# Project Iteration2 Report

# Group 6

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## **Iteration Plan for iteration2**

User Story 5:

Story:

ID	US:5
As A	manager
I Want	be able to open and freeze an election
So That	I can control the voting process

ID	AT: 5.1
Given	manager want to be able to open and freeze an election
When	after the manager login to admin page and click freeze button
Then	all voters won't be able to continue to vote.

ID	AT: 5.2
Given	manager want to be able to open and freeze an election
When	after the manager login to admin page and click open button
Then	all voters will be able to continue to vote.

ID	AT: 5.3
Given	manager want to be able to open and freeze an election
When	After the user log in to their page.

Then	enable to vote
Hear Story 6.	

User Story 6:

Story:

ID	US:6
As A	manager
I Want	to have my account
So That	I can manage the voting process

# Acceptance Tests:

ID	AT: 6.1
Given	manager want to have his own account
When	after manager type in correct email and password
Then	manager will be log in to his own account

# User Story 7:

Story:

ID	US:7
As A	manager
I Want	this application be able to run election ballot with multiple contests
So That	several different contests can run in the same time

ID	AT: 7.1
Given	the manager want this application be able to run election ballot with multiple contests

When	if a user logs in to his account, he will be able to see two different contests.
Then	users can click one activity and start voting.

User Story 10:

Story:

ID	US:10
As A	user
I Want	to cast my ballot of intended vote
So That	I will be able to vote

# Acceptance Tests:

ID	AT: 10.1
Given	user want to cast his ballot of intended vote
When	after user click vote button
Then	a message will appear which shows a successful vote.

# User Story 11:

Story:

ID	US:11
As A	user
I Want	be able to view the voting result
So That	I can tell who is the top candidate

ID	AT: 11.1
Given	user wants to be able to view the voting result
When	after user login to his account
Then	he will see the voting result for different activities

# User Story 12:

Story:

ID	US:12	
As A	manager	
I Want	user only have permission to vote one time for each activity	
So That	i can manage the voting activity better	

# Acceptance Tests:

ID	AT: 12.1
Given	manager wants user only have permission to vote one time for each activity
When	after user vote for one candidate in one activity
Then	he won't be able to vote again for that activity

# User Story 13:

Story:

ID	US:13
As A	User
I Want	to share the vote activity
So That	I can engage more people to take part in vote

ID	AT: 13.1	
Given	User has already logged in	
When	User click share button	
Then	User will redirect to a share page	

Tasks – Iteration 2

Table shows the summarization of completely situation about each user story we focused on Iteration2

User Story	Tasks	Estimate	Start	Expected	Status
US:5	Complete the function that manager can open and freeze the voter	4 hrs	February 25th	March 11th	Complete
US:6	Achieve the function that manager can have count to manage the activity	4 hrs	February 25th	March 11th	Complete
US:7	To achieve this application be able to run election ballot with multiple contests	4 hrs	February 25th	March 11th	Complete
US:10	Complete the function that user can cast the ballot	4 hrs	February 25th	March 11th	Complete
US:11	user can view the voting result	4 hrs	February 25th	March 11th	Complete
US:12	manager can manage the user only have permission to vote one time for each activity	4 hrs	February 25th	March 11th	Complete
US:13	user can share the vote	4 hrs	February 25th	March 11th	Complete

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# Table records daily completion and progress during Iteration1 in detail.

Date	User Story	Task	Pair Member	Status	Duration
Feb.25	N/A	We discussed user stories.	Ruida & Chaojun & Xinhai & Haonan & Jinaliang & Yanlin	Complete	1h 30min
Feb.27	N/A	Group discussion for the structure and assign everyone's tasks	Ruida & Chaojun & Xinhai & Haonan & Jinaliang & Yanlin	Complete	1h 30min
Feb.29	N/A	Refactoring the naming style	Haonan & Xinhai	Complete	1h 30min
Mar.3	N/A	Trying to use firestore	Haonan & Xinhai	Complete	
Mar.3	N/A	Refactoring the main activity	Yanlin & Chaojun	Complete	
Mar.3	N/A	Try using firestore connected the app add data to the database	Ruida & Jianliang	Not complete	
Mar.5	US 11	Continued trying to use firebase connected the app add data to the database	Ruida & Jianliang	Complete	2h 30 min
Mar.5	US 5 & US 6&US1 2	Drawing UI layout for manager activity	Yanlin & Haonan	Complete	
Mar.5	US 11	Drawing UI layout	Chaojun&Xinh	Complete	

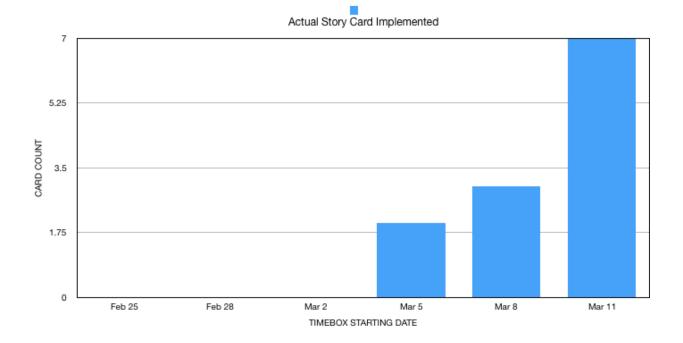
		for vote activity	ai		
Mar.7	US 7 & US 6	Finished UI layout for vote activity	Yanlin&Xinhai	Complete	2h
Mar.7	N/A	Writing the test for some functions	Jianliang & Haonan	Complete	
Mar.7	N/A	Bugfix for homepage and vote activity UI	Ruida & Chaojun	Complete	
Mar.11	All US	UI redesign for better user experience.	Chaojun & Ruida	Complete	6 h
Mar.11	All US	Implementation of the two core functions	Xinhao and Yanlin	Complete	
Mar.11	All US	Designing and researching on the database issues.	Haonan & Jianliang	Complete	

# **Progress Charts**

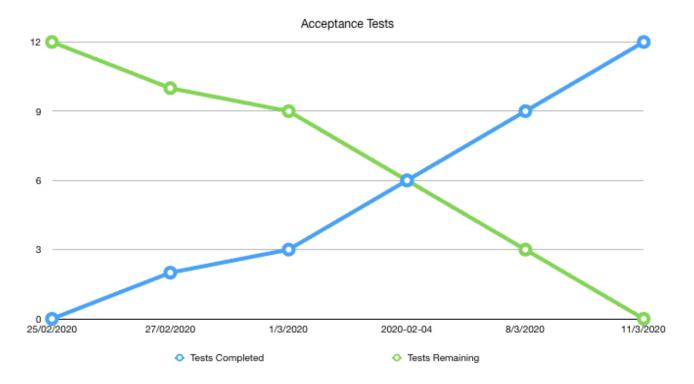
### Burndown Chart



Velocity Chart



# Testing Chart



# **Standup Meeting Minutes**

Iteration 2

**Tuesday, Feb.25, 2020** 

Attendance: Xinhai Cheng, Haonan Ren, Chaojun Ma, Ruida Wang, Jianliang Xiao, Yanlin Zhu

We discussed user stories, which need to be done in iteration two. We talked about the completion schedule of the whole project, talked about refactoring the code in iteration 1, the process of test-driven development and Travis CI. Also, we discussed how to change some style issues and non consistent naming style. Trying to use some descriptive name.

**Thursday, Feb.27, 2020** 

Attendance: Xinhai Cheng, Haonan Ren, Chaojun Ma, Ruida Wang, Jianliang Xiao, Yanlin Zhu

In this meeting, we continued discussing the user story we would achieve in iteration 2. After that, we discussed a huge problem. We used firebase in iteration1. However, we found that firebase cannot support the database for the application for some further requirement. We must use firestore instead of initial version. Xinhai Cheng & Haonan Ren tried to learn how to use firestore for the application. Also, we found that the code we have written in iteration 1 has lots of redundant code because we write all functions in one class. We ignored to use object oriented programming. This is a big problem for us to achieve.

**Saturday, Feb.29, 2020** 

Attendance: Xinhai Cheng, Haonan Ren, Chaojun Ma, Ruida Wang, Jianliang Xiao, Yanlin Zhu

During this session, we started going over Firebase. Went over group member concerns for this iteration. Everyone up to date for the new iteration. Chaojun Ma & Ruida Wang refactor the main activity use object oriented programming. At the same time, Xinhai Cheng & Haonan Ren started to write tests for ui and some functions. Jianliang Xiao & Yanlin Zhu started to set up firestore for the application.

**Tuesday, Mar.3, 2020** 

Attendance: Xinhai Cheng, Haonan Ren, Chaojun Ma, Ruida Wang, Jianliang Xiao, Yanlin Zhu

We talked about refactoring the log in activity. Talked about for a new user story how to make the manager control the voter system and what is required to finish that, saving students' accounts into the firestore, refactoring that needs to be done. Testing and Travis CI.

Thursday, Mar.5,2020

Attendance: Xinhai Cheng, Haonan Ren, Chaojun Ma, Ruida Wang, Jianliang Xiao, Yanlin Zhu

In this meeting, we talked about Chaojun Ma & Ruida Wang's refactor. After that, we discussed the ui design for each interface. We had a big disagreement about whether we needed PHP and js for some functionality.

**Sunday, Mar.8, 2020** 

Attendance: Xinhai Cheng, Haonan Ren, Chaojun Ma, Ruida Wang, Jianliang Xiao, Yanlin Zhu

We discussed in details about UI design for each interface. We talked about our assignment3 and used the firebase for the application. We talked about how we can use adapters to implement our function. After talking about that issue, we discussed how to implement "share" function in the application. We decided to add a "share" button. Also, for the open and freeze function. We initially failed to store the voting status properly due to a database problem, but we were able to write the admin panel initially after we resolved the firestore connection and read issues. After implementing the admin panel, we need to override the original login structure. We tried to find out a proper solution for this issue.

# Attendance: Xinhai Cheng, Haonan Ren, Chaojun Ma, Ruida Wang, Jianliang Xiao, Yanlin Zhu

In this meeting, we talked about the implementation of two core functions: admin freeze election and vote for multiple contests. Also, a limitation that one user can only vote once on one contest is enforced to all users. After discussion, Chaojun & Ruida were continuing working on the UI redesign for better user experience. Xinhao and Yanlin were working on the implementation of the two core functions while Haonan & Jianliang were designing and researching on the database issues.

#### **Post-Mortem Review**

#### Issues with Development

The biggest issue which arose during development was refactoring the code. This is because we did not have experience for team work development. We did not use a clear structure at start. It made it difficult for us to complete more tasks on the initial base. Like we wrote functions in one method. It wasted our time to debug and the code had high coupling. We really understand why we need to use the SOLID principle in code. High coupling code is absolutely not easy to change. Also, we found that the test for ui is hard. For database part, we realized that firebase can not achieve more tasks so we have to change that. Therefore, for this iteration. It is very difficult to implement more functionality on top of the existing code because we have to improve and refactor the code.

The "freeze and open the vote" user story is a difficult part for us. We discussed lots of time to determine how we achieve the activity for the manager to freeze and open the vote. We had a great challenge trying to implement the administrator freezing voting function.

Another thing is about our team work. Our team members differed widely in many opinions, and we found that it was not easy to complete an application in a team. Everyone has their own opinions and ideas. This led to disagreement between us. We spent a lot of time on the consensus. For example, some of our team members were so good at PHP that he suggested that our backend be written in PHP. But the rest of our team didn't know anything about PHP. We talked about it for a long time. We also talked a lot about UI design for interfaces. Everyone has their own aesthetics and opinions. We spent a lot of time agreeing.

Solutions

We adhered to the test-driven development approach. Studied and learned some of the important development principles presented in class. Based on these theories, our development will be more efficient. We refactor the code before which uses object oriented programming to make sure low coupling code. Also, we used firestore to save users information which can support further activity.

For the function which manager can freeze and open the vote. We finally did it by refactor. We initially failed to store the voting status properly due to a database problem, but we were able to write the admin panel initially after we resolved the firestore connection and read issues. After implementing the admin panel, we need to override the original login structure. Since the administrator cannot vote, we need to make a decision in the login interface. If the user is a plumber, open the administrator panel. By adding the "isAdmin" field to the database, we complete the user's judgment and jump.

In our team, when we realized that we were spending a lot of time arguing about something. We adjusted our strategy in time. We chose a team leader who would define some of our choices in an objective capacity. After that, we made some decisions quickly. The most important thing is that we are of one mind.

#### Goals for Upcoming Iteration

Our goal for the next iteration is to solve our testing issues and to make better use of continuous integration. With wrapping up everything and trying to put together our final demo making better use of testing and continuous integration will be critical for success. Also, we must keep using test-driven development. This is a better way to make coding more efficient.

## Links:

Github Repository:

https://git.cs.dal.ca/xcheng/csci-3130.git