

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

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| Date | 03 October 2022 |
| Team ID | PNT2022TMID37075 |
| Project Name | Project – Inventory management system for Retailers |
| Maximum Marks | 4 Marks |

Technical Architecture:

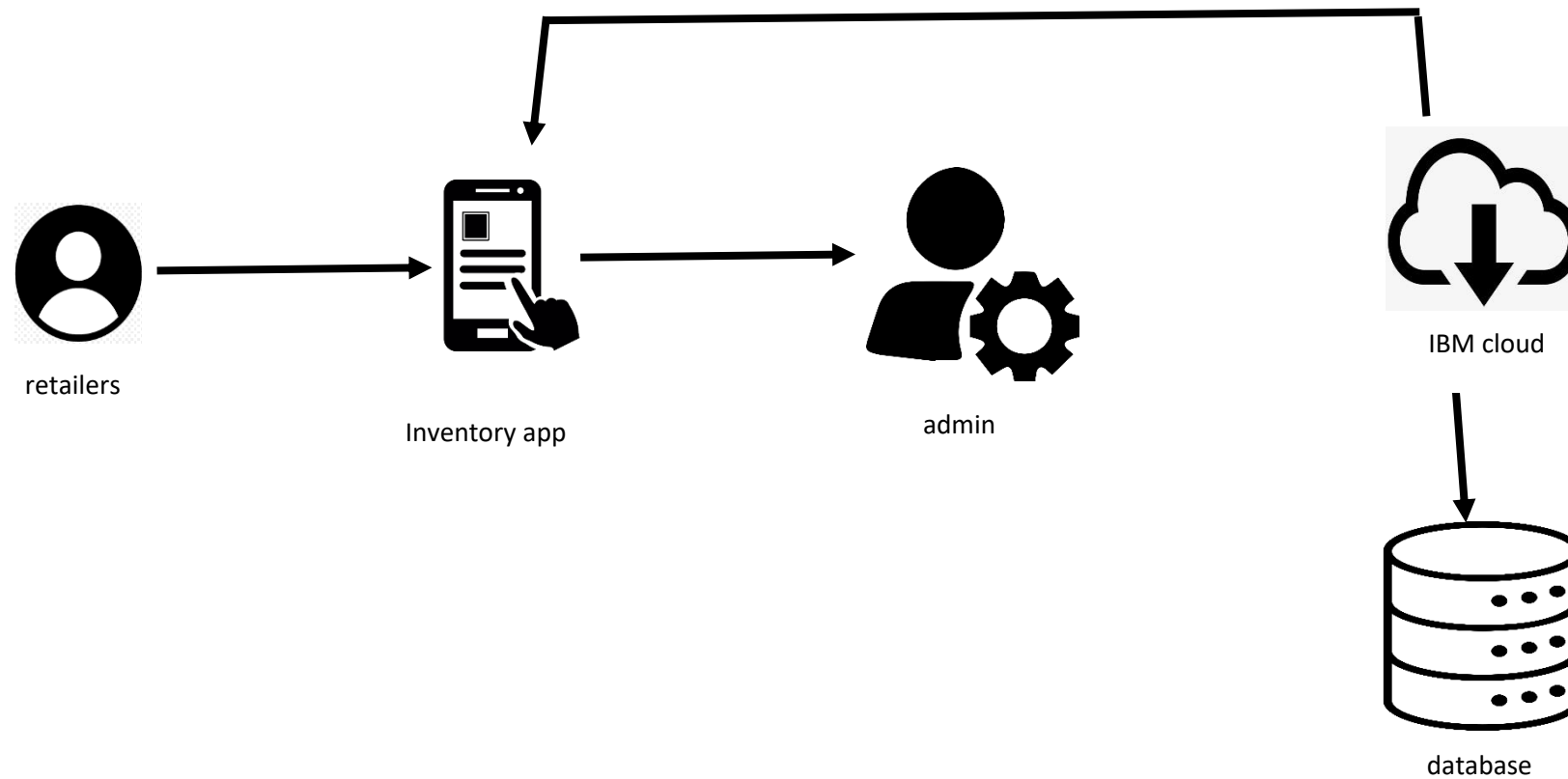


Table-1 : Components & Technologies:

| S.No | Component | Description | Technology |
|------|---------------------------------|---|--|
| 1. | User Interface | How user interacts with application 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 | 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, 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. | 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 | Python flask |
| 2. | Security Implementations | List all the security / access controls implemented, use of firewalls etc. | e.g. encryption, intrusion detection software,antivirus, firewalls |
| 3. | Scalable Architecture | Justify the scalability of architecture (3 – tier, Micro-services) | Supports higher workloads without any fundamental changes to it |
| 4. | Availability | Justify the availability of application (e.g. use of load balancers, distributed servers etc.) | High availability enables your IT infrastructure to continue functioning even when some of its components fail |
| 5. | Performance | Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc. | Performance technology, therefore is a field of practice that uses various tools, processes and ideas in a scientific , systematic manner to improve the desired outcomes of individuals and organizations |