

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

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| Date | 15 October 2022 |
| Team ID | PNT2022TMID08776 |
| Project Name | Analytics for Hospital's Health-Care Data |
| Maximum Marks | 4 Marks |

Technical Architecture:

Analytics for Hospital's Health-Care Data

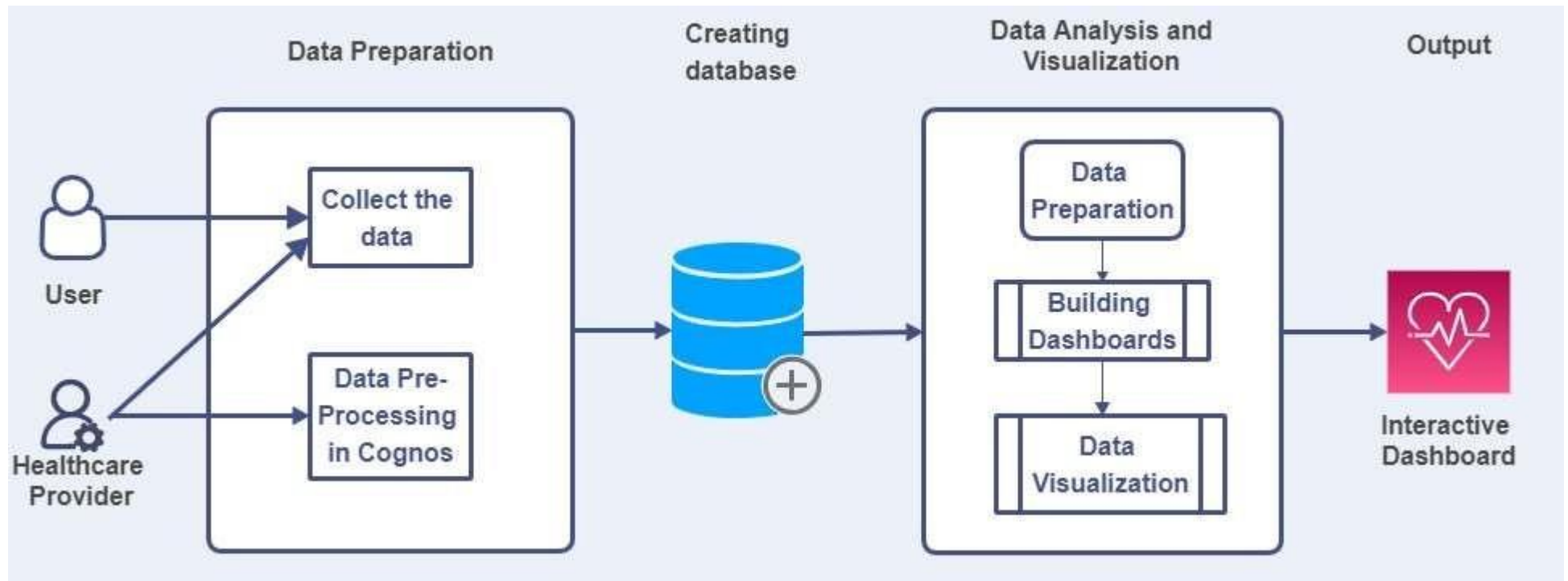


Table-1 : Components & Technologies:

| S.No | Component | Description | Technology |
|------|--------------------|---|--|
| 1. | Dataset | Gathering Dataset from the internet | Kaggle API |
| 2. | User Interface | How user interacts with application e.g. Web UI, Mobile App, Chatbot etc. | HTML, CSS, JavaScript / Angular Js / React Js etc. |
| 3. | Data Processing | The data from the dataset is pre-processed | IBM Cognos Analytics |
| 4. | Database | Database Service on IBM Cloud | IBM Cloud |
| 5. | File Storage | File storage requirements | IBM Block Storage or Other Storage Service or Local Filesystem |
| 6. | Uploading Dataset | Uploading dataset to the IBM Cognos | IBM Cognos Analytics |
| 7. | Data Visualization | The data is visualized into different forms | IBM Cognos Analytics and python |
| 8. | Data Prediction | Prediction of the Length Of Stay (LOS) | IBM Cognos Analytics and python |

Table-2: Application Characteristics:

| S.No | Characteristics | Description | Technology |
|------|------------------------|---|--|
| 1. | Open-Source Frameworks | Dashboard frameworks in the form of charts, graphs and more. | IBM Cognos |
| 2. | Scalable Architecture | Scalability 3-tier => Database, application, server | Web server – HTML, CSS Application server- Python |
| 3. | Availability | This dashboard is available for health care providers which helps them to managing the hospital resources | IBM Cognos |
| 4. | Performance | This dashboard can contain numerous data and provides interactive visualizing performance which helps in easy usage | IBM Cognos |
| 5. | Storage | It is a database used to store the Data(MySQL) | DB2 |