Group Projects

Event-Attendance-Management-System

GitHub Link : https://github.com/RavinduBA/e19-3yp-Event-Attendance-Management-System

Project Page: https://cepdnaclk.github.io/e19-3yp-Event-Attendance-Management-System/

So what event attendance management system basically do is when organizing a event for organizers they can track and analyze the Session in real time. So there is a web application for event organizers, through that they can track the entering and leaving of the attendees , creating conference rooms ,adding sessions to rooms, and view analyzed info about sessions like wise things . and for event attendee also we provide display device in front of session room so they can view all the info about ongoing sessions, upcoming session like wise.so for hardware part we used ESP 32 as the main micro controller, FID sensors and reader, and display device and for web application we used MERN stack and we hosted it on AWS and we used AWS services like Ec2 ,Lambda functions ,IOT core.

Technology stack : React , CSS , Figma, Node.JS

Contribution : contribution is explained in the short video.

Baby Development tracking system (Mobile Application)

GitHub Link : https://github.com/RavinduBA/e19-co225-Baby-Developement-Tracking-System-Mobileapplication

Project Page : https://cepdnaclk.github.io/e19-co225-Baby-Developement-Tracking-System-Mobileapplication/

This mobile application for parents, doctors and midwives to track the growth of babies from 0 to 5 years old. parents can register babies in this application .Doctors are able to add the standard vaccinations details of babies , Medication and Recommendations. so this app includes features like doctor/midwife/baby registration, vaccination tracking, growth monitoring ,user notifications like features. For tech stack we used android studio with java and for database we used fire base.

Features :

Vaccination Tracking - The system is equipped with a standard vaccine schedule, Users can record the vaccinations the babies have already received and receive notifications for upcoming vaccinations

Growth Monitoring - application provides standard weight and height ranges based on the baby's age. Users can enter the baby's weight and height regularly, and the system compares these values with the standard ranges. if the weight or height falls outside the standard range, users receive notifications

Contribution :

What I did in this project was I created registration parts of doctor, midwives , baby .and the vaccination details adding parts and firebase integration for those . So I designed this using XML in Android Studio with java. I really used some of OOP concepts like encapsulation , inheritance and interfaces like wise . so I used encapsulation to secure fields like medical License Number ,specialty in the Doctor class are private and accessible only through public getter and setter methods. And I use Inheritance to Create base class called USER and by extending that I created specific classes for doctor midwives and baby. by that I can share some common attributes and methods among classes like name ,id. and I also created xml forms and UIs for this. and after creating that I set the firebase Fire store integration with some those components.

Library Management System

GitHub Link : https://github.com/RavinduBA/librarymanagmentsystemD

So in this project we Developed a library management system Web Application for libraries users . So this system includes features like monitor, search books, view books, and lending activities, user registration /login likewise things. For the tec stack we used was html ,php and for database we used MySQL and for styling we used CSS.

Contribution :

For my part I created frontend parts of some pages like homepage, search books, borrowed books, login/registration like wise and I used CSS for styling and I did some backend parts also using php like form submissions, and database interactions. Then I used MySQL to store data related to users, books, and transactions. so I used GET and POST Methods for Form Handling (EX: search for books and see the results). and for various activities I created reusable functions and use it on different components and pages. For example, I created a function to fetch book details from the database. This function can be used in different pages like the read books, and borrowed books pages to display book information .I used like Password Hashing in registration pages Used password hash to securely hash passwords before storing them. Also I used basic SQL queries like SELECT , INSERT,UPDATE and Operations like JOIN for data retrieval ,insertion and updates.

Individual Projects

Movie Review Web Application

GitHub Link : https://github.com/RavinduBA/Movie-Review-WebApp

This is an ongoing project where I'm developing a movie review application. Users can log in or register to the system, search for movies, watch trailers, enter reviews, and rate the movies.For the tech stack, I used Spring Boot for the backend and MongoDB for the database. For the frontend, I utilized React. To test API calls, I used Postman.

I have explained this further in my short video. Please refer to it for more details.

User-Management-System Web Application (Mini Project)

GitHub Link : https://github.com/RavinduBA/User_Management_System

This project includes features like user register, login ,update, delete contacts and add blogs. mainly why I did it was to practice PHP and get some experience of it . it doesn't contain many functionalities but that time it really helped me to get some idea about PHP and MySQL. I learned basic things like Password Hashing (password hash() function to securely hash user passwords before storing them in the database) / Form Handling (post/get method) / writing SQL statements like Update Query, delete query , Select Query (EX: SELECT statement to fetch the user's data based on the provided username or email.) like wise . So this was done mainly for learning purposes.

Grocery list Web Application (Mini Project)

GitHub Link : https://github.com/RavinduBA/Grocery_List_App

A basic grocery list application with features like the ability to add and remove items and categories the items that were brought. This project is still being worked on with plans to add more features and make the mobile application of this version.

Technology Stack : React ,CSS , Node.js