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

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|---|---|
| Date | 06 November 2022 |
| Team ID | PNT2022TMID10045 |
| Project Name | Project- University Admit Eligibility Predictor |
| Maximum Marks | 4 Marks |

**Technical Architecture:**

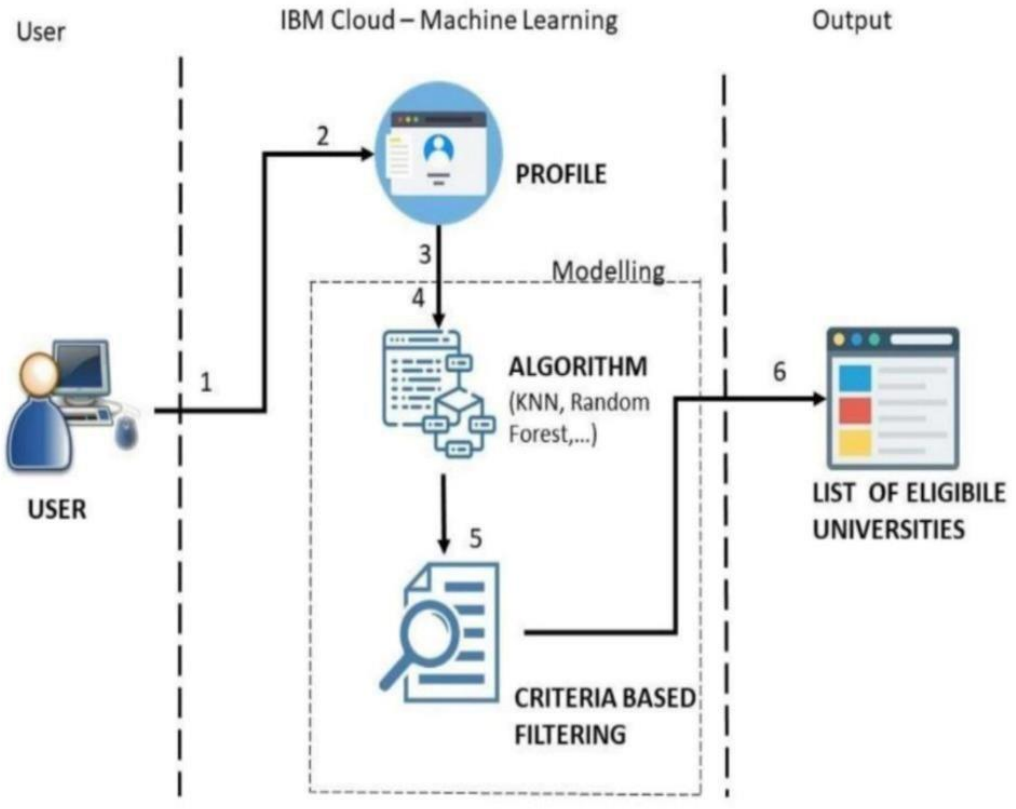

**Table-1 : Components & Technologies:**

| S.No | Component | Description | Technology |
|---|---|---|---|
| 1 | User Interface | How user interacts with application and its features. | HTML, CSS, JavaScript etc. |
| 2 | Application Logic-1 | The user fills the data into his profile which is then fed into the model to calculate the chances | Python [Jupyter] |
| 3 | Application Logic-2 | The model predicts the eligibility chances of the user for different universities based on the input data | IBM Watson STT, Python |
| 4 | Database | Data of the names of the universities and their corresponding cut-offs and exam scores for admission | Imported through pandas in a csv format |
| 5 | Machine Learning Model | Predicts the output using the ML algorithm | KNN, Decision tree, Random Forest, etc. |
| 6 | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud | IBM cloud, local cloud |

**Table-2: Application Characteristics:**

| S.No | Characteristics | Description | Technology |
|---|---|---|---|
| 1 | Open-Source Frameworks | Python for backend and Flask for front end | Python, Flask |
| 2 | Security Implementations | To ensure the security of the data provided by the user | Encryption, OWASP |
| 3 | Scalable Architecture | The model is scalable in nature because its scope can be increased easily | Random forest ML algorithm, Logistic regression |
| 4 | Availability | The model is available to anyone, anywhere, anytime | IBM load balancer |
| 5 | Performance | The chances are predicted with a greater accuracy | Random forest ML algorithm |