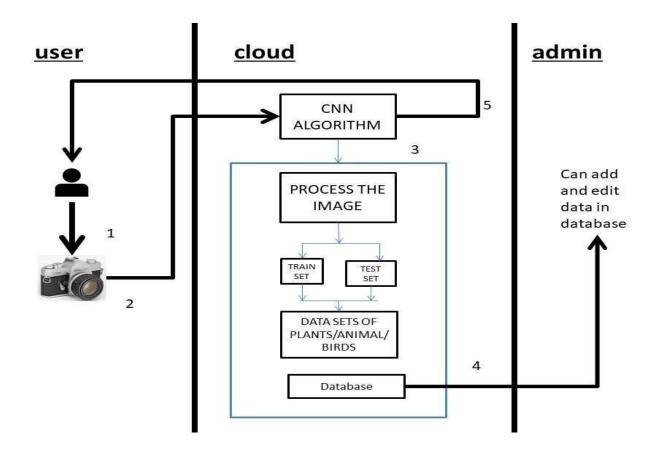
## Project Design Phase-II Technology Stack (Architecture & Stack)

| Date          | 13 November 2022   |  |  |
|---------------|--|--|--|
| Team ID       | Shanmugapriya P, Monika B, Aruna A,<br>Dhanushiya Y, Sindhumeenal T  |  |  |
| Project Name  | Digital Naturalist - AI Enabled tool for<br>Biodiversity Researchers |  |  |
| Maximum Marks | 4 Marks  |  |  |

## **Technical Architecture:**



**Table 1: Components & Technologies:** 

| S No | Characteristics       | Description                              |  |  |
|------|-----------------------|--|--|--|
| 1    | Scalable Architecture | Capacity of the application to handle    |  |  |
|      |                       | growth, especially in handling more      |  |  |
|      |                       | users.                                   |  |  |
| 2    | Open-Source Framework | Open-Source frameworks for data          |  |  |
|      |                       | preprocessing, web application and       |  |  |
|      |                       | model training                           |  |  |
| 3    | Availability          | Without near 100% availability,          |  |  |
|      |                       | application reliability and the user     |  |  |
|      |                       | satisfaction will affect the solution.   |  |  |
| 4    | Performance           | How the application is functioning and   |  |  |
|      |                       | how responsive the application is to the |  |  |
|      |                       | end-users depending on the performance   |  |  |
|      |                       | of IBM cloud platform.                   |  |  |

**Table-2: Application Characteristics:** 

| S.No | Component                     | Description   |  |
|------|-------------------------------|---|--|
| 1    | User Interface                | Web UI or Website   |  |
| 2    | Application Logic – 1         | Image upload  |  |
| 3    | Application Logic – 2         | Display search history  |  |
| 4    | Image Recognition Model       | To predict the species (flora and fauna) through image provided |  |
| 5    | Infrastructure (Server/Cloud) | Application Deployed on cloud server                            |  |