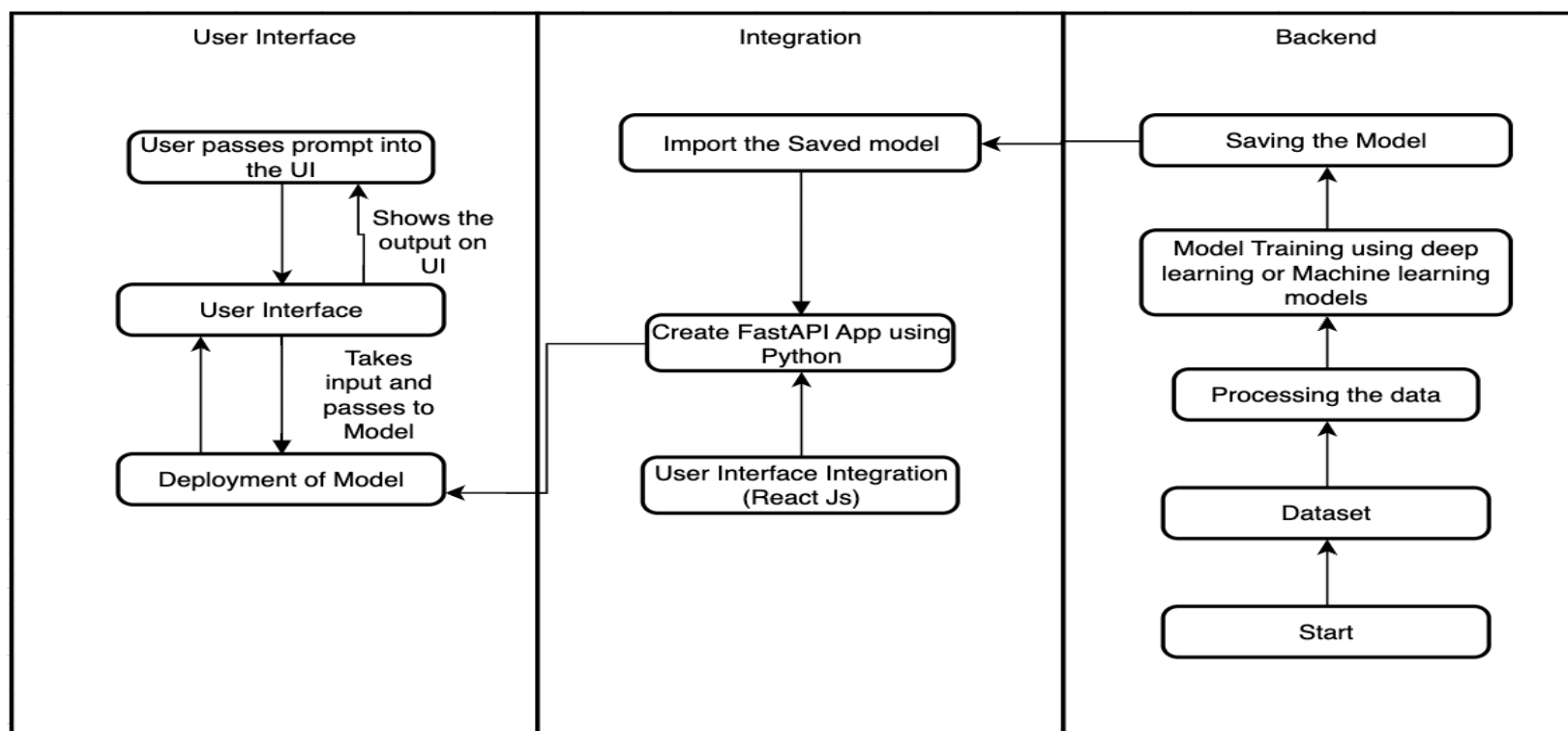


## Project Design Phase-II Technology Stack (Architecture & Stack)

Date	25-10-2023
Team ID	PNT2022TMID592760
Project Name	Anticipating Business Bankruptcy
Maximum Marks	4 Marks

### Technical Architecture:

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



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

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI	React Js, Bootstrap.
2.	Application Logic-1	Logic for a process in the application	Python
3.	Database	Collect the Dataset Based on the Problem Statement	PSQL
4.	File Storage/ Data	File storage requirements for Storing the dataset	Local System
5.	Frame Work	Used to Create a web Application, Integrating Frontend and Back End	Python FastAPI
6.	Deep Learning Model	Purpose of Model : To Anticipate Business Bankruptcy	CNN, Transfer Learning etc.
7.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Python's FastAPI, React Js, Bootstrap
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	HTTPS , OAuth 2.0, API tokens
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	AWS or Azure, Docker, Kubernetes
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	AWS Elastic Load Balancer, Content Delivery Network (CDN)

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Caching mechanisms, Content Delivery Network (CDN), Load Testing Tools.