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

Date	03 October 2022	
Team ID	PNT2022TMID06046	
Project Name	Project – Smart solutions for Railways	
Maximum Marks	4 Marks	

Technical Architecture:

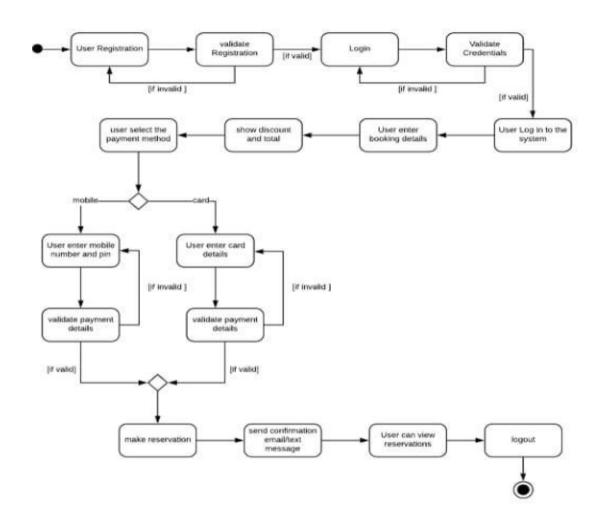


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Logic for a process in the application	Java / Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
9.	External API-2	Purpose of External API used in the application	Aadhar API, etc.
10.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration:	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Technology of Opensource framework
2.	Security Implementations	List all the security / access controls implemented,	e.g. SHA-256, Encryptions, IAM
		use of firewalls etc.	Controls, OWASP etc.
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier,	Technology used
		Micro-services)	
4.	Availability	Justify the availability of application (e.g. use of	Technology used
		load balancers, distributed servers etc.)	
5.	Performance	Design consideration for the performance of the	Technology used
		application (number of requests per sec, use of	
		Cache, use of CDN's) etc.	