**Project Design Phase-II**

**Technology Stack (Architecture & Stack)**

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| --- | --- |
| Date | 9 November 2022 |
| Team ID | PNT2022TMID39808 |
| Project Name | Ai powerd nutrition for fitness enthusiast |
| Maximum Marks | 4 Marks |

**Technical Architecture:**

**Table-1: Components & Technologies:**

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Component** | **Description** | **Technology** |
|  | Website | Customer can proceed the website and interact with the chatbot to get the desire product | HTML, CSS, JavaScript, Watson chatbot |
|  | Docker | Service for storing the private container images | Container |
|  | IBM Object Storage | Bucket are used to upload the images and files | Bucket |
|  | Kubernetes | Manage the complete process in the stable state  If any software crash it automatically restart the work | Kubernetes |
|  | DB2 | Data types are String, Numeric, Date, time, and timestamp distinct types.  Act\_ sortmem\_ limit, auto\_ del\_ rec \_ obj, auto\_ maint Configuration . | MySQL |
|  | Cloud DB2 | A fully managed cloud database with AI capabilities that keep our website running 24\*7. | IBM DB2 |
|  | Watson chatbot | Customers can search the product easily by human-like interaction with bot. | IBM Watson Assistant |
|  | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud  Local Server Configuration: Anaconda  Cloud Sever Configuration: IBM cloud | Local, Cloud Foundry, Kubernetes, etc. |

**Table-2: Application Characteristics:**

| **S. No** | **Characteristics** | **Description** | **Technology** |
| --- | --- | --- | --- |
|  | Open-Source Frameworks | Cloud Stack, Eucalyptus.  Open Nebula, App Scale, Docker. | Docker |
|  | Security Implementations | Authentication and password management  Accountability to authorize and monitor the use anonymous accounts and to remove | Encryptions, Secured Authorization. |
|  | Scalable Architecture | To expand our server capacity, memory, or disc space so that more people may transact on your website. Chat bots to provide scalable customer support. | DB2, Watson chatbot |
|  | Availability | The administrator needs to look up the stock availability in the database | Docker |
|  | Performance | Speed up the webpage  Site optimization based on data analysis. | Kubernetes |