

Learning Document

➤ 201912004

1. Being a leader, I learnt team management.
2. Taking initiatives and responsibilities.
3. How to work remotely and be in synchronization with 10 members despite an ongoing pandemic.
4. Learnt how to build a quality project following software engineering principles.
5. I learnt how to get the work done efficiently from all the members of the team.
6. I learnt how important it is to ensure that all the team members should know about everything in the project.
7. I learnt other leadership skills such as motivating the team members into giving their best.
8. I learnt how to resolve any conflict and keep the harmony intact throughout the journey.

1. A contract should include every norms and cover all the aspects required for both the parties to be on the same page before the development begins.

2. Requirement Specifications would act like a base of contract between the client and the developer.

3. Requirement Analysis makes the understanding more clear regarding the expectations of the customer.

4. It's important to have a checklist to ensure that nothing important gets missed and also keep a track throughout of the pending tasks to be done.

5. A formal Technical Review ensures that the project is on the right path and is good for getting suggestions and helps in enhancing the product.

6. If we don't review after every phase, the mistakes will propagate to the next levels establishing their roots where they happened first and will create problems later on.

6. In a nutshell, I learnt how important is documentation.

7. After getting an internship in a company, I understood the real life example of importance of documentation and how

rigorously do they follow the software engineering principles in corporate world.

Coding:

1. For the coding part, I learnt the importance of authentication as I worked in login, signup and forgot password modules.

2. Importance of commenting the code.

3. Importance of user friendly UI.

4. DRY [don't repeat yourself]

5. Keep it simple

➤ **201912009**

Definition : The main purpose behind the idea is to develop a system for the DAIICT students which will provide several services such as sell/buy items, arranging sessions. And also, This will help special committees in arranging sessions.

Purpose of document : This document will help the students who will make the system for college or university in future. Here, I am mentioning some links and references which will help the team making any system for the college or university.

❖ References for making essential documents :

1) Feasibility study document

- https://www.tutorialspoint.com/software_engineering/software_requirements.htm
- <https://www.brighthubpm.com/project-planning/56372-types-of-feasibility-studies/>
- Feasibility study is the foremost thing before giving a proposal to the client.

❖ What will you learn ?

- Feasibility study helps us in analysing whether the software product can be practically materialized in terms of implementation, cost constraints and in timely manner.

2) State chart diagram :

- https://www.tutorialspoint.com/uml/uml_statechart_diagram.htm
- <https://www.geeksforgeeks.org/unified-modeling-language-uml-state-diagrams/>
- State chart diagram is use to define the different states of an object during its lifetime that is it describes the flow of control from one state to another. In simple words it is used to depict the transition of state of an object from creation to termination.

❖ What will you learn ?

- How to make state chart diagram for a system.
- how transition of state occurs in an object.
- Events responsible in transition of state in an object.
- To understand the reaction of objects.

3) Formal Technical review :

- <https://www.geeksforgeeks.org/formal-technical-review-ftr-in-software-engineering/>
- FTR is a software quality control activity.
- The purpose of FTR is to verify that the software meets specified requirements.
- It is done to ensure that software is represented according to predefined standards

❖ References for learning html

- I am familiar with the html and also using it since long time but as i was working in frontend i had to refer some sites for some advance features in html and for the same i am mentioning some websites for the same.
- <https://www.w3schools.com/html/>
- <https://www.tutorialspoint.com/html/index.htm>

❖ References for learning css

- CSS is used along with the html to make web pages more attractive.
- It also helps in modifying header and footer in the attractive way
- It allows one to adapt the presentation to different types of devices.
- I am mentioning some sites which i had referred
- <https://www.w3schools.com/css/>
- <https://www.tutorialspoint.com/css/index.htm>

❖ **References for bootstrap**

- Bootstrap includes HTML and CSS based design templates for forms, buttons, tables, navigation, modals, image ,etc.
- It is also used for JavaScript plugins.
- It is also used to create responsive designs.
- I am mentioning some sites which i had referred.
- https://www.w3schools.com/whatis/whatis_bootstrap.asp
- <https://www.tutorialspoint.com/bootstrap/index.htm>

❖ **Course related learnings:**

- I had referred lecture notes and ppts provided by the sir.
- also i had referred some sites also for sdlc models.
- and also for testing phase such as types of test to be performed such as types of testing to be performed while developing a software.
- https://www.tutorialspoint.com/sdlc/sdlc_overview.htm

➤ <https://www.geeksforgeeks.org/types-software-testing/>

➤ 201912010

- Express js and Database(My Sql)

For Express I would like to recommend the Udemy Course .

-Link for Udemy Course(<https://www.udemy.com/course/the-web-developer-bootcamp/>)

-For YouTube Link(https://www.youtube.com/watch?v=hGZX_SA7IYg)

You will learn how to:

1. How express helps in fast-tracking development of server-based applications.
2. Routes are used to divert users to different parts of the web applications based on the request made.
3. The response for each route can be varied depending on what needs to be shown to the user.
4. How to Connect MySQL database server from node.js
5. Use SQL statements to read from (or write to) a MySQL database.

- JQuery

For this I would like to recommend the W3schools .

-Link for It(<https://www.w3schools.com/jquery/>)

We use JQuery because :

JQuery is a JavaScript Library.

jQuery greatly simplifies JavaScript programming.

- Ajax

For this I would like to recommend the W3schools .

-Link for It(<https://www.w3schools.com/jquery/>)

You will learn how to:

- How to Update a web page without reloading the page
 - How to Request data from a server - after the page has loaded
 - How to Receive data from a server - after the page has loaded
 - How to Send data to a server - in the background
- DOM And Advance DOM

For this topic I would like to recommend the same Udemy Course that I have mentioned above.

Link(<https://www.udemy.com/course/the-web-developer-bootcamp/>)

You will learn how to:

1. Manipulate the DOM with vanilla JS
 2. Manipulate the DOM using jQuery
- Backend Basics and Command Line Used for Backends

For this topic I would like to recommend the same Udemy Course that I have mentioned above.

Link(<https://www.udemy.com/course/the-web-developer-bootcamp/>)

You will learn how to:

1. Master the command line interface and learn how to access, create, or delete a Directory or File.
2. Learning Backend Basics in which you will Learn how backend works.

- Node .js

For this topic I would like to recommend the same Udemy Course that I have mentioned above and a YouTube tutorial which I find very useful.

-Link for Udemy Course(<https://www.udemy.com/course/the-web-developer-bootcamp/>)

-For YouTube Link

(https://www.youtube.com/watch?v=TlB_eWDSMt4&list=PLTjRvDozrdIynYXGUfyyMZdrQ0Sz27aud&index=4)

You will learn how to:

1. Use NodeJS to write server-side JavaScript
2. Use NPM to install all sorts of useful packages
3. Understand the ins and outs of HTTP requests
4. Create your own Node modules

- Webhosting

-Link for Webhosting

<https://www.youtube.com/watch?v=P86N9FqNqso&t=606s>

-Link for Hosting Database

<https://www.youtube.com/watch?v=0ztTZHSCzEw>

You will learn how to:

1. How to host JS Framework based website on heroku Server(Platform for webhosting)
 2. How to host your database on a particular server
- COURSE RELATED - LEARNING PROCESS
 - Other Resources used for learning the concepts related to course:
 - <https://www.geeksforgeeks.org/software-engineering/>
 - https://www.tutorialspoint.com/software_engineering/index.htm

➤ **201912055**

1) Software Engineering Principles

From this project I learned about which rules or principles has to be follow while we are creating the software.

Reference:-

[http://seu1.org/files/level4/IT-242/Software%20Engineering%20 %207th%20Edition.pdf](http://seu1.org/files/level4/IT-242/Software%20Engineering%20%207th%20Edition.pdf)

2) Software Development Life Cycle (SDLC)

From this subject I learned about the phases of SDLC Process. I learned that it has 5 phases and each phase

contains what and in which order we have to follow the phase.

When we are allowed to exit one phase and enter in next phase.

I also learned that why we have to follow this process. Every software engineer should follow this process to create the software very Effective and complete it in assigned time and budget.

1) Requirement Phase

- a. In the requirement phase you are only allow to enter when all the development team members are cleared about the definition.
- b. You are allow to exited from the Requirement Phase ,
 - i. Only when all the Requirement related documents are done.
 - ii. SRS is reviewed and Approved by Client and also the Contract signed by the client.

2) Design Phase

- a. In the design phase you represents your system in diagrammatically though which the outsider of that project team is able to understand the system easily.

3) Implementation phase

- a. You are allow to enter in this phase when your all diagrams and data dictionary are done.

4) Testing Phase

- a. In this phase you are allow to test your system according to system test plan and also check whether your system is doing exactly what is supposed to do.

5) Deployment phase

- a. In this phase now you are allow to handover your system to your client.

Reference :-

[http://seu1.org/files/level4/IT-242/Software%20Engineering%20 %207th%20Edition.pdf](http://seu1.org/files/level4/IT-242/Software%20Engineering%20%207th%20Edition.pdf)

3) UML Diagrams

- ❖ UML diagrams contains many diagrams that represents the flow, structure of the system that made by your development team.

Reference :-

<https://edutechlearners.com/download/books/OOSE/OOAD.pdf>

4) Sequence Diagram

- ❖ Sequence diagram represent the flow of the messages or inputs and output passes through the system.

References :-

<https://edutechlearners.com/download/books/OOSE/OOAD.pdf>

5) HTML,CSS and JavaScript

- ❖ HTML is scripting language, used to create webpages, forms and other components.
- ❖ CSS is used to styling the elements that are created by the HTML.
- ❖ JavaScript is used to add the dynamic behaviour and responsive design.

References :-

<https://www.w3schools.com/>

6) While creating the Project Report document I learnt how to merge all the crated documents and how the journey of the project development is documented properly.

7) Node.js

- ❖ I learnt how to run the node project.
- ❖ First we have to install node and npm and then we are able to run the node project only by using npm start command.

8) In this subject I learnt what the principles should followed by a software developer.

References :-

https://www.youtube.com/watch?v=6G_UQ0YepV8

9) Team work

- ❖ In this subject I learnt how work in a team.
- ❖ My communication skills are improved.

➤ **201912075**

❖ Html/Css/Javascript :

I learned the Basics of Html/Css/Javascript From below link:

<https://www.w3schools.com/default.asp>

You will learn :

1. How to make Html pages/Forms.
2. How to style the pages and make attractive .
3. How to apply scripts in Html/Css pages using Javascript.

❖ Node.js and Express.js.

I learned the basics of Node.js and Express.js from Udemy course.

Link of Udemy Course :

<https://www.udemy.com/course/the-complete-nodejs-developer-course-2/>

*It contains 3 real-world applications for hands-on Node.js/Express.js.

You will learn :

1. How module system works and how to require modules in our application.
2. File system and command line args working.

3. How to create quickly an application skeleton.
4. How to upload file and send Emails.
5. EJS Templates which works as a Html/Css files in Node.js.
6. Making of Get/Post requests.
7. Basics of Routings and creation of Routes.

❖ MySQL Database Connectivity with Node.js or Express.js.

YouTube Link

<https://www.youtube.com/watch?v=4tFG6yoyjSN8&list=PLUVqY59GNZQMCLXlrBo4T557kWjbKHMLS&index=66>

You will learn:

1. How to connect or integrate Node.js/Express.js with MySQL Database.
2. All the Create/Read/Update/Delete operations.

❖ API Authentication and Security :

Youtube Link :

<https://www.youtube.com/watch?v=KCDwmO-RXis&list=PLUVqY59GNZQMCLXlrBo4T557kWjbKHMLS&index=47>

You will learn:

1. Making of JSON Web tokens using JWT for 'Remember me' functionality.
2. Making of middleware to authenticate user/task endpoints.

3. To store user id in local storage using npm module.

❖ Mini Project ‘Password Manager’ Using Node.js/Express.js:

Here is Youtube Link Below :

https://www.youtube.com/playlist?list=PLUVqY59GNZQNCK_D9VW_zNh60WuQIzo3K

You will Learn :

1. You will learn how to make full web application using Node.js and after completing this mini project you'll gain confidence to make full web-app by yourself.

COURSE RELATED LEARNING

❖ SOFTWARE ENGINEERING BASICS:

I learned from course instructor's PPT and made notes on it.

❖ SDLC MODELS:

I learned SDLC models basics from below links:

https://www.tutorialspoint.com/software_engineering/software_development_life_cycle.htm

<https://www.guru99.com/software-development-life-cycle-tutorial.html>

Youtube Link : <https://www.youtube.com/watch?v=i-QyW8D3ei0>

You Will Learn:

1. All about SDLC models, their phases, Advantages/disadvantages.
2. Which SDLC is suitable for a particular project.
3. How to develop software following SDLC models.

❖ Iterative Waterfall Model

Here is link below from where I learned :

<https://www.geeksforgeeks.org/software-engineering-iterative-waterfall-model/#:~:text=The%20iterative%20waterfall%20model%20provides,from%20the%20classical%20waterfall%20model.&text=When%20errors%20are%20detected%20at,by%20programmers%20during%20some%20phase.>

https://www.youtube.com/watch?v=tF5x_d7Bies

You will Learn :

1. Iterative waterfall model working , its advantages and drawbacks.

❖ Agile Model

Here is link below from where I learned Agile Model with an interesting story.

<https://medium.com/swlh/how-to-explain-agile-and-scrum-to-your-grandpa-in-5-mins-and-to-better-understand-both-yourself-3792748fa085>

You will Learn :

2. Agile Model using an interesting story and understanding of this model.

❖ Incremental Model :

Link : <https://www.guru99.com/what-is-incremental-model-in-sdlc-advantages-disadvantages.html>

You will learn:

1. Uses, Advantages and Disadvantages of this model.

➤ **201912082**

First of all I would like to mention that it's a very good exercise because it forces every one for brainstorming and it requires full scan of last 3-4 months to analyse the key points learned by us.

So there are many technical skills which I learned during this course but it's not that much noticeable because we already learned many technical skills from many different courses and I felt that software engineering taught us some skills which impact our lives more.

Some skills is as follows which is bit philosophical but very impactful in my life for sure and also in my other team member's life also but I guaranteed about mine.

1) Team work :

This skills is very important not only for software engineering but in many other aspect of life also and we learned this skills in this period. Yes, it's full of mistakes but that's the beauty of learning from mistakes.

2) Communicate with team members :

Communication is very essential part of mankind and when it's about professional communication it's responsible for our good image in corporate world and this course has also teach us little bit about communication also.

3) How a software development get completed as Team :

When it's about developing software individually or developing it as a team there is lots of difference. Although if you want to build same software, but the way you develop it as an individual and develop it as a team there is drastic difference both t approach because team development requires planning and strategy which suitable for whole team and when you work individually there is different plan and strategy. This single thing says that there is lots of difference in both approach and that's the key learning from this course.

4) To observe/find strength of every team member and take maximum out of that :

Working as a team give some advantage which works as a super power for a whole team because every human has some strength and when you develop a software as team you can take advantage of this super power and to find this super power is not everyone's cup of tea. It's doesn't that you are leader or not but to find and observe the super power from team member is the responsibility of everyone and to suggest a leader about this super powers will make job easy for leader and grow whole team.

5) Work from home experience :

Due to this pandemic we got an opportunity to experience a very key factor of professional life of software engineering. At this stage, such a learning boost the confidence of every student and help to bind themselves in corporate world.

Although there are many other learning from this duration but not all learning can be mentioned some of them is just felt by us.

➤ **201912091**

1. I lean Software engineering from online sources like Rjib Mall's ppt, YouTube videos, and some websites of learning software engineering like:

- ❑ Tutorials point

- https://www.tutorialspoint.com/software_engineering/index.htm

- ❑ javaTpoint

➤ <https://www.javatpoint.com/software-engineering-tutorial>

❑ guru99

➤ <https://www.guru99.com/software-engineering-tutorial.html>

2. I know about diagram but some diagrams like sequence diagram and lean Gantt chart from YouTube channel Subjectmoney link is <https://www.youtube.com/watch?v=-oD50HSBBBI>

3. I learn Html, CSS and JavaScript from random channel on YouTube and also learn that how to create script in html page and how to responsive to the page. For this Reference is “DarkCode” website and YouTube channel.

❑ YouTube:

<https://www.youtube.com/channel/UCD3KVjbb7aq2OiOffuungzw>

❑ Website: <https://www.darkcode.info/>

4. I learn How to work in Team by doing Team work and doing meeting on meet app. My communication skills are improved.

➤ **201912110**

Project :

Time Estimation :

I create the time estimation plan for the project.

Complete this document I refer the several website.

- <https://hackernoon.com/barriers-to-effective-software-effort-estimation-and-how-to-avoid-them-4abd39f09f26>
- <https://medium.com/globalluxsoft/time-estimation-in-software-development-a4a495c8eb6c>

The main purpose of the time estimation is refers to the practice and process of trying to determine the amount of time (usually hours) required for a single software engineer to complete a given task. A task may also need to be broken into many smaller tasks that must each be estimated as well.

After the complete time estimation I learned the how calculating Realistic Project Timelines. without time estimation you won't know how long your project will take, and you won't be able to get commitment from the people who need to sign it off and we can not judge whether a project has succeeded or failed depending on whether it has been delivered on time and on budget. To have a chance of being successful as a project manager, you need to be able to negotiate sensible budgets and achievable deadlines.

Test Cases :

The Main purpose of the Test cases involve a set of steps, conditions, and inputs that can be used while performing testing tasks. The main intent of this activity is to ensure whether a software passes or fails in terms of its functionality and other aspects.

First created the all test cases and after then I check the each of the test case is pass or fail. Using this document I learned the what is the status of the project based on test case.

Front End :

Sell module (USER)

In front end I was done the complete sell module. So complete this work First I learned the some advance concept of css , html and javascript.

Wheneve I implement this module that time I learned some best feature like pop up menu, attractive image show , uploading the file etc.

I use the following link:

<https://www.w3schools.com/js/>

<https://www.udemy.com/course/htmlwebsite/>

Admin

In admin side do the all table and and pop up menu.

Back End :

First I learned the nodejs Express framework .

Node.js

- ❖ I learnt how to run the node project.
- ❖ First we have to install node and npm and then we are able to run the node project only by using npm start command.

Course.

First I learned the Some class notes and PPT.

And then other resources I used

- Software Engineering by Roger Pressman 7th edition Book
- <https://www.geeksforgeeks.org/software-engineering/>
- https://www.tutorialspoint.com/software_engineering/index.htm
- https://www.tutorialspoint.com/sdlc/sdlc_overview.htm
- And some other you tube vedio.

201912111

PURPOSE OF DOCUMENT: This document would help someone who is building a project for university or colleges hostel students. We developed project for DA-IICT specific and this concept may also be helpful for other university or college students.

SCOPE OF DOCUMENT: This document basically covers what we have learned during tenure of our course and project. This includes both the technical and non-technical aspects and experience.

PROJECT OVERVIEW: DA-UTILITIES is an online portal by using it anyone can use the facilities of sale and session management in campus. A system for Daiictians where everyone can avail the benefits of selling their belongings and conducting sessions of their interests and opinions.

PROJECT RELATED LEARNING

1. TECHNICAL LEARNING:

→ PROJECT PURPOSE

- i. Node .JS (EXPRESS FRAMEWORK)
- ii. MySQL
- iii. XAMPP Server
- iv. POSTMAN
- v. HTML5
- vi. CSS3
- vii. JavaScript
- viii. GITHUB
- ix. Implementation of Client-Server Relation

→ DOCUMENT PURPOSE

- i. Microsoft VISIO

2. NON-TECHNICAL LEARNING:

- a. Team Coordination
- b. Communication
- c. Time Management
- d. Problem Solving
- e. Organization
- f. Decision Making

STARTING PHASE OF PROJECT:

- ➔ First, we discussed many ideas in the team. I suggested one of the idea of PRESCRIPTION RECORD OF PATIENT HISTORY – DOCTOR. We thought about this idea but it is already developed product.
- ➔ After many discussion and found out a best idea to developed a useful system for daiict students and finalized the project that is DA-UTILITIES.
- ➔ From all of the discussion about project, I learned how to choose a proper and useful project definition and come up with the best solution. So I learned Project Definition Selection.

1. TECHNICAL LEARNING:

i) Node .JS (EXPRESS FRAMEWORK)

- ➔ First, we selected Node JS for our project. The following are the reasons why we choose Node JS.
- ➔ Node .JS uses an event-driven, non-blocking I/O model that makes it lightweight and efficient, perfect for data-intensive real-time applications that run across distributed devices.
- ➔ Node .JS is an open source, cross-platform runtime environment for developing server-side and networking applications.

- ➔ Node.js also provides a rich library of various JavaScript modules which simplifies the development of web applications using Node.js to a great extent.
- ➔ Node .JS = Runtime Environment + JS Library.
- ➔ Features of Node .JS: Asynchronous and Event Driven, Very Fast, Single Threaded but Highly Scalable, No Buffering.
- ➔ So we selected Node .JS and watched the videos and official sites of Node .JS.
- ➔ We used EXPRESS framework of Node .JS.
- ➔ The express framework **is** built on top of the node. js framework and helps in fast-tracking development of server-based applications.
- ➔ Routes are used to divert users to different parts of the web applications based on the request made.
- ➔ Below are the links from where I learned Node .JS – Express Framework.

<https://nodejs.org/en/>

https://www.w3schools.com/nodejs/nodejs_intro.asp

DOWNLOAD: <https://nodejs.org/en/download/>

NODE JS FULL COURSE | EDUREKA:

<https://youtu.be/JnvKXcSI7yk>

<https://jinalshahblog.wordpress.com/>

- ➔ From the above links and tutorials, I created some important notes during learning of Node .JS.
- ➔ Installation steps:
 - Step 1: Check nodejs Type

node -v

Step 2: Download Recommended Version.

Step 3: Install nodejs

Step 4: npm install -g @angular/cli

➔ Project Creation Steps:

Step 1 :npm install express-generator -g

Step 2 :express

Step 3 :npm install mysql --save OR "mysql": "^2.16.0"

Step 4: npm install cors --save OR "cors": "^2.8.4"

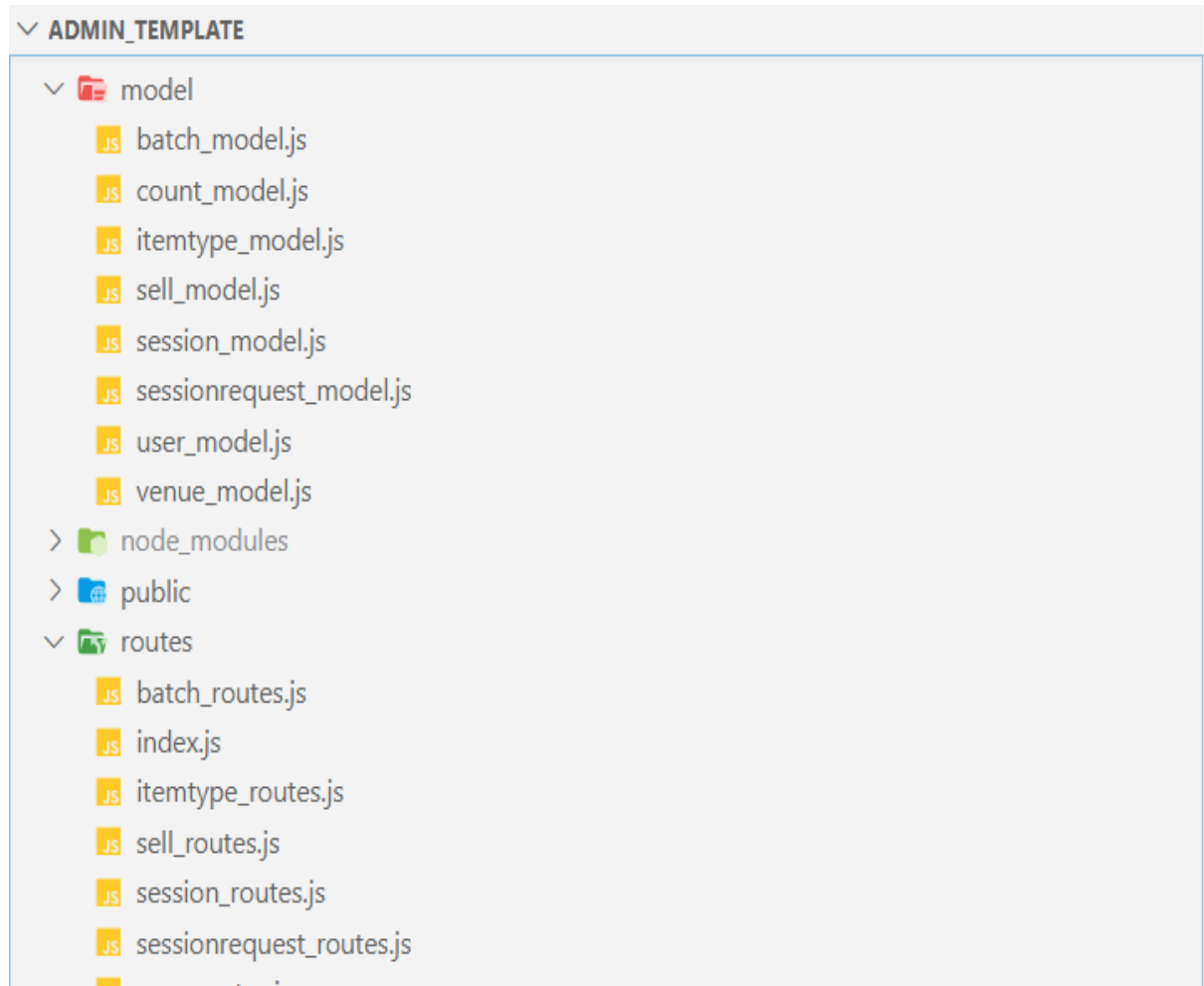
Step 5: npm install

Step 6: Start server: npm start

➔ We can use Node .JS as for the frontend and backend both. So we decided that we used Node .JS as frontend and backend both.

➔ We used EJS with Express in Node JS, for that I installed EJS in my project using “npm install ejs”.

➔ To make project easier and easy to understand, I created MVC structure in the Project. I used MODEL, ROUTES for each and every module.



- ➔ Above figure illustrated that there are MODEL and ROUTES folder. Model folder contains all the queries for each module. Routes folder contains HTTP method like GET, POST, PUT, DELETE with routing.
- ➔ To check the queries, I found out on internet that there is a tool named as “POSTMAN”.
- ➔ I learned how to use POSTMAN and what are the uses of it from the link: <https://www.blazemeter.com/blog/how-use-postman-manage-and-execute-your-apis>
- ➔ **Postman** is a popular API client that makes it easy for developers to create, share, test and document APIs.

ii) MySQL

- ➔ We used MySQL database for our project. For that I learned how to make Data-Dictionary and what are the constraints I have to put for different fields.

iii) XAMPP Server

- ➔ I learned XAMPP server installation in my laptop.
- ➔ DOWNLOAD: <https://www.apachefriends.org/download.html>
- ➔ Installed and start the server.
- ➔ Created new database and added tables.

iv) HTML

- ➔ I already knew some elements of HTML. I was working in a backend coding team but sometimes I have to add an element or modification of existing page so I learned new elements of HTML from the following links:
<https://www.w3schools.com/html/>
https://www.w3schools.com/html/html5_semantic_elements.asp
- ➔ I learned and implemented few elements of HTML.

v) CSS

- ➔ To modification of existing page like header, footer, logo, etc. I learned some part of CSS.
- ➔ It describes the presentation of Web Pages, including colours, layout and fonts.
- ➔ To apply css in our project, I referred to use the sites:
<https://www.w3schools.com/css/>
https://www.w3schools.com/icons/fontawesome_icons_webapp.asp

vi) JavaScript

- ➔ I learned that if I want to work in Node .JS, It would require JavaScript Knowledge. I would also preferred that you have to first learned some basics of JS and then jump right to Node .JS.
- ➔ Node .JS is an interpreter of JavaScript.
- ➔ I learned the basic stuffs of JavaScript from the following links:
<https://www.youtube.com/watch?v=W6NZfCO5SIk>
https://www.youtube.com/watch?v=Bv_5Zv5c-Ts
https://www.youtube.com/watch?v=_8gHHBlbziw
- ➔ From the above youtube links, I tried to learn JS. And I also done some basic programs in JS. I attached my hands-on demo links of the above links.
- ➔ ATTACHMENTS:
https://drive.google.com/open?id=1IU2A9SnrvLIO7I_m8B9XHo2eGRulTnrF

<https://drive.google.com/open?id=1ksef2xHfxtSjRa4Pewcs37uEmi3BwKjp>

vii) GITHUB

- ➔ GitHub is an open-source repository hosting service. I learned that it is used to host code projects in a variety of different programming languages.
- ➔ It also keep the track of the various changes made to every iteration.
- ➔ I made a notes for hosting a code in GitHub. The following are the steps that I used to host the code:

Step 1: Click New Repository

Step 2: [Check] `git remote -v`

Step 3: [initialize] `git init`

Step 4: [Take to the Server] `git remote add origin URL`

`git remote -v`

`git add .`

Step 5: [For Message] `git commit -m "Initial Commit"`

`git push origin master`

Step 6: [For Remove] `git remote remove origin`

Step 7: [For Clone] `git clone URL`

`git pull origin master`

- ➔ From the above steps, I hosted one of our project side.

- ➔ Link: https://github.com/meet1612/swe_admin

❖ PROJECT DEPLOYMENT

- ➔ I deployed our project for learning. I searched the various platform for deploying a project. I used heroku.com to deploy

our project because it is cloud platform and free hosting platform.

➔ After that I learned how to deploy Node JS project on heroku. I referred the steps from the following link:

<https://jinalshahblog.wordpress.com/2016/10/13/how-to-host-rest-api-on-heroku-server-using-command-line/>

➔ Above link explained all the steps with screenshot for the Node JS project deployment.

❖ DOCUMENT PURPOSE OF LEARNING

➔ In the Documentation part, I was created USECASES, USER MANUALS, DATA-DICTIONARY and TEST CASES.

➔ USECASES: I learned how to draw the use cases in VISIO. I also learned the purpose of use case diagram that are:

- Used to get an outside view of the system.
- Used to gather the requirements of the system.
- Show the interaction among the requirements are actors.

➔ For referenced, I used the link:

https://www.tutorialspoint.com/uml/uml_use_case_diagram.htm

➔ Data-Dictionary: I created Data-Dictionary in the word file. It is relationship to objects and data. I noted some information like primary key, foreign key, constraints and default values of the fields in the tables.

➔ TEST CASES: To create document of test case, I referred the link: <https://www.softwaretestinghelp.com/test-case-template-examples/>

2. NON-TECHNICAL LEARNING:

➔ Apart from the core technical learnings, there were many key skills that I improved which were quite essential to complete a successful team project. Our team coordination was developed through clear communication and efficient time management. During this project, I also got opportunity to enhance our problem solving and decision making skills. As we went ahead I also gained some knowledge regarding the organization and its functions.

COURSE RELATED LEARNING

➔ For course related learning, first I used Lecture's notes and PPT.

➔ Other Resources:

- Software Engineering by Roger Pressman 7th edition Book
- <https://www.geeksforgeeks.org/software-engineering/>
- https://www.tutorialspoint.com/software_engineering/index.htm

➔ For some topics, I watched a youtube playlist by easy engineering classes.

Link: https://youtu.be/tZreaH_FyMs

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A) Documentation :

- 1)SDLC Phases :<https://www.youtube.com/watch?v=G-6qDY8UltU> : (Youtube Video)
- 2)Activity Diagram : <http://vlabs.iitkgp.ernet.in/se/6/theory/>
- 3)User Manual for Reference : https://www.redhawk-tech.com/Labs/RedHawkCMSManual_2-2013.pdf

B)Project work :

1) Node js Tutorial in 1 hour :
https://www.youtube.com/watch?v=TIB_eWDSMt4&t=1369s
(YouTube)

2) Node js Tutorial Website :
<https://www.tutorialsteacher.com/nodejs/nodejs-basics>
(Website)

3) Express js Framework : <https://expressjs.com/>

a)Routing :

<https://expressjs.com/en/guide/routing.html>

4) Express js Framework :
<https://www.tutorialsteacher.com/nodejs/expressjs>

5) Express js Tutorial in Hindi :
https://www.youtube.com/watch?v=Q6swmpfzcgY&list=PLNHw_0qv1zy_Ym-VPmRggL94Hml-3dlGm (YouTube)-Whole Playlist

6)Routing & Controller : https://developer.mozilla.org/en-US/docs/Learn/Server-side/Express_Nodejs/routes

7)How to send data from html form to node.js server :
<https://www.youtube.com/watch?v=0tOgMSEPFRs&t=1s>

8)Node.js + MySQL CRUD - GET,POST,PUT and DELETE :
<https://www.youtube.com/watch?v=4fWWn2Pe2Mk&t=356s>

c)System Test Plan : <https://www.guru99.com/what-everybody-ought-to-know-about-test-planing.html>