THE UNIVERSITY OF SYDNEY

School of Information Technologies
Faculty of Engineering & IT

ASSIGNMENT/PROJECT COVERSHEET - INDIVIDUAL ASSESSMENT

Unit of Study: COMP5703 Information Technology Capstone Project

Assignment name: Individual Progress Report

Tutorial time: WEND 16:30-18:30

Tutor name: Dr. Martin

DECLARATION

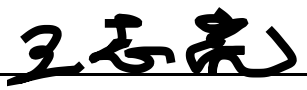
I declare that I have read and understood the *University of Sydney Academic Dishonesty and Plagiarism in Coursework Policy*, and except where specifically acknowledged, the work contained in this assignment/project is my own work, and has not been copied from other sources or been previously submitted for award or assessment.

I understand that failure to comply with the the *Academic Dishonesty and Plagiarism in Coursework Policy*, can lead to severe penalties as outlined under Chapter 8 of the *University of Sydney By-Law 1999* (as amended). These penalties may be imposed in cases where any significant portion of my submitted work has been copied without proper acknowledgement from other sources, including published works, the internet, existing programs, the work of other students, or work previously submitted for other awards or assessments.

I realise that I may be asked to identify those portions of the work contributed by me and required to demonstrate my knowledge of the relevant material by answering oral questions or by undertaking supplementary work, either written or in the laboratory, in order to arrive at the final assessment mark.

Student ID: 460094203

Student name: Zhiliang Wang

Signed  **Date** 11/05/2018

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0 Project Title

An Online Web-Streaming Service for Bitcoin-Exchanges.

1 Progress

I have completed part of landing page for our program including left-side style layout and private account related functionalities. In the landing page, users could observe the dynamic data about fiat-cryptocurrency exchange and crypto-crypto currency exchange directly and clearly. The data are real-time changing. Furthermore, the users can get a private account in our system which will be leveraged for store transaction data from other exchange websites. It is a better method to collect competitor's data and attract more customers to use our website more frequently.

2 Deviation to Timeline

The first deviation of timeline is that we picked the overlay layout as our main menu, which is a little harder than the traditional design, then we spend more time on this part. The second deviation is that according to the requirement of assignments, "bitcoin stream", we changed what we focused on before in the whole project. Originally, the data we intend to exhibit in the website was collected from four exchange websites, however, we made a change on this part, some data will be recollected in the form of global data.

3 Obstacles

First of all, the main obstacles in this project are that it's hard to differentiate our web program with the other cryptocurrency exchange website. We need to study the structure of other website and think about how to make our functionalities different from other websites. Then, when we find out some sections in other websites, such as Binance and GDAX, we need to think about whether we have enough time to design and implement our designed functionalities. These two parts cost us a large volume of time.

Secondly, we decided to make a world map to show the real-time and dynamic exchange data all over the world. Even though the Bitnodes give us the source code to crawl the data seconds by seconds, the code is python programmed in the source code. Thus, if we use the same way as Bitnodes did, we need to spend lots of time to figure out the running mechanism in Bitnodes. We may finally quit on this job but to do it in a simpler way.

4 Milestones and Reporting

Week	Task	Status
1	Participate orientation and kick-off meeting	Completed.
2	Arrange a meeting with my team members.	Completed.
3	Group meeting and discussing how to do and what to do in the next stage on details of exchange website.	Completed.
4	I was preparing to writing individual and group proposal. Have a deeper discussion about the outline and technology we are going to use in the project.	Completed.
5	Finalized and submitted the all related documents about proposals.	Completed.
6	Start to identify how to implement the functionalities about storing private transaction data, layout for our website and dynamic exchanging data in world map.	Completed.
7	Working on user login, register modules.	Completed.
8	Working on how to get back the password when user forget the password.	In progress.
9	Woking on adjusting whole layout.	In progress.

10	Plan to work on implementing dynamic exchanging data and learn bitnodes.	In progress.
11	Plan to test all functionalities that will come out in our website.	Not started.
12	Plan to finalize the final presentation.	Not started.
13	Plan to finalize the final related reports.	Not started.

Table 1 Update of own time lines for completion

5 Contributions to our group

Slack is the main communication platform in the process doing our research and coding. We use it to talk much about the project details and feelings sometimes (As shown in Figure 1).

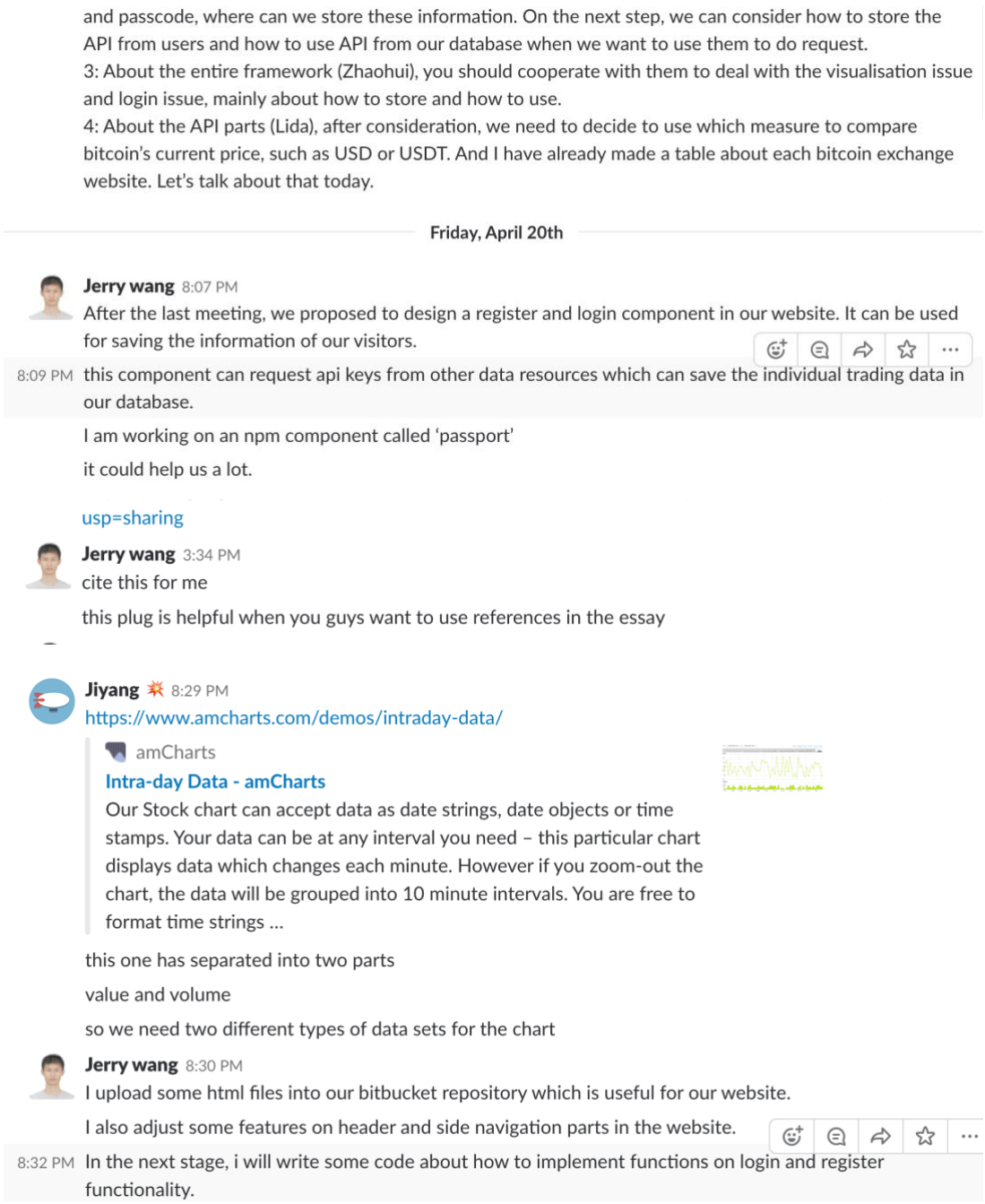

Figure 1 Parts of the records of discussing projects issues on slack.

Another platform we are using is Bitbucket and Gitkraken. The former is leveraged as a git repository which helps us to reserve our code easily. As shown in the figure 2, I have upload several

times in bibucket with many html files. Those of them will be modified later on. Moreover, I have to mention that GitKraken tool which is good at "git merge" operations. We have four members, when we want to merge our branches, we are confused about some conflicts. It gives us so much help on details of merging code.

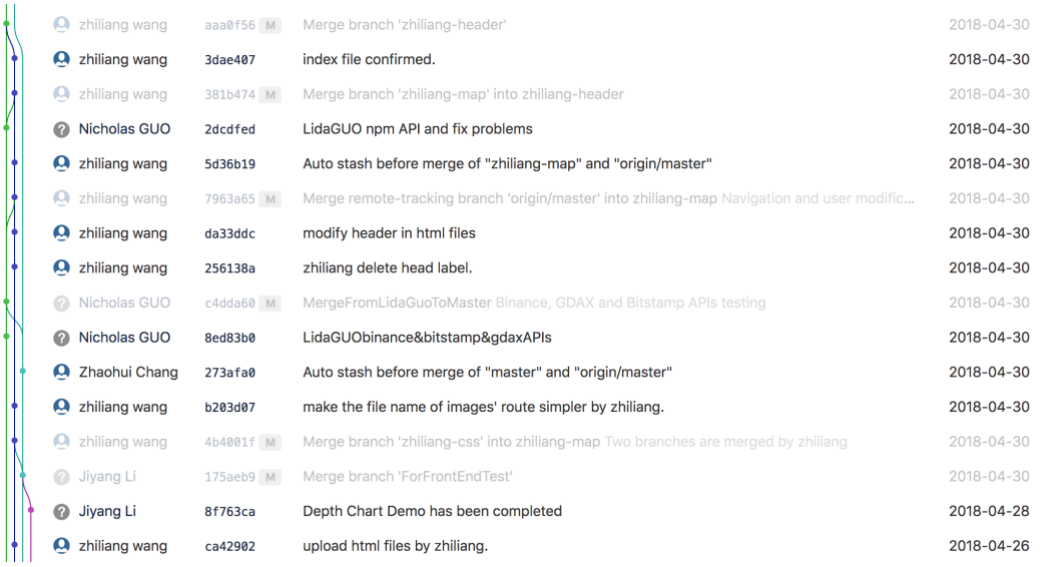

Figure 2 Parts of committing records on Bitbucket repository (zhiliang is me.)

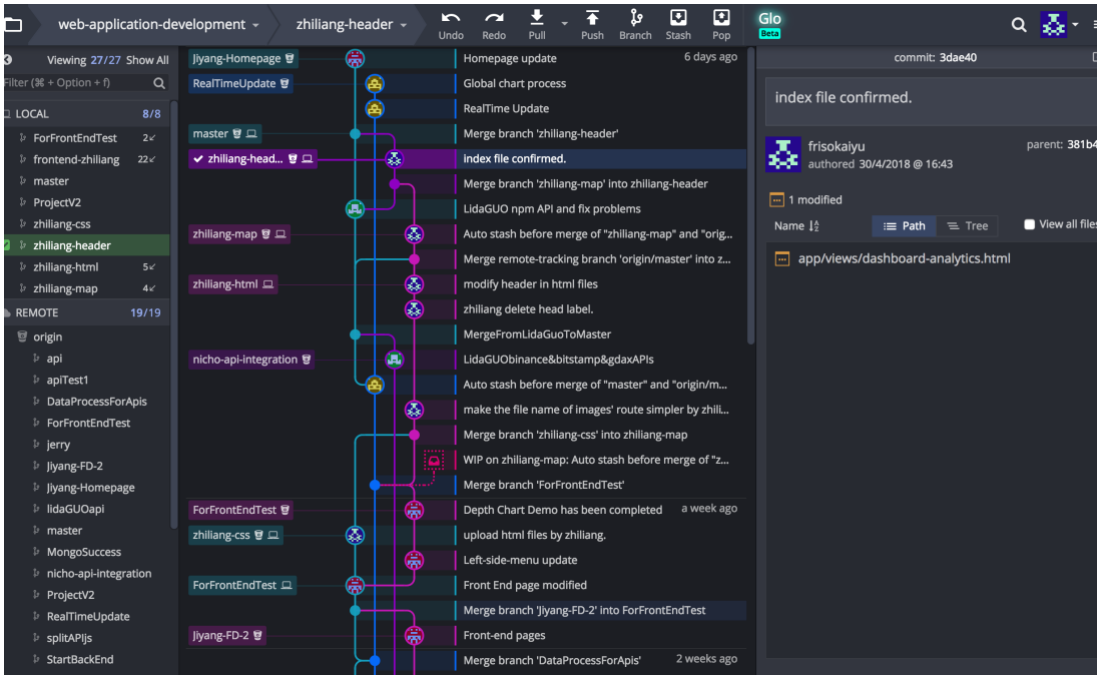

Figure 3 GitKraken interface.

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CAPSTONE PROJECT COMP5703/5707/5708 2018-S1

Weekly Project Status Report

Unit of Study	COMP5703
Group name	CP28/1
Project Name	An Online Web-Streaming Service for Bitcoin-Exchanges
Project start date	Starting from 07/03/2018
Project point person	Martin

Quick description	We will retrieve, store, and visualize data from various cryptocurrency exchanges for customers and also employ data modelling techniques to find suitable data-structures to represent order books of exchanges, will store them in a relational database, and visualize them via a web-interface using different Materailize.js and Reactjs.

Project Status Report	#06	Day of the week, 18/04/2018

Status item	**Status up to last week**	**Planned for this week**
Major deliverables	Start to identify how to implement the functionalities about storing private transaction data, layout for our website and dynamic exchanging data in world map. I have written the html code of user-login.html file that will be used in our websites. By the way, I have learnt some new techniques on layout.	Next week, I need to complete user-register.html file in our project.
Planned delivery date	14/04/2018	21/04/2018
Major issues	Design a static html file is not seem so easy if you are not so professional in this domain though html cannot be seen as coding area.	To read a large amount source code in framework in a short time.
Major risks	Out of time.	None.
External dependencies	Source code in materialize.js framework.	Source code in materialize.js framework.
Estimated effort (h)	12 hours	12 hours
Recorded effort (h)	10 hours	14 hours
Status (RYG)	Y	Y

This project status report is limited to one page. Details on subsequent pages will not be considered.

THE UNIVERSITY OF SYDNEY

CAPSTONE PROJECT COMP5703/5707/5708 2018-S1

Weekly Project Status Report

Unit of Study	COMP5703
Group name	CP28/1
Project Name	An Online Web-Streaming Service for Bitcoin-Exchanges
Project start date	Starting from 07/03/2018
Project point person	Martin

Quick description	We will retrieve, store, and visualize data from various cryptocurrency exchanges for customers and also employ data modelling techniques to find suitable data-structures to represent order books of exchanges, will store them in a relational database, and visualize them via a web-interface using different Materailize.js and Reactjs.

Project Status Report	#07	Day of the week, 25/04/2018

Status item	**Status up to last week**	**Planned for this week**
Major deliverables	Working on user login, register modules.	Next week, I need to finish all the related modules to our group members.
Planned delivery date	21/04/2018	28/04/2018
Major issues	Workloads from other courses give me a high pressure.	None.
Major risks	None	Unknown
External dependencies	Source code in materialize.js framework.	Source code in materialize.js framework.
Estimated effort (h)	15 hours	16 hours
Recorded effort (h)	15 hours	20 hours
Status (RYG)	Y	Y

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THE UNIVERSITY OF SYDNEY

CAPSTONE PROJECT COMP5703/5707/5708 2018-S1

Weekly Project Status Report

Unit of Study	COMP5703
Group name	CP28/1
Project Name	An Online Web-Streaming Service for Bitcoin-Exchanges
Project start date	Starting from 07/03/2018
Project point person	Martin

Quick description	We will retrieve, store, and visualize data from various cryptocurrency exchanges for customers and also employ data modelling techniques to find suitable data-structures to represent order books of exchanges, will store them in a relational database, and visualize them via a web-interface using different Materailize.js and Reactjs.

Project Status Report	#08	Day of the week, 02/05/2018

Status item	**Status up to last week**	**Planned for this week**
Major deliverables	Finish the exchange data showing on the word map with amchart.js.	Rearrange all the related reports in this project and think back and forth.
Planned delivery date	29/04/2018	05/05/2018
Major issues	Not familiar with code.	Documents would be too many for me.
Major risks	Cannot implement the functionality in time.	Unknown
External dependencies	Source code in materialize.js framework.	Source code in materialize.js framework.
Estimated effort (h)	22 hours	20 hours
Recorded effort (h)	20 hours	20 hours
Status (RYG)	Y	Y

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THE UNIVERSITY OF SYDNEY

CAPSTONE PROJECT COMP5703/5707/5708 2018-S1

Weekly Project Status Report

Unit of Study	COMP5703
Group name	CP28/1
Project Name	An Online Web-Streaming Service for Bitcoin-Exchanges
Project start date	Starting from 07/03/2018
Project point person	Martin

Quick description	We will retrieve, store, and visualize data from various cryptocurrency exchanges for customers and also employ data modelling techniques to find suitable data-structures to represent order books of exchanges, will store them in a relational database, and visualize them via a web-interface using different Materailize.js and Reactjs.

Project Status Report	#09	Day of the week, 07/05/2018

Status item	**Status up to last week**	**Planned for this week**
Major deliverables	Woking on adjusting whole layout.	Finalize and test our website.
Planned delivery date	03/05/2018	10/05/2018
Major issues	Too many CSS files in our framework which cost me too much time to study.	Time control.
Major risks	Cannot finish the CSS modification in time.	Too many job to be done in this week.
External dependencies	Source code in materialize.js framework.	Source code in materialize.js framework.
Estimated effort (h)	10 hours	18 hours
Recorded effort (h)	15 hours	20 hours
Status (RYG)	R	R

This project status report is limited to one page. Details on subsequent pages will not be considered.

THE UNIVERSITY OF SYDNEY

CAPSTONE PROJECT COMP5703/5707/5708 2018-S1
Peer Review of Contribution to Team Effort

SID _4_._6_._0_._0_._9_._4_._2_._0_._3_ Name _____Zhiliang Wang_____
Student identification number First name (Preferred first name) Family name

The submission of the deliverables up to this week required the application of the following three software development, project management and team work activities from each colleague in your team:

- Contribution to the design and implementation of the current sprint user stories.
- Contribution to the full range of software development activities (including requirements capture, analysis and design, coding, testing and documentation).
- Contribution to group work and sharing of work.

Based on the overall combination of the contribution above, rate your teammates' performance in the activities up to and including week 5.

IMPORTANT: You *must* assess all your teammates. Use only whole numbers addressing the criteria below:

1 **[0 – no contribution]**	**2**	**3**	**4**	**5**
Below satisfactory in 3 criteria ***or*** very poor in *any* activity	Satisfactory in 1 criteria ***and*** poor in 2 activities (none very poor)	Good in at least 2 criteria ***and*** activity in 1	Excellent in at least 1 activity ***and*** good in 2 others	Excellent in all 3 activities

Student ID	**Name**	**Rating 0 to 5 *no fractions***	**Reason for rating**
460269052	Lida Guo	5	He is responsible for different types of API in cryptocurrency exchanges website using RESTful method. He was also play a role in gathering other team members to do the job.
460061928	Jiyang Li	5	He is responsible for chart programming. The most important thing is that he controlled the timeline and deliverables very clearly.
460477129	Zhaohui Chang	5	He is responsible for back-end programming in our group. He is so patient for any changes from front end requirements. I am impressed on this quality.

Comments: I am in a very cooperative and passionate team. I feel very encouraged when all team members are positive to discuss issues we encountered in the project. Although we do not have much experiences in developing a web application about bitcoin exchanges, we still have courage and confidence to submit a satisfied job.