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

Date	21 October 2022
Team ID	PNT2022TMID47540
Project Name	Natural Disaster Intensity Analysis and Classification Using Artificial Intelligence
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Analyze the current location and indicate Alerts:

uture state

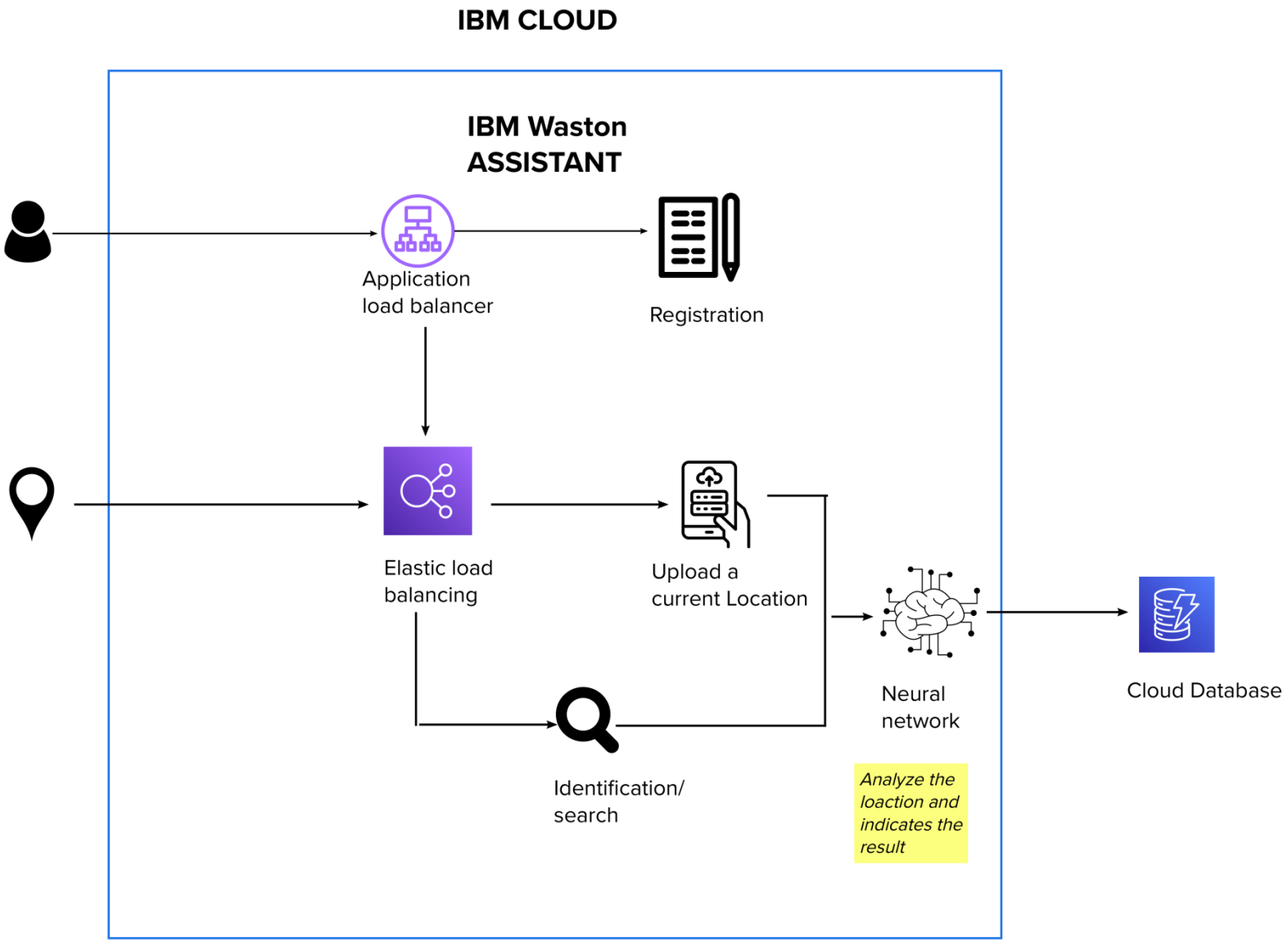
IBM CLOUD
IBM Waston
ASSISTANT
Application
load balancer
Registration
Elastic load
balancing
Upload a
current Location
Neural
network
Cloud Database
Identification/
search
Analyze the
loaction and
indicates the
result

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,WSDL,SOAP
2.	Application Logic-1	Logic for a process in the application	Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson Assistant
4.	Application Logic-3	Logic for a process in the application	NLP
5.	Database	Data Type, Configurations etc.	MySQL
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant .
7.	File Storage	File storage requirements	Local Filesystem
8.	External API-1	Purpose of External API used in the application	Image API
9.	External API-2	Purpose of External API used in the application	REST API
10.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, Image Recognition Model
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local Server configuration, IBM cloud

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Jupyter
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	Firewall, encryption and decryption,IAM Controls ,OWASP
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	3 – tier architecture(user-IBM cloud-admin)
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Elastic load balancer ,Application load balancer
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Use of CDN's ,Use of catch ,use of requests per sec.