Minutes of the Fourth Client Meeting

Terrific Group 19

Thursday 30th March 2022

Chair	Yufeng Jiang
Secretary	Mingen Xiao
Members	Zhaotong Cui
	Jing Han
Apologies	None.

1 Time and Place

The fourth client meeting for the Master of Computing & Innovation Group Project was held in **Zoom** remotely, at **6pm on Thursday 30th March 2022**.

2 Quorum Announcement

The Chairman announced that a quorum of the group was present and that the meeting,having been duly convened, was ready to proceed with its business.

3 Summary of Previous Meeting

Mingen Xiao briefly recapped last week's meeting which was largely focused on the decisionof the topic and technical details of the project.

4 Group Milestone

4.1 Overview

All the team members contributed on preparing for the pitch presentation based on theclient's suggestions, asked some questions about the whole project.

4.2 Detailed Presentation

The team ask more detailed questions about the requirement document.

- The first week was mostly lost to the late scheduling of selecting project topics, so bythe end of the first week, only a brief meeting with self-introduction between group members had occurred.
- In the second week the team had a brief role allocation and started focusing on technique research. The first client meeting was held which mainly introduce the details of the project and discuss about the expectations of every step of the project.
- In the third week, upon to what the team had known for the project details so far, the client showedthe key point 'data lineage' for the preferred project, which is a enterprise

system with lots of data, objects and tables storing in the database. The challenge is to achieve visualisation and generate links between objects. The aim is to build a web application which can load the script of the sequence of database, that could be from100-200 script into 2. The function is to analyse the links between the tables in the database. SQL lineage could be the crucial skills for the software.

- Throughout the course of the entire project so far, all team members have a general frame of how to start the projects and make the final decision of the project topic so that the team can further going with the technique research and start learning corresponding skills. The team also had well prepared agenda in the general group meeting before the first client meeting and collect important questions that needed to ask for the client to make a clear project plan.
- In the fourth week, the team found the project has more potential details to be discussed. Each member had new questions. The team had well prepared agenda in the general group meeting before the second client meeting and collect important questions that needed to ask for the client to make a clear project plan.
- The client meeting in this week mainly talked about the details of the project and discuss about the expectations of every step of the project.
- The client demonstrated the basic functionality of the project. This project is a visual website. Users input data and use the underlying tools of the website to obtain the relationship between related data, and display it in visual graphics, allowing customers to intuitively see the relationship between stock data. The challenges faced by this project are as follows:
    1. Medium data scale, hundreds of orders of magnitude.
    2. Using a given analysis tool, how to create interfaces.
    3. How the tool recognizes multiple logical relationships between the input data and correctly outputs the visualization.
    4. Create a classification query function on the website, and each type of data can be output and compared through the same name.
- In order to overcome the difficulties in the project, the team should learn SQL basic syntax, T-SQL, subqueries SQL and SQL joins. Besides, learn how to use the given tool

or use another ready-made mature tool.

- Throughout the course of the entire project so far, all team members are going with the technique research and start learning corresponding skills.
- In this week's presentation, the problem that the team firstly discussed was the complex data flow and too much data, so searching data is time-consuming. Database user needs a tool to help them to search meaningful information, track data flow, create a map of data flow. Need to get insight of the database or data information. Generate data map, dictionary of the data.
- Then comes to solution:
    1. Parsing-transform data into useful structure.
    2. Storing useful data/information in a database and visualize it through data map and data dictionary.

5 Individual Milestone Reports

5.1 Mingen Xiao

- Attended all meetings.
- Participated in everything needed in the fourth week activities.
- Mainly focus on the pitch oral presentation.
- Start working on the business case & draft plan
- Continue doing research for achieving the visualization of the data provided by the client.
- Understand of how to design the database to store the sample data provided by theclient.

5.2 Zhaotong Cui

- Attended all meetings.
- Participated in everything needed in the fourth week activities.
- Prepare the draft of the pitch presentation.
- Practice oral skills for the following week's oral presentation
- Help record meetings and gather important information.
- Mainly focus on the coding part:
    1. Finding a suitable database format to store back-end data.
    2. Finding open source tools to implement visual dataflow.
    3. Learning python class and method creation and calling rules.
    4. Learn the pros and cons of different sql, mainly understanding the differencesbetween mysql and sql-server.

5.3 Yufeng Jiang

- Attended all meetings.
- Record the video for the pitch presentation.
- Asked the clients some questions about the requirement of the project
- Learn how to use the related open source tools to assist the project
- Took an active role in to coordinate the division of labor among group members.
- Be the chair of this week's meeting and complete the minute.

5.4 Jing Han

- Attended all meetings.

- Participated in everything needed in the fifth week activities.
- Preparing personal presentation video.
- Combine the personal presentation videos together.
- Contribute on project Business case allocation.
- Doing further research for open source.

6 Project Administration

Mingen Xiao suggested a number of project administration requirements and task allocation:

Front-end:

Activity	Team member	Planned due date
Create a dataflow map	Zhaotong Cui	5th April 2022
Creates a form as the object of the database by applying MySQL.	Yufeng Jiang	5th April 2022
Optimise the code to ready input files	Jing Han	5th April 2022

Back-end:

Activity	Team member	Planned due date
Briefly extract information from them and then store the information for downstream tasks.	Mingen Xiao	5th April 2022

- Fix GitHub structure
- Commit code to GitHub
- Communicate with the client in Slack

7 Requirements Elicitation

Check the basic front-end, back-end structure and database system for the project by the client and ask for further improvements.

7.1 User Requirements

- As a user, I want to view an image showing the processes of my input data flowing from sources to destination so that I can understand the logic.
- As a user, my files are usually including 100-200 scripts with the csv format.

7.2 System Requirements

High Priority:

- Create a website for the software.
- Create a database with mid-size payload to store the data.
- Create a dataflow map to show visualizing dataflows.

Low Priority:

- Optimize the layout of the webpage.
- Upgrade the payload size of the software.

7.3 Browser Support

- Google Chrome
- Mozilla Firefox 3.0+
- Microsoft Internet Explorer 6.0+

7.4 Communication

- Face-to-face meeting
- Zoom meeting onshore
- Text in Slack

7.5 Tasks

- Zhaotong Cui designs a dataflow map to show the dataflow.
- Yufeng Jiang creates a form as the object of the database by applying MySQL.
- Mingen Xiao builds the environment to load input files and extract information from them and then store the information for downstream tasks.
- Jing Han optimises the code to read the input file.

7.6 Lists of Tasks to do

Done:

- Briefly understand the skills that the team need to get familiar with to complete the project.
- Doing research of data lineage.
- Learn fundamental skills of python.
- Have a brief understanding of SQL and start using it.
- Understand the details in the requirement document provided by the client.
- Doing research of csv format.
- Design a form as the object of the database by applying mySQL.
- Front-end developers create webpage with basic framework.

In Progress:

- Extract the subqueries and the name of the subqueries.
- Extract the comments in every query.
- Learn how to input files from convert csv format into json format.

7.7 Glossary

Data-Lineage:

- Data Lineage
- Dataflow maps
- Meta-data

- Data extraction
- Data mining
- Data parsing
- Data catalog
- The extraction of case and join

Python:

- Tuple

SQL:

- Subquery
- Join clause

7.8 Non-functional

None.

7.9 Interface

- Graphical user interface to achieve visualisation of the dataflow map.
- The software needs to be highly compatibility because data lineage can be widely used for the users in different fields and generate various functions.
- The input files will be the csv format files, and convert to json format, for the system to read the data, analyse the relationship and run the lineage between data.

8 Adjournment

The next meeting is a group meeting and will be held in **Zoom** remotely, at 6pm on Thursday 8th April 2022.
The meeting closed at 7:00pm.