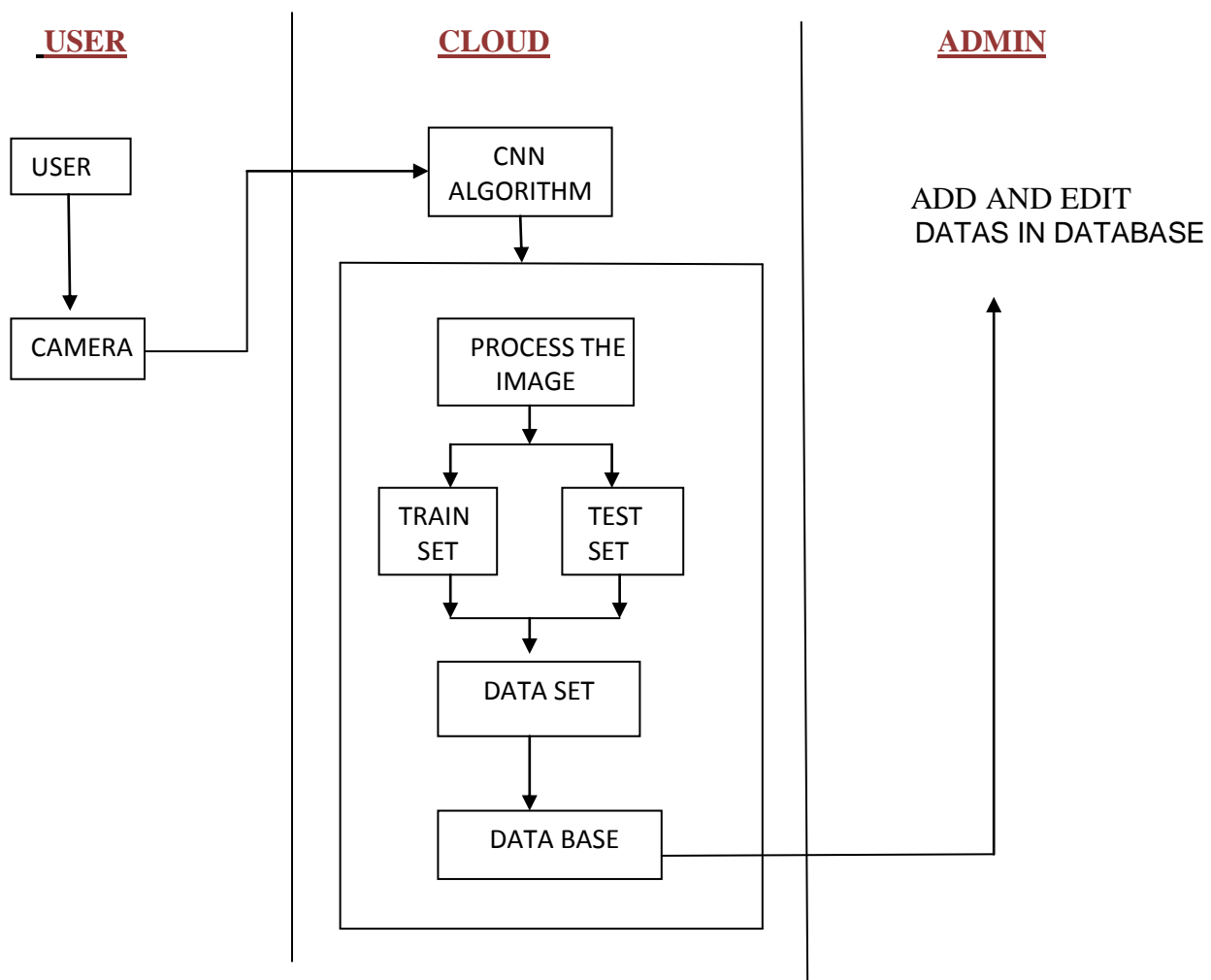


## Project Design Phase-II Technology Stack (Architecture & Stack)

Date	23.10.2022
Team ID	PNT2022TMID33205
Project Name	Digital naturalist – AI enabled tools for Biodiversity reachers
Maximum Marks	4 Marks

### Technical Architecture:



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

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App	HTML, CSS, python,jupyter
2.	camera	Capture photos for processing	Phone camera
3.	CNN Algorithm	For processing the photos	
4	Database	Data Type, Configurations etc.	Mysql, python
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Location service	Location or google API, etc.

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Data set,api	python
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Does not affect the performance even though used by many users	Python ,mysql
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Python ,mysql
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	