Project Design Phase-II Technology
Stack (Architecture & Stack)

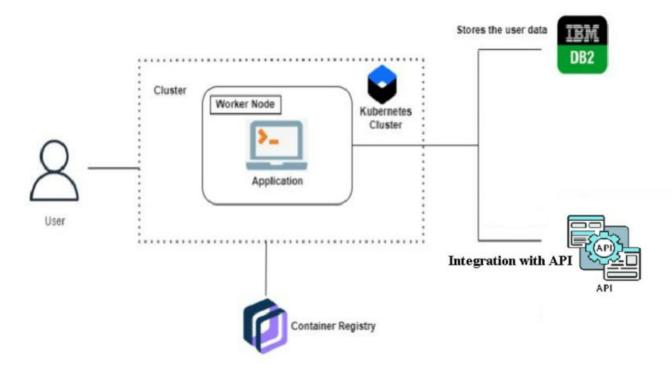| Date	13May2023
Team ID	NM2023TMID19980
Project Name	Navigating the complex world of auto insurance: A vehicle cost analysis for better decision making.

Technology Architecture:

Table-1 : Components & Technologies:

S.No	Component	Description	Technology

2.	Cloud Computing	● Computes the data from sensor ● Real time data analysis	Amazon Web Services(AWS),Microsoft Azure,Google Cloud.
3.	Machine Learning	● Learn from recorded data and make predictions about future events. ● Detect sudden changes in pressure,flow rate, temperature	Python,Tensor flow, Apache
4.	Data Analytics	● Analyse the data and provide alerts	Python,Tensor flow, Apache
5.	Mobile Application Development (User interface)	● Convenient and easy access for hospital staff to monitor the system ● Respond to alerts remotely	Java, Kotlin, AWS, React Native ,Flutter
6.	Web Devleopment (User interface)	● User friendly interface ● Easy Maintenance	React.js , vue.js, Angular,HTML,CSS,Java Script

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	- Source code for the frameworks is openly available - Developers can save time and effort - Pre built , reusable software components	MongoDB, React.js, Node.js,LTensor flow
2.	Security Implementations	- Ensure system security - Encrypted Data - Protect from cyber attacks	User Authentication,Firewall,Data Encryption
3.	Scalable Architecture	Ability to be flexible and adaptable to the changing hospital environments	Sensors,Remote monitoring,Mobile app
4.	Availability	Uses widely available components for constructing this system	Sensors,cloud platforms
5.	Performance	Overall design performance is effective based on the services provided by the developers	High quality sensors,Machine learning