



浙江师范大学

非师范专业实习手册

Internship Workbook for the Undergraduates Majors in ZJNU



学院 College: Mathematics And Computer Science

专业 Major: Computer Science And Technology

姓名 Name: NYONI ELSON 性别 Gender: MALE

学号 Student ID No.: 201935520702 年级 Grade: Class of 1901

(国籍 Nationality: ZIMBABWE 护照号 Passport No.: EN208850)

浙江师范大学制

Designed by Zhejiang Normal University

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实 习 周 记

Weekly Journal of the Internship Program

2022 年(yy) 10 月(mm) 16 日(dd)至 to 2022 年(yy) 10 月(mm) 22 日(dd)

WEEK 1

The week of October 16, 2022 was my first week of the internship. Each day went by and I thought to myself what will be the challenges which needs to be solved to increase each and every student academic performance. Therefore I did a thorough research concerning our strengths and weaknesses as students according to learning and to my surprise I realized that sometimes us as students we fail to attend classes due to different reason such as weather conditions, being sick and ignorance. Therefore I decided to propose a topic of developing an online attendance system for Zhejiang Normal University, that would allow students to report their issues and to ask for leave direct to their teachers and getting a feedback from them in return . After carrying-out my researches I figured out that our University has an online mini-program for Attendance System on WeChat APP and then I decided to create an online web-based attendance platform that can be used by students who are abroad taking classes online but failing to access WeChat due to different locations they are situated. It took me three days to complete my rough draft of the newsletter. My rough draft of the newsletter was very vague due to my lack of knowledge concerning the development of such a bigger system but however, I managed to put all my mind together in-order to pursue with the task. I began to read a lot of published documents which are online concerning different kinds of attendance systems and how they are designed, implemented and brought into functionality. I also discovered that some attendance systems use RFIDs, which I learned in the subject of internet of things (IoT), mobile phone or computer based attendance system e.t.c. This motivated me to propose a web-based application for my University, that will help to manage the



attendance of student, generating attendance reports, managing and recording student details, etc. The system should be able to calculate the attendance statistics at the end of each day and updated in the database, whereas the reports can be generated at the end of each month.

实 习 周 记

Weekly Journal of the Internship Program

2022 年(yy) 10 月(mm) 23 日(dd)至 to 2022 年(yy) 10 月(mm) 29 日(dd)

WEEK 2

On the second week i starting jotting down the main functions needed for the system to work perfectly.

I designed structural UML diagrams using the idea which i learned in software engineering course in order to have a clear overview of the system. I designed Entity Relationship Diagrams, Data Flow Diagrams, Use Case Diagrams and other diagrams using Microsoft Visio and other diagram designer software.

- Preparation and approval of the topic from my supervisor.
- Downloading and installing designing tools which are for Unified Modelling Language tools.
- Jotting down main or key functions.
- Designing the structure of the project to be followed.

实 习 周 记

Weekly Journal of the Internship Program

2022 年(yy) 10 月(mm) 30 日(dd)至 to 2022 年(yy) 11 月(mm) 05 日(dd)

WEEK 3



This week was about downloading all vital soft-wares needed for running my java codes such as eclipse integrated environment development, java development kit, tomcat for server, MySQL connector and then i put environment variables . I decided to use java since it was my favourite programming and i understand it better.

- downloading and installing developer software tools
- configuration of developing tools
- checking technological updates

实 习 周 记

Weekly Journal of the Internship Program

2022 年(yy) 11 月(mm) 06 日(dd)至 to 2022 年(yy) 11 月(mm) 12 日(dd)

WEEK 4

Third week was one of the busy week since i was supposed to focus much on coding part. I wrote down all the crucial attributes, methods and operations needed for my system to function very well. I

decided to use the MVC framework which consists of:

- Controllers as servlets used for processing all the business logic and incoming requests, manipulate data using the model component and interact with the Views to render the final output.
- View as j-soup files and used for all the UI logic of the application.
- Model as the components that corresponds to all the data-related logic that the user works with.

实 习 周 记



Weekly Journal of the Internship Program

2022 年(yy) 11 月(mm) 13 日(dd)至 to 2022 年(yy) 11 月(mm) 19 日(dd)**WEEK 5**

On the fifth week i started creating my database on MySQL workbench called students_attendance with six tables and then i used attributes which i had listed down on the previous week inside the tables corresponding to each user in order to successful complete all my database tables according to the functionalities which i was thinking of implementing on the system. When creating the database I used port number 3306 memorized it so that i could use it when creating my java database connection class.

- Creating database name.
- Creating database tables using attributes.
- Analyzing the functionality which corresponds to the teacher as the admin and the user a student.
- Using MySQL workbench port 3306.

实 习 周 记

Weekly Journal of the Internship Program

2022 年(yy) 11 月(mm) 20 日(dd)至 to 2022 年(yy) 11 月(mm) 26 日(dd)**WEEK 6**

On the sixth week i began creating my dynamic web project on eclipse IDE and giving my project a name called Elson_ZJNU_CampusAttendanceSystem. Since my project was supposed to run online, I created a tomcat server and ticking the web.xml deployment descriptor so that it will be available in the web information folder. I then created my three packages to hold my java model classes and servlets



classes. I then created different folders to contain css, JavaScript, images and fonts in the web-app folder.
➤ Giving the project a name.
➤ Creating server on eclipse IDE.
➤ Creating packages and naming them according to the classes to be contained inside them.
➤ Creating the folders to hold font-end codes and images.
➤ The put the folder to hold my jar files inside the web-info folders.

实 习 周 记

Weekly Journal of the Internship Program

<u>2022</u> 年(yy) <u>11</u> 月(mm) <u>27</u> 日(dd)至 to <u>2022</u> 年(yy) <u>12</u> 月(mm) <u>03</u> 日(dd)
<u>WEEK 7</u>
On the seventh week i began the coding part whereby i started with creating my database connection class and put the MySQL port number, username, password and database name. I then created all servlets files to hold my query information from the database and communicating with the database.
All my servlets classes consisted of do-post and do-get methods for sending requesting and receiving response from the URL and also the J-soup name to be used. The J-soup files consists of HTML which is used for front-end display.
➤ Creating connection between eclipse and MySQL.
➤ Creating servlets files inside the packages.



实 习 周 记

Weekly Journal of the Internship Program

2022 年(yy) 12 月(mm) 04 日(dd) 至 to 2022 年(yy) 12 月(mm) 10 日(dd)

WEEK 8

On this week i began doing the coding part of all the CSS, JavaScript, servlets, j-soup and java classes. I then put all the images which i wanted to use on their own folder. I searched for the jars needed by some classes to function well and then i added then in lib folder and build them all. After building the jar files all the errors which i was faced from starting of coding they disappeared and then my system run well on the server of tomcat7. I began to wrote the documentation on this week and putting some of the diagram i designed before in the documentation. I then did unit testing using eclipse extensions and performance testing on the system.

I began to take the screenshots, videos, exporting database dump files, and compressing the project.

I then put everything in one folder and compress it so that i can send it as one file.

- Compressing files and codes.
- Naming documents well.
- Exporting database dump files.
- Compressing whole folder for submission.

浙江师范大学



非师范专业实习报告

Zhejiang Normal University

姓名(Name): NYONI ELSON	学号(Student ID No.): 201935520702
学院(College): College Of Mathematics And Computer Science	班 级(Class): 1901
实习单位(Name of the Intern Employer): Zhejiang Normal University	
实习岗位(Post of Internship): Developing An Online Attendance Management	
实习时间(Time of Internship): 2022 年(yy) 10 月(mm) 16 日(dd)至 to 2022 年(yy) 12 月(mm) 10 日(dd)	
实习单位指导教师姓名(Name of Instructor of Internship Employer): Proffessor Chen Xin	
实习单位地址(Address of Internship Employer): 688 Yinbin Avenue, Wucheng District, Jinhua City, Zhejiang Province, China	
实习单位简介: (Introduction to the internship Employer) The project-based internship project provided by College Of Mathematics And Computer Science to Computer Science And Technology Students studying at Zhejiang Normal University. I propose doing the Online Attendance Management System to help teachers to identify active and in-active students in their classes.	