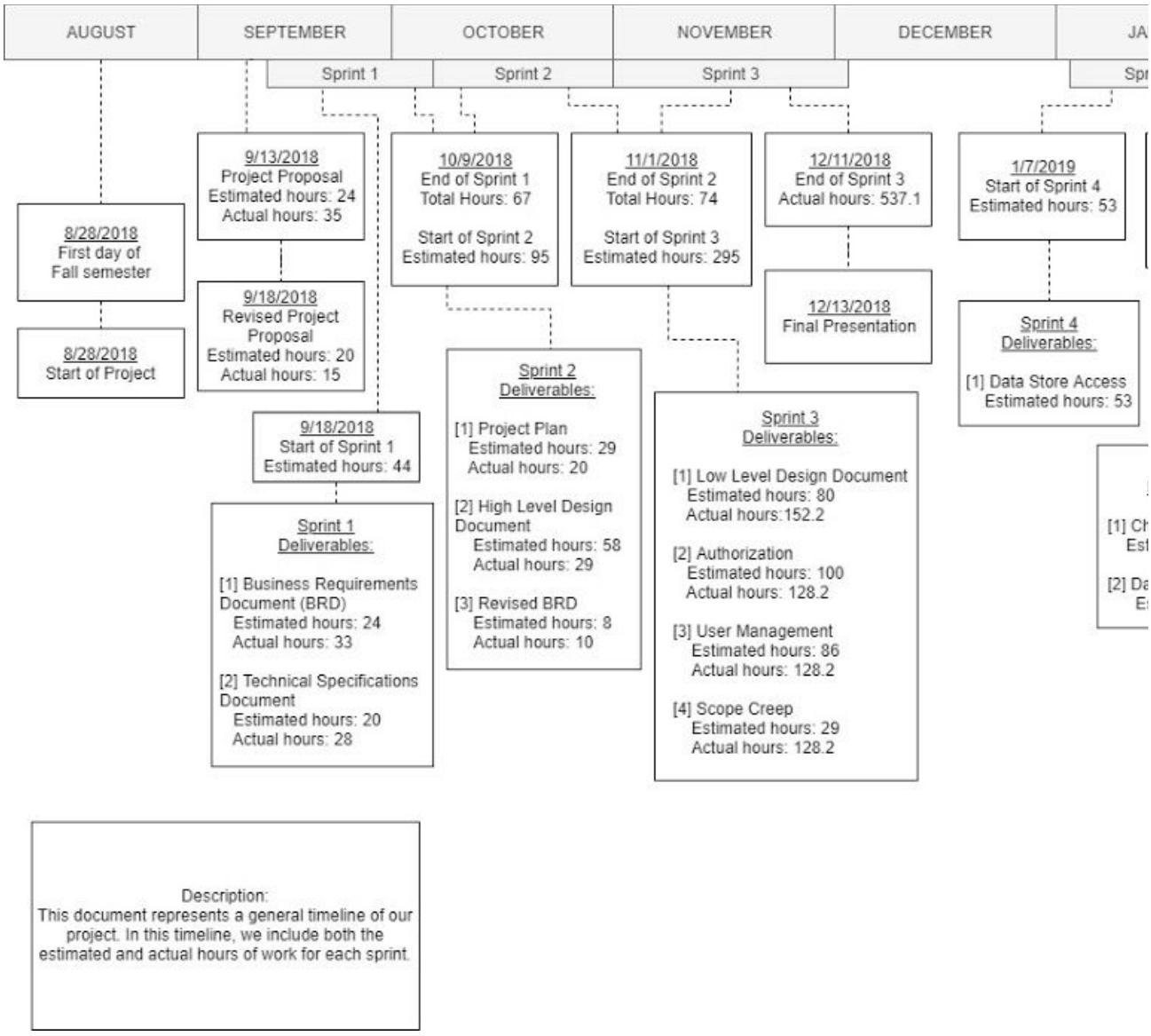
Time Cost Estimates

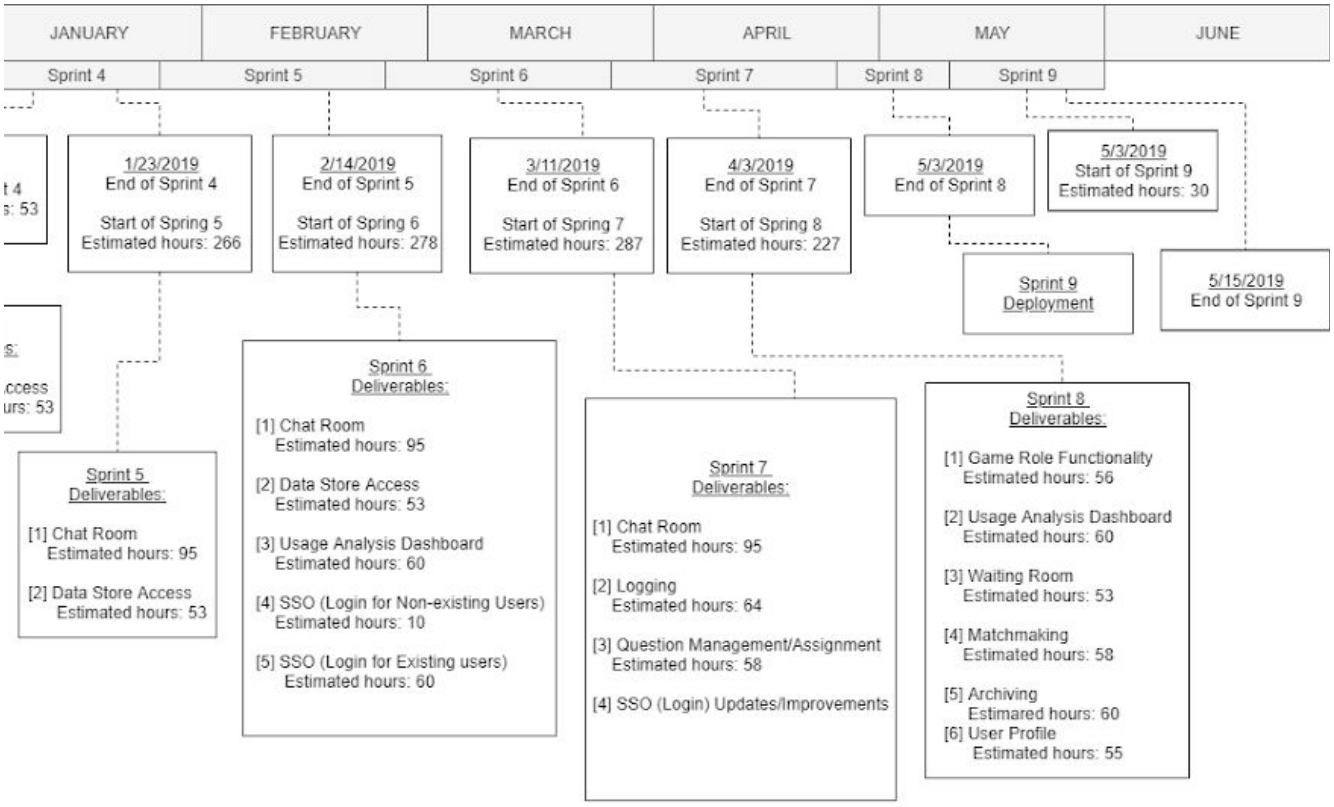
Deliverable	Time Cost Total	Design Hours	Implementation Hours	Testing Hours	Description
Project Plan	29 hrs	N/A	N/A	N/A	Document that details the development stage by providing a timeline, resources, and cost
High Level Design Document	58 hrs	50	N/A	N/A	Document of high level details of the project
Test Plan	42 hrs	10	N/A	N/A	Document of solution validation which includes pass/fail cases of the web app
User Management	86 hrs	15	49	22	Feature that allows administrators to control what users have access to in the app
Data Store Access	53 hrs	15	28	10	Feature that gives users the ability to access or retrieve data stored within the database or other repositories
User Access Control	71 hrs	22	37	12	Feature that restricts features that the users can access and change within the app
Scope Creep (Pwned)	29	10	15	4	Feature that uses Troy Hunt's Pwned Password to check if a password has been breached
Logging	64 hrs	10	42	12	Feature that records warnings, errors
Archiving	64	10	42	12	Storage of data

Usage Analysis Dashboard	60 hrs	15	33	12	Feature that displays statistics including when and where it was accessed and user activity
User Profile	55 hrs	15	30	10	Feature that displays User info and stats
Documentation	54 hrs	N/A	N/A	N/A	Documentation of our code as well as a user manual, installation manual, and other requirements of the document
Chat Room	95 hrs	15	65	15	Feature where teams debate on a topic using a live chat system
Game Role Functionality	56 hrs	10	31	15	Feature that defines the roles that each user in a debate will be responsible for
Waiting Room	53 hrs	10	28	15	Feature where users wait for the debate to start and allows the host to start the debate earlier if the minimum number of users is met.
Matchmaking	58 hrs	10	33	15	Feature that allows users to join or create a debate
Questions Management/ Assignment	43 hrs	10	23	10	Feature that assigns random questions to chat rooms
SSO Login - existing users	75 hrs	17	45	12	Feature that will allow existing users to login

Total Hours: 1045 hrs

Timeline I


AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER
JA
Sprint 1
Sprint 2
Sprint 3
Spr
8/28/2018
First day of Fall semester
8/28/2018
Start of Project
9/13/2018
Project Proposal
Estimated hours: 24
Actual hours: 35
9/18/2018
Revised Project Proposal
Estimated hours: 20
Actual hours: 15
9/18/2018
Start of Sprint 1
Estimated hours: 44
Sprint 1 Deliverables:
[1] Business Requirements Document (BRD)
Estimated hours: 24
Actual hours: 33
[2] Technical Specifications Document
Estimated hours: 20
Actual hours: 28
10/9/2018
End of Sprint 1
Total Hours: 67
Start of Sprint 2
Estimated hours: 95
Sprint 2 Deliverables:
[1] Project Plan
Estimated hours: 29
Actual hours: 20
[2] High Level Design Document
Estimated hours: 58
Actual hours: 29
[3] Revised BRD
Estimated hours: 8
Actual hours: 10
11/1/2018
End of Sprint 2
Total Hours: 74
Start of Sprint 3
Estimated hours: 295
Sprint 3 Deliverables:
[1] Low Level Design Document
Estimated hours: 80
Actual hours:152.2
[2] Authorization
Estimated hours: 100
Actual hours: 128.2
[3] User Management
Estimated hours: 86
Actual hours: 128.2
[4] Scope Creep
Estimated hours: 29
Actual hours: 128.2
12/11/2018
End of Sprint 3
Actual hours: 537.1
12/13/2018
Final Presentation
1/7/2019
Start of Sprint 4
Estimated hours: 53
Sprint 4 Deliverables:
[1] Data Store Access
Estimated hours: 53
Description:
This document represents a general timeline of our project. In this timeline, we include both the estimated and actual hours of work for each sprint.

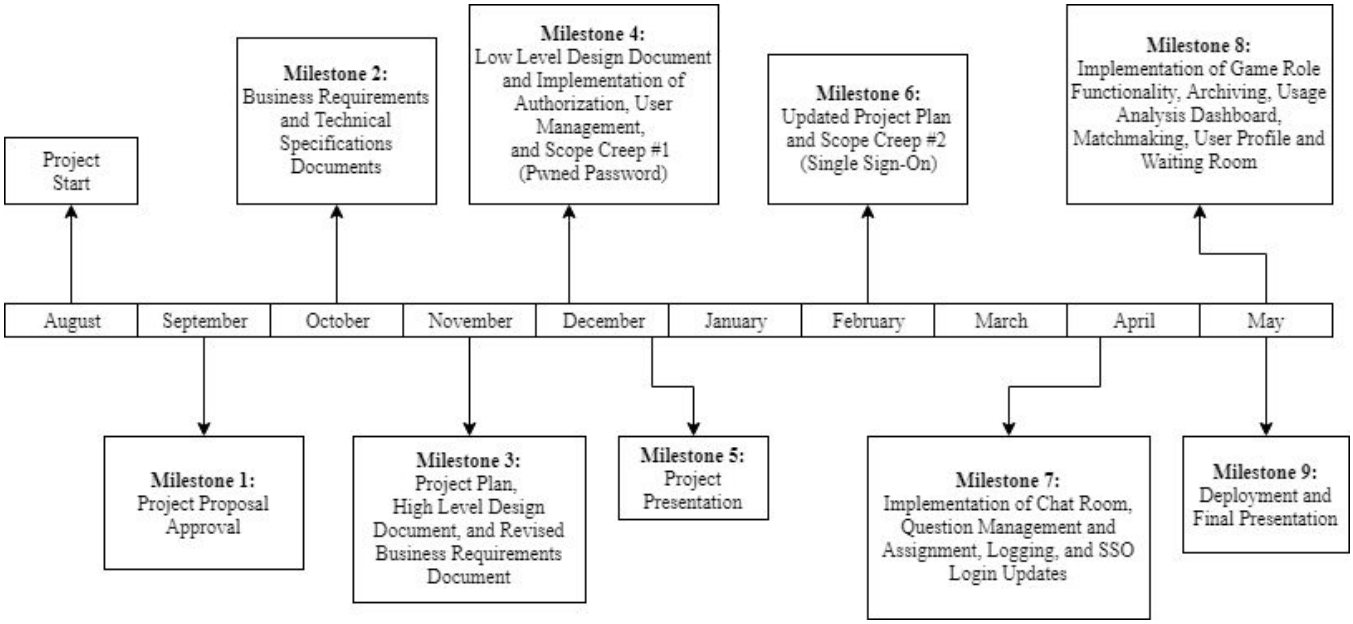

JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
Sprint 4
Sprint 5
Sprint 6
Sprint 7
Sprint 8
Sprint 9
1/23/2019
End of Sprint 4
Start of Spring 5
Estimated hours: 266
2/14/2019
End of Sprint 5
Start of Spring 6
Estimated hours: 278
3/11/2019
End of Sprint 6
Start of Spring 7
Estimated hours: 287
4/3/2019
End of Sprint 7
Start of Spring 8
Estimated hours: 227
5/3/2019
End of Sprint 8
5/3/2019
Start of Sprint 9
Estimated hours: 30
Sprint 9
Deployment
5/15/2019
End of Sprint 9
Sprint 5
Deliverables:
[1] Chat Room
Estimated hours: 95
[2] Data Store Access
Estimated hours: 53
Sprint 6
Deliverables:
[1] Chat Room
Estimated hours: 95
[2] Data Store Access
Estimated hours: 53
[3] Usage Analysis Dashboard
Estimated hours: 60
[4] SSO (Login for Non-existing Users)
Estimated hours: 10
[5] SSO (Login for Existing users)
Estimated hours: 60
Sprint 7
Deliverables:
[1] Chat Room
Estimated hours: 95
[2] Logging
Estimated hours: 64
[3] Question Management/Assignment
Estimated hours: 58
[4] SSO (Login) Updates/Improvements
Sprint 8
Deliverables:
[1] Game Role Functionality
Estimated hours: 56
[2] Usage Analysis Dashboard
Estimated hours: 60
[3] Waiting Room
Estimated hours: 53
[4] Matchmaking
Estimated hours: 58
[5] Archiving
Estimared hours: 60
[6] User Profile
Estimated hours: 55

Timeline II

Red Team: Project Timeline					DELIVERABLES	Assigned to:
START DATE	END DATE	DURATION IN HOURS	TASK NAME	DESCRIPTION	DELIVERABLE	Name
Project Proposal I						
9/4/18	9/13/18	1	Introduction	Introduction to project idea	Project Proposal	Deivis
9/4/18	9/13/18	1	Problem	Describe problem without project	Project Proposal	Kia
9/4/18	9/13/18	1	Solution	Describe solution to problem provided by project	Project Proposal	Luis
9/4/18	9/13/18	4	Features	Describe project features	Project Proposal	Christian
9/4/18	9/13/18	2	User Roles	Roles of the users within project	Project Proposal	John
9/4/18	9/13/18	1	Approach	Introduction to project implementation	Project Proposal	Deivis
9/4/18	9/13/18	1	Time and Cost	Time and cost of project	Project Proposal	Luis
Proposal Approval I						
9/13/18	9/13/18	1/2	Approval of project from Client	Initial proposal: not approved	Project Proposal	Christian, Deivis, Luis
Project Proposal II						
9/13/18	9/18/18	1	Introduction	Introduction to project idea	Revised Project Proposal	John
9/13/18	9/18/18	1	Problem	Describe problem without project	Revised Project Proposal	Kia
9/13/18	9/18/18	1	Solution	Describe solution to problem with project	Revised Project Proposal	Luis
9/13/18	9/18/18	1	Value	Value of project to real world	Revised Project Proposal	Kia
9/13/18	9/18/18	1	Scope	Scope of project	Revised Project Proposal	Deivis
9/13/18	9/18/18	1	How the App Works	Introduction to the overall function of the project	Revised Project Proposal	Deivis
9/13/18	9/18/18	4	Features	Introduction to the functionalities of the projecct	Revised Project Proposal	Christian
9/13/18	9/18/18	1	User Roles	Roles of the users within project	Revised Project Proposal	John
9/13/18	9/18/18	1	Time and Cost	Time and cost of project	Revised Project Proposal	Luis
Proposal Approval II						
9/18/18	9/18/18	1/2	Approval of project from Client	Second proposal: approved	Project Proposal	Christian, Deivis, John
Sprint 1						
9/13/18	10/9/18	2	Introduction (BRD)	Introduction to business requirements of project	Business Requirements Document	Kia
9/13/18	10/9/18	20	Core Feature Requirements	Description of the core features of project	Business Requirements Document	Everyone
9/13/18	10/9/18	10	Application Feature Requirements	Description of the application-specific features of project	Business Requirements Document	Luis, John
9/13/18	10/9/18	1	Glossary/Reference	List of terms in BRD to reference	Business Requirements Document	Kia
9/13/18	10/9/18	1	Introduction (TS)	Introduction to overview of technologies to be used for project	Technical Specifications	Kia
9/13/18	10/9/18	25	System Design	List of technologies to consider for creating system for project	Technical Specifications	Christian, Deivis
9/13/18	10/9/18	1	Requirements for Web App to Run	List of requirements needed for project to function on	Technical Specifications	John
9/13/18	10/9/18	1	References	List of references to citations	Technical Specifications	Deivis
Sprint 2						
10/9/18	11/1/18	1	Project Scope	Introduction of document and description of scope	Project Plan	Deibis
10/9/18	11/1/18	7	Resources	Staff, budget, cost estimations	Project Plan	John
10/9/18	11/1/18	3	Timeline I	Sprints, deadlines	Project Plan	Kia
10/9/18	11/1/18	2	Timeline II	Sprints, deadlines	Project Plan	Kia
10/9/18	11/1/18	4	Risk Management	Defines risks of each	Project Plan	Luis
10/9/18	11/1/18	3	Roadmap	Milestones; end goal of project	Project Plan	Deivis
10/9/18	11/1/18	5	Layered Architecture Diagram	Prospective architecture of system	Design Document	Christian
10/9/18	11/1/18	2	Feature Diagram	Features of project	Design Document	Christian
10/9/18	11/1/18	7	Client Workflow Diagram	Flow of interaction with client	Design Document	Deivis, Luis
10/9/18	11/1/18	5	Administrative Diagram	Flow of interaction with administrator	Design Document	John, Luis
10/9/18	11/1/18	3	Flow of Debate (Swimline)	Demonstration of chat room feature	Design Document	Deivis, Luis, John
10/9/18	11/1/18	7	Network Diagram	Map of our device to the database server	Design Document	Christian
10/23/18	11/1/18	10	Revised Business Requirement Document	Revised copy of Business Requirement Document	Business Requirements Document	Everyone
Sprint 3						
11/1/18	12/6/18	152.5	Sequence Diagrams for Implementations	Specific details of the implementation of project	Low Level Design	John, Deivis, Luis, Kia
11/1/18	12/6/18	Total Hours: 128.2 Implementation Hours: 96.6 Testing Hours: 31.6	Project Coding Implementations	Authorization of system	Authorization	Christian,
11/1/18	12/6/18	Total Hours: 128.2 Implementation Hours: 96.6 Testing Hours: 31.6	Project Coding Implementations	Management of user types; abilities of administrative user and normal user	User Management	Christian, Deivis
11/1/18	12/6/18	Total Hours: 128.2 Implementation Hours: 96.6 Testing Hours: 31.6	Project Coding Implementations	Implementation of password approval	Scope Creep (Pwned Passwords)	Luis, John
Project Presentation						
12/14/18	12/14/18	5	Presentation	Final presentation for coding implementations of sprint 3	Presentation	Deivis, John

Sprint 4		Estimated Hours				
1/7/19	1/23/19	Total Hours: 53 Design Hours: 15 Implementation Hours: 28 Testing Hours: 10	Project Coding Implementation	Create, read, update, and delete data	Data Store Access	Everyone
Sprint 5		Estimated Hours				
1/23/19	2/14/19	Total Hours: 95 Design Hours: 15 Implementation Hours: 65 Testing Hours: 15	Project Coding Implementation	Rooms where debates take place and teams collaborate	Chat Room	Christian
1/23/19	2/14/19	Total Hours: 53 Design Hours: 15 Implementation Hours: 28 Testing Hours: 10	Project Coding Implementation	Create, read, update, and delete data	Data Store Access	Luis
Sprint 6		Estimated Hours				
2/14/19	3/11/19	Total Hours: 95 Design Hours: 15 Implementation Hours: 65 Testing Hours: 15	Project Coding Implementation	Rooms where debates take place and teams collaborate	Chat Room	Christian
2/14/19	3/11/19	Total Hours: 53 Design Hours: 15 Implementation Hours: 28 Testing Hours: 10	Project Coding Implementation	Records of system interactions	Data Store Access	Luis
2/14/19	3/11/19	Total Hours: 60 Design Hours: 15 Implementation Hours: 33 Testing Hours: 12	Project Coding Implementation	Data made available to system administrator and administrative users	Usage Analysis Dashboard	Kia
2/14/19	3/11/19	Total Hours: 75 Design Hours: 17 Implementation Hours: 52 Testing Hours: 16	Project Coding Implementation	Login SSO Existing User	Scope Creep II (SSO) - Login for existing users	John
Sprint 7		Estimated Hours				
3/11/19	4/3/19	Total Hours: 50 design Hours: 10 Implementation Hours: 30 Testing Hours: 10	Project Coding Implementation	Enable users to create a drawing in the chat room so it could help them in their argument.	Chat Room	Christian/Luis
3/11/19	4/3/19	Total Hours: 60 Design Hours: 15 Implementation Hours: 33 Testing Hours: 12	Project Coding Implementation	Question database and assignment of questions to debate rooms	Question Management/Assignment	Kia
3/11/19	4/3/19	Total Hours: 43 Design Hours: 10 Implementation Hours: 23 Testing Hours: 10	Project Coding Implementation	Logging error/telemetry data	Logging	Deivis
3/11/19	4/3/19	Total Hours: 20	Coding Implementation	SSO integration to app	SSO Login intregation	Christian
3/11/19	4/3/19	Total Hours: 75 Design Hours: 15 Implementation Hours: 45 Testing Hours: 15	Project Coding Implementation	archiving data	Archiving	John
Sprint 8		Estimated Hours				
4/3/19	4/3/19	Total Hours: 75 Design Hours: 15 Implementation Hours: 45 Testing Hours: 15	Project Coding Implementation	archiving data	Archiving	John
4/3/19	5/3/19	Total Hours: 50 Design Hours: 5 Implementation Hours:35 Testing Hours: 10	Project Coding Implementation	Displays data for admin in a page only for them	Usage Analysis Dashboard	John
4/3/19	5/3/19	Total Hours: 53 Design Hours: 10 Implementation Hours: 28 Testing Hours: 15	Project Coding Implementation	Start, leave, and end debate rooms	Waiting Room	Deivis
4/3/19	5/3/19	Total Hours: 58 Design Hours: 10 Implementation Hours: 33 Testing Hours: 15	Project Coding Implementation	Matching normal users to specific debate room	Matchmaking	Kia
4/3/19	5/3/19	Total Hours: 55 Design Hours: 15 Implementation Hours: 30 Testing Hours: 10	Project Coding Implementation	Displays data for the user of the app	User Profile	Christian
4/3/19	5/3/19	Total Hours: 56 Design Hours: 10 Implementation Hours: 31 Testing Hours: 15	Project Coding Implementation	Implementations of game roles to normal users	Game Role Functionality	Luis
Sprint 9		Esimated Hours				
5/3/19	5/8/19	Total Hours: 30	Deployment	Deploy app on the azure cloud		John, Christian, Luis
Project Presenation		Esimated Hours				
5/8/19	5/15.19	6	Presentation	prepare ppt		Everyone

Roadmap


Project Start
Milestone 2: Business Requirements and Technical Specifications Documents
Milestone 4: Low Level Design Document and Implementation of Authorization, User Management, and Scope Creep #1 (Pwned Password)
Milestone 6: Updated Project Plan and Scope Creep #2 (Single Sign-On)
Milestone 8: Implementation of Game Role Functionality, Archiving, Usage Analysis Dashboard, Matchmaking, User Profile and Waiting Room
August
September
October
November
December
January
February
March
April
May
Milestone 1: Project Proposal Approval
Milestone 3: Project Plan, High Level Design Document, and Revised Business Requirements Document
Milestone 5: Project Presentation
Milestone 7: Implementation of Chat Room, Question Management and Assignment, Logging, and SSO Login Updates
Milestone 9: Deployment and Final Presentation

Risk Management

1. A risk associated with our project is our team falling behind schedule. There is a possibility that due to our teams inexperience with the technologies that we are using in our project will result in us being unable to complete all system features on time. We could also fall behind as a result of unforeseen circumstances, such as the loss of a team member, a team member becoming unable to work due to illness, or a natural disaster. The possibility that this occurs is high and it would have a major impact. We would mitigate this risk by keeping track of our progress and knowing how much time we have to complete a feature before we fall behind. We will also prioritize higher priority features if we do fall behind. Our project cannot ever fall two features behind. We are willing to drop global settings and simplify the waiting room. If our team ever falls more than two features behind, then the project will be considered a failure.

2. Another risk associate with the project is that our team goes over budget. It is possible that our team underestimated the cost of our project or that some unforeseen circumstances cause our project's cost to increase. There is a medium chance of this happening. If this were to happen then our group, our team has already attempted to mitigate this by including a miscellaneous cost section in our original budget. However, it is possible that our project still goes over budget and in this situation, we cannot ever allow our budget to increase over 50% of our original budget. If this were to occur, then our project would not have the funds to be finished.

3. A third possible risk is that our team overestimated our time cost benefits and that we get ahead of schedule. The chances of this occurring are low. Our team would mitigate this risk by keeping track of our progress and if we get ahead of schedule during a sprint, we would move onto the next highest priority feature that we would be able to finish within the timeframe of that sprint. If we actually finish the project ahead of schedule, then our group would add an additional feature not originally included with the project plan.