Weekly Progress Report

Name: Akshay Prakash Kolhe

Domain: Cloud Computing

Date of submission: 01/06/2024

Week Ending: 02

1. Overview

This week, I focused on deepening my understanding of different cloud service models (IaaS, PaaS, and SaaS) and cloud deployment models (Private, Public, Community, and Hybrid Cloud). Additionally, I studied the benefits of on-premise vs. off-premise solutions. After thorough research, I finalized the MERN stack as the development framework for my Health Care Management System project.

2. Achievements

- Detailed Study on Cloud Models: Completed an in-depth study of IaaS, PaaS, and SaaS models, understanding their specific use cases and advantages.
- Explored Cloud Deployment Models: Gained a comprehensive understanding of Private, Public, Community, and Hybrid Cloud models.
- Benefits Analysis: Studied the benefits of on-premise versus off-premise solutions, evaluating which is more suitable for different scenarios.
- Project Development Stack Finalized: Chose the MERN stack (MongoDB, Express.js, React.js, Node.js) for the development of the Health Care Management System project.

3. Challenges

- Comparing Cloud Models: It was initially challenging to understand the nuanced differences between the various cloud service and deployment models and their practical applications.

- Stack Selection: Deciding on the right development stack for the project required careful consideration of various factors including scalability, ease of development, and community support.

4. Learning Resources
- LMS Platform Documents and Videos: Provided foundational and detailed knowledge on cloud computing models and their benefits.
- YouTube: Supplemented my learning with video tutorials and explanations on IaaS, PaaS, SaaS, and different cloud deployment models.
- Online Articles and Tutorials: Various online resources and articles helped in understanding the practical applications and benefits of on-premise vs. off-premise solutions.

5. Next Week's Goal
- Project Infrastructure Setup: Begin setting up the basic infrastructure on Azure for the Health Care Management System, including creating virtual networks, setting up databases, and deploying initial applications.
- MERN Stack Implementation: Start building the initial components of the Health Care Management System using the MERN stack.

By progressing through these goals, I aim to lay a strong foundation for the Health Care Management System project and ensure that the technical stack and cloud infrastructure are robust and scalable.