

Project Design Phase-II
Technology Architecture and Stack

Team ID	PNT2022TMID24705
Project Name	AI POWERED NUTRITION ANALYZER FOR FITNESS ENTHUSIASTS

TECHNICAL ARCHITECTURE:

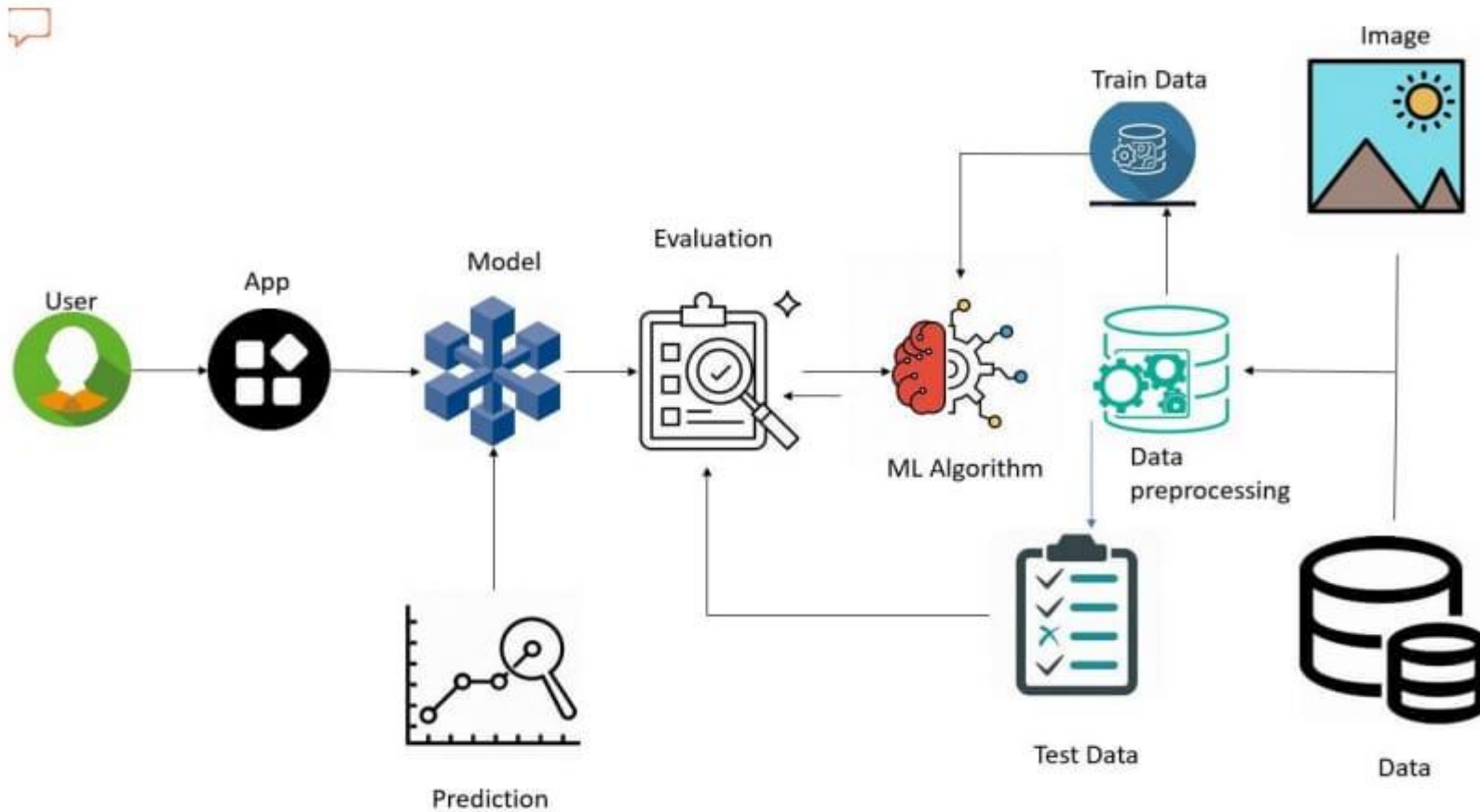


Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	App	For the prediction of Nutrition the user interacts with this application	Python, Java, HTML, SQLite, Android studio
2.	Database	Data, Configurations and data types will be stored	MySQL, JS
3.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
4.	File Storage	File storage requirements	Cloud -- > drive
5.	Machine Learning Model	Purpose of Machine Learning Model	ANN, CNN, RNN
6.	Notification	From Server the notifications would be send	SendGrid

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Open-source frameworks used	SendGrid, Python, JQuery
2.	Security Implementations	Request authentication using encryption	Encryptions, SSL certs
3.	Scalable Architecture	The scalability of architecture consists of 3 tiers	Web Server – HTML, CSS ,Javascript Application Server – Python Flask Database Server – IBM Cloud
4.	Availability	Availability is increased by loads balancers in cloud VPS	IBM Cloud hosting
5.	Performance	The application is expected to handle up to 4000 predications per second	IBM Load Balance

