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

| Date | 03 October 2022 |
|---|---|
| Team ID | PNT2022TMID13061 |
| Project Name | A Gesture-based Tool for Sterile Browsing of Radiology Images |
| Maximum Marks | 4 Marks |

**Technical Architecture:**

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2
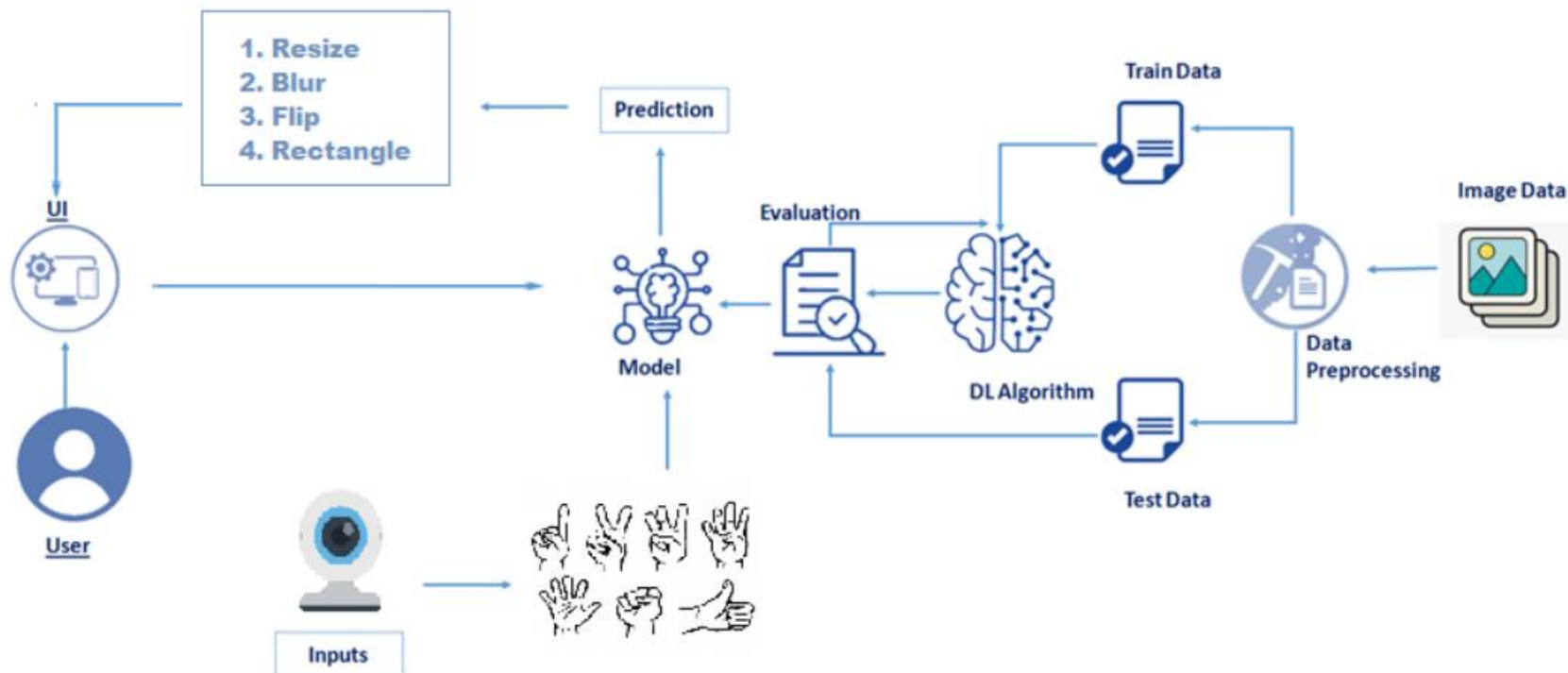
**Table-1 : Components & Technologies:**

| S.No | Component | Description | Technology |
|---|---|---|---|
| 1. | User Interface | Web user Interface. | HTML, CSS, JavaScript. |
| 2. | Data set image | Collect image from internet or create the hand gesture dataset by taking picture. | Hand gesture images |
| 3. | Data image pre-processing | Import the file you already have in python. | Python |
| 4. | Image Model building | Using CNN build the mode from imported dataset images | IBM Watson Assistant |
| 5. | Application building | Create the website for the user interface. | HTML, CSS JavaScript |
| 6. | File storage | Store the program files and dataset files in a particular file. | Local host file storage system |
| 7. | Deep Learning | Used to analyse visual imagery, image processing video capture | CNN, OpenCV, TensorFlow. |

**Table-2: Application Characteristics:**

| S.No | Characteristics | Description | Technology |
|---|---|---|---|
| 1. | Open-Source Frameworks | User interface and pre-processing | Visual Studio code or sublime text editor, anaconda navigator. |
| 2. | Security Implementations | It Identify the gesture action only when the hand is in front of the camera. | OpenCV |
| 3. | Scalable Architecture | It can be used in any platform like Android, Linux and windows using web | HTML and OpenCV |
| 4. | Availability | It is used to reduce the possibility of spreading infections to the patients. | Artificial Intelligence |
| 5. | Performance | Design consideration for the performance of hand gesture actions. | CNN Model |