COMP2043-Group Interim Report Unification of University Information Services

Team 13 2021.12.29

Module Convener:

Dave Towey

Supervisor:

Matthew Pike

Team members:

Yifei SHAO

Haonan CHEN

Zhihang ZHU

Yongjing QI

Yuke GAO

Abstract

Contents

1	Introduction	1
	1.1 Motivation	1
	1.2 Aims and Objectives	1
	1.3 Team Members	1
2	Background Information and Research	4
	2.1 Survey on Requirements	4
	2.2 Survey on other Schools Web Using Navigation	4
3	Technologies, Software and Programming Languages	5
4	Requirements	6
5	Initial Design of the System and the User Interface	7
6	UML Diagrams of this Project	8
7	Time Plan	9
8	Evaluation and Problems	10
9	Summary and Reflections	11
10	References	12
11	Appendix	13
12	Graphs	14

1 Introduction

1.1 Motivation

The digitalization of university procedures has brought great changes to the campus life of UNNC. However, lesser attention has been paid to the experience of using the digitalization as part of a typical staff/student workflow. At present, a user is required to consult several disjoint systems, to comprehend the particulars of a module. For example, as for the students, the most frequently used website is Moodle, which mainly provides the module teaching materials. However, to attain the overall selected modules information of year period, students need to login to another system, MyNottingham. In addition, if a student would like to check the progression information or module marks, he needs to refer to another system, Blue Castle. Meanwhile, according to supervisor, the current systems like Module Catalog, present the wrong information. For example, a staff has already resigned, however, the current page still show the module he convenes. In addition, the module assessment are not added to a hundred percent. Overall, the information are too scattered and not real-time updated, a more integrated system is needed to unify the university information in a user-friendly manner to better support staff/student workflows at UNNC.

1.2 Aims and Objectives

This project is designed to develop a system to integrate the university information to better support users. As for students, it will combine disjoint information together to make things convenient for students like UCource, as for staffs, the project is designed for them to better provide the module information and personal information(staff profile). Overall, it is designed to better support students' study and staffs' teaching and it can bring great convenience to the life of all staffs and students

1.3 Team Members

Haonan CHEN

 Have experience in building web with Nodejs in a web monitoring project. Good Java and web programming skills.

- Have experience in UI design about a WeChat Mini Program.
- Have experience in image processing. Participated in a project to detect regular gaps of different types of material.
- Have experience in AI method and algorithm. Participated in a project designing robot arm Have experience in UI design about a WeChat Mini Program.
- Have a good understanding about software engineer progress, including requirements, designing, coding and maintenance.

Yuke GAO

- Have systematically studied the C Programming Language, Java and other general programming languages.
- There is a certain theoretical foundation in various fields such as algorithms, computer foundations, relational database management systems, artificial intelligence, software engineering and so on.
- Familiar with the core technology of front-end development(HTML, CSS, JavaScript).

Yongjing QI

- Experienced in Web programming. Familiar with using JavaScript frameworks (React) and UX frameworks (Fluent UI, material UI) to build frontend of a web-based system.
 Experienced with collaboration of Front-end and Back-end. Familiar with how basic HTTP conversations works and experienced with using axios to exchange JSON type data to do data transfer and invocation.
- Familiar with Human-Computer Interaction (HCI) methodologies, have experience of UI design depending on different users of the system, to provide users with interface which is beautiful, clear and easy to access.
- Have a thorough understanding of SE process. Gained great experience from working within a summer research team to develop a web-based system. Especially familiar with requirements, designing and building process.

• Familiar with basic Al knowledges and some typical Al algorithms.

Yifei SHAO

- Can well use basic front-end programming language: Html5, Css3 and JavaScript.
- Have worked in a company as a front-end development trainee last summer. Have experience on Vue2.0, Vue3.0 and Familiar with front-end development and connector.
- · Have well C and Python programming skills.
- · Have experience on prototype design by using Modao.

Zhihang ZHU

- Have basic knowledge and understanding in machine learning and data mining.
- Have experience working in a company as a Product Manager Intern last summer vacation. Knows how to improve user experience from UI Design when using our products.
- Have basic knowledge of front-end development.

2 Background Information and Research

- 2.1 Survey on Requirements
- 2.2 Survey on other Schools Web Using Navigation

3	Technologies, Software and Programming Languages

4 Requirements

5	Initial Design of the System and the User Interface

6 UML Diagrams of this Project

7 Time Plan

8 Evaluation and Problems

9 Summary and Reflections

10 References

11 Appendix

12 Graphs

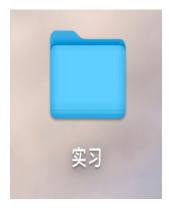


Figure 1: Test1



Figure 2: figure1.



Figure 3: figure2



Figure 4: Test



Figure 5: Test