PROJECT DESIGN PHASE – II TECHNOLOGY STACK (ARCHITECTURE AND STACK)

| Date | 12 October 2022 | |
|---------------|---------------------------------------|--|
| Team ID | PNT2022TMID13093 | |
| Project Name | Project - Inventory Management System | |
| | for Retailers | |
| Maximum Marks | 4 Marks | |

Technical Architecture:

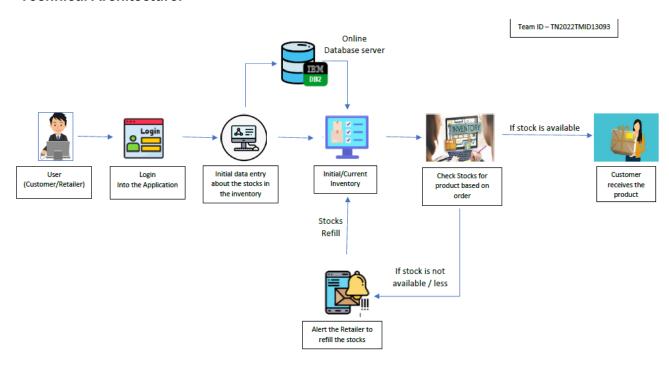


Table-1: Components & Technologies:

| S. No | Component | Description | Technology |
|-------|---------------------|--|-----------------------------|
| 1. | User Interface | How user interacts with application | HTML, CSS, JavaScript / |
| | | e.g.,Web UI, Mobile App, Chatbot etc. | Angular Js /ReactJs 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 Cloud ant etc. |
| 7. | File Storage | File storage requirements | IBM Block Storage or |
| | | | Other StorageService 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 / CloudLocal Server Configuration | Local, Cloud Foundry, Kubernetes, etc. |

Table-2: Application Characteristics:

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