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

| Date | 03October 2022 |
|------|----------------|
| Team ID | PNT2022TMID36734 |
| Project Name | University Admit Eligibility Predictor |
| Maximum Marks | 4 Marks |

**Technical Architecture:**
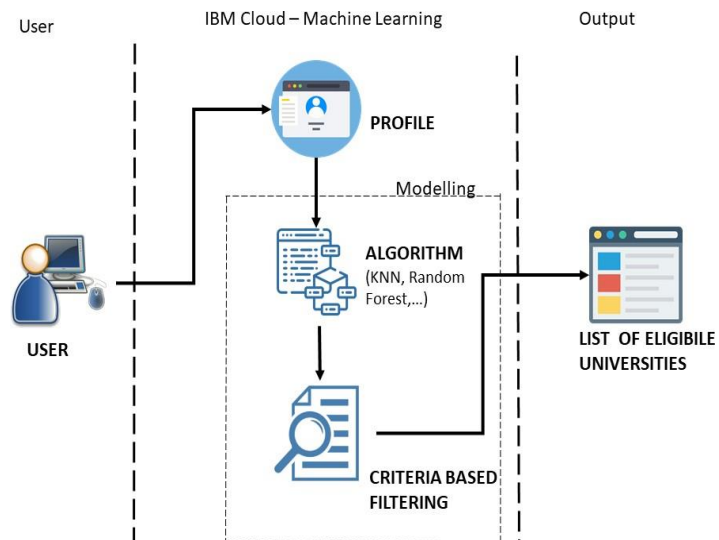


Guidelines:

1. Include all the processes (As an application logic / Technology Block)
2. Provide infrastructural demarcation (Local / Cloud)
3. Indicate interface to machine learning models
4. Include necessary machine learning algorithms
5. Indicate Data Storage components / services
6. Provide the list of all eligible universities along with its description

**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 etc. |
| 2. | Application Logic-1 | Logic for a process in the application | Python (Jupyter) |
| 3. | Application Logic-2 | Logic for a process in the application | IBM Watson Assistant |
| 4. | Database | Data Type, Configurations etc. | CSV |
| 5. | External API | Purpose of External API used in the application | List of eligible Universities |
| 6. | Machine Learning Model | Purpose of Machine Learning Model | KNN, Random Forest, Decision Tree, etc. |
| 7. | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration : | Local, Cloud etc. |

**Table-2: Application Characteristics:**

| S.No | Characteristics | Description | Technology |
|------|-----------------|-------------|------------|
| 1. | Open-Source Frameworks | Python for Backend purpose and flask is imported for front end purpose | Python(Flask) |
| 2. | Security Implementations | The user profile will be secure | Encryptions, IAM Controls, OWASP etc. |
| 3. | Scalable Architecture | The accurate list of eligible universities name and its description will be provided | Random Forest ML Algorithm |
| 4. | Availability | Anyone and in anytime they can visit our website | IBM Load Balancer |
| 5. | Performance | The user can have a knowledge of their eligibility for applying Universities through our website | Random Forest ML Algorithm |