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

Date	18 October 2022
Team ID	PNT2022TMID50788
Project Name	AI-Powered Nutrition Analyzer For Fitness Enthusiasts
Maximum Marks	4 Marks

USER

MOBILE CAMERA

INPUT IMAGE

USER INTERFACE

RAPID API

HTTP REQUEST

IBM Cloud

PREDICTED RESULT

HTTP RESPONSE

CNN MODEL
(TRAINED AND TESTED)
FLASK APPLICATION
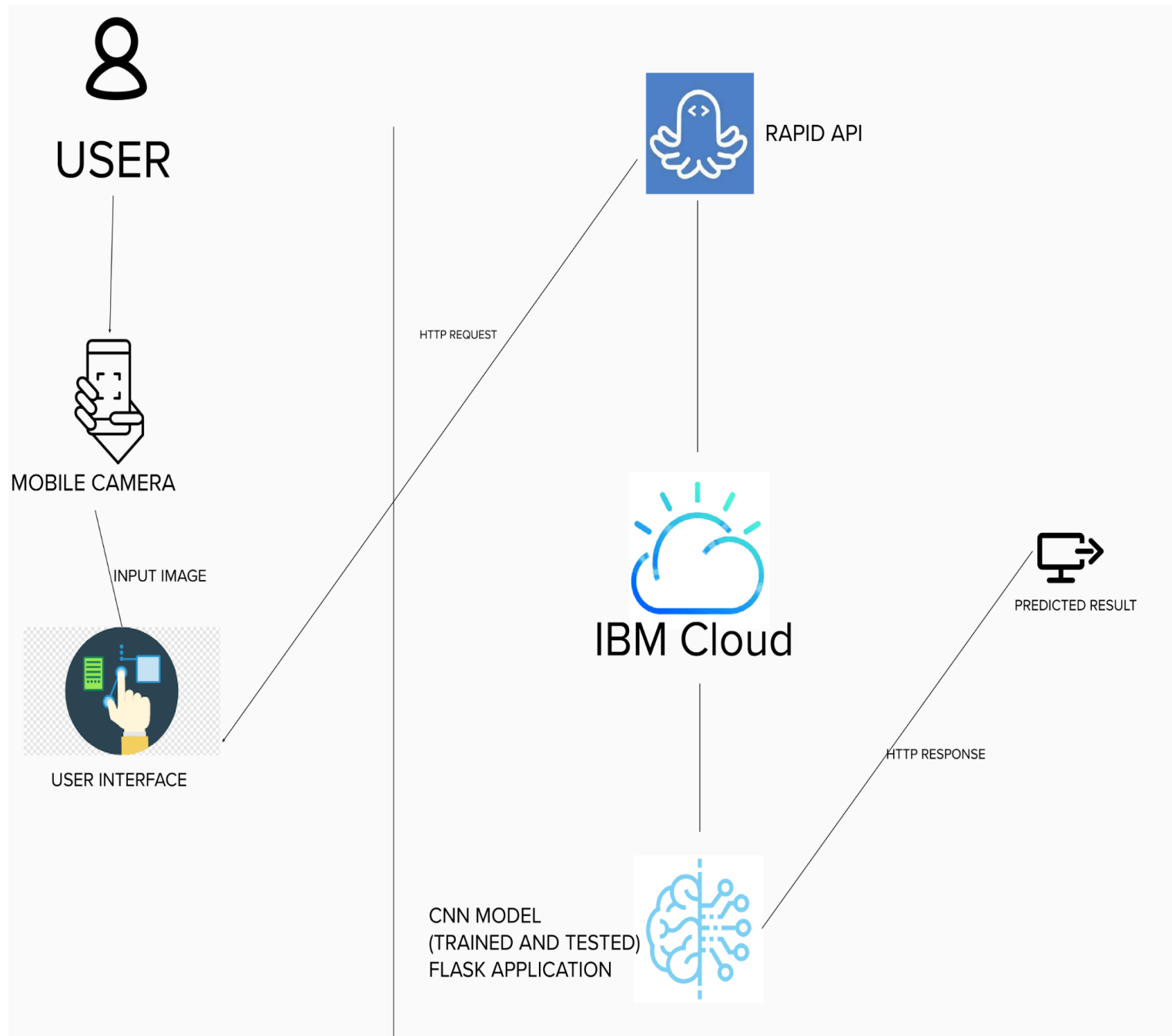
Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS
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 STT service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL
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	Purpose of External API used in the application	IBM Weather API, etc.
9.	External API-2	Purpose of External API used in the application	Rapid API
10.	Machine Learning Model	Purpose of Machine Learning Model	Image Recognition Model
11.	Infrastructure	Application Deployment on Cloud	IBM cloud.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Python open-source framework	Flask
2.	Security Implementations	To secure the data we use the given processes	Basic HTTP authentication/Encryption.
3.	Scalable Architecture	Architecture is scalable when needed	IBM Cloud
4.	Availability	Server should be available always,so to balance network traffic if any distributed servers are used	Application load balancer
5.	Performance	Predicted result by the model will be accurate.	Technology used Deep learning algorithm- CNN