Electronic Health Record

Course No: CCZG628T-L1 Course Title: Dissertation

Dissertation Done by:

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Degree Program: M.Tech- Cloud Computing

Research Area: Cloud



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1. Broad Area of Work:

Cloud computing is one of the fastest growing and most transformative technologies in today's digital era. The broad focus of our project encompasses Cloud Computing and Full-Stack Development. Specifically, the project highlights the following application areas:

- Frontend Development: Designing and implementing a user-friendly website interface.
- Database Management: Storing and managing user information securely.
- **Cloud Deployment**: Hosting the website on a reliable cloud platform for seamless access and scalability.

2. Background:

Technology has become an integral part of modern life, with innovations like IoT and Cloud Computing reshaping industries. Cloud technologies are gaining widespread adoption due to their flexibility, scalability, and accessibility. Health is a critical aspect of human life, and leveraging technology to manage health records can save significant time and effort. The motivation behind this project is to create an online platform that securely stores and shares health records, such as diagnostic test reports, prescriptions, and medical bills. By deploying this platform on the cloud, users can conveniently access their health information anytime, anywhere, without delays caused by traditional methods of record-keeping.

3. Objectives:

The primary objectives of this project are:

- To analyze the current challenges faced by doctors and patients due to repetitive diagnostic tests and delayed access to historical health records.
- To design a user-friendly website that facilitates seamless interaction between patients, doctors, diagnostic centers, and insurance providers.
- To develop and deploy a cloud-based solution that accelerates healthcare processes and ensures the secure storage and sharing of patient records.

4. Scope of Work:

The scope of this project is to develop and deploy an Electronic Health Record (EHR) software application that:

- Provides users, including patients and healthcare providers, with secure access to health records.
- Enables the storage of health-related documents such as diagnostic reports, prescriptions, and medical bills.
- Facilitates sharing of records between relevant stakeholders, such as hospitals, doctors, diagnostic centers, and insurance companies.
- Leverages cloud technology to ensure accessibility, scalability, and reliability of the platform.
- By addressing these objectives, the project aims to streamline healthcare workflows and enhance the overall experience for all stakeholders involved.

5. Plan of work:

Phases	Start Date-End Date	Work to be done	
Dissertation Outline	18 Jan 2025 - 25 Jan 2025	prepare Dissertation Outline	
Design & Development	2 Feb 2025 - 28 Feb 2025	Design & Development Activity	
Testing	1 Mar 2025 - 20 Mar 2025	Manual Testing and Document for Mid Sem submission	
Deployment	21 Mar 2025 - 17 April 2025	Deployment and Final PPT and documents preparation.	
Submission and Review	25 April 2025 - May 2025	Final Review and submission of Dissertation	

6. Particulars of the Supervisor and Examiner:

	Supervisor	Additional Examiner
Name	Pradeep Palla	Ajay Kumar
Qualification	Bachelor of Engineering: Information Science	MCA
Designation	Solution Architect	Engineering Lead
Employing Organization and Location	Persistent Systems, Bengaluru	Persistent Systems, Pune.
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7. Remarks of the Supervisor:

'Electronic Health Record' Application is a good use case to demonstrate the skills and technologies learned by student till now in the course. This project will use Cloud, Database, Object Storage, CI/CD, Serverless Service, Kubernetes Async Message Service, etc.

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