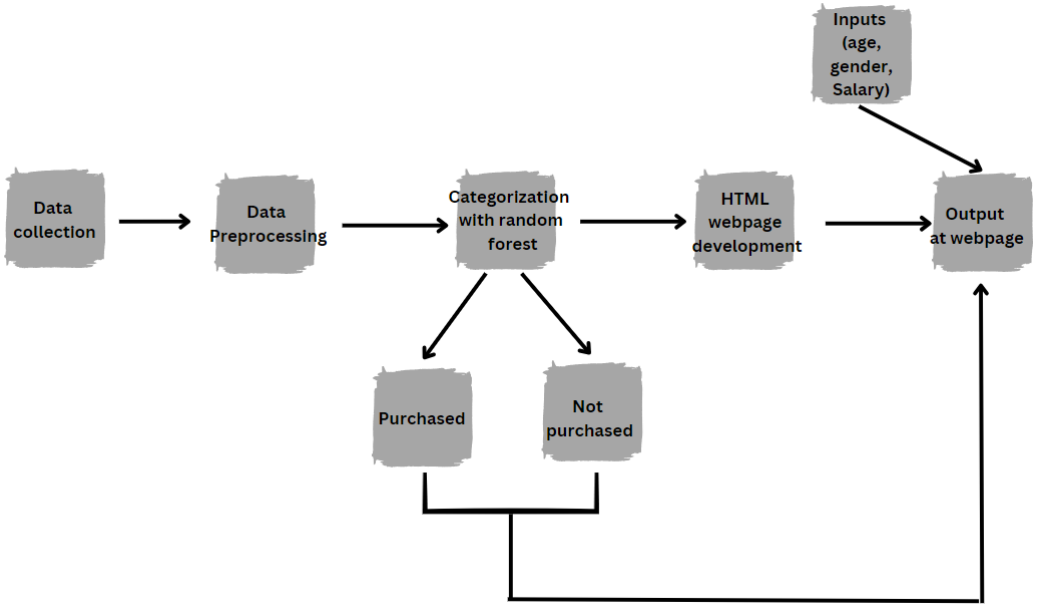
Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	27 October 2023
Team ID	Team-593136
Project Name	Car purchase prediction using ML
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 the user interacts with the application e.g. Web UI	HTML and CSS
2.	Application Logic-1	Logic for a process in the application	Python
3.	Database	Collect the Dataset Based on the Problem Statement	File Manager, Kaggle
4.	File Storage/ Data	File storage requirements for Storing the dataset	Local System, Google-colab workspace
5.	Frame Work	Used to Create a web Application, Integrating Frontend and Back End	Python Flask
6.	Deep Learning Model	Purpose of Model	Random Forest
7.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration	Local

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Python's Flask, Google's Tensorflow, SciKit learn
2.	Scalable Architecture	Justify the scalability of architecture (3–tier, Micro-services)	The 3-tier architecture can be scaled as per the requirement
3.	Availability	Justify the availability of applications	Load Balancers are used in Cloud Deployment
4.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDNs)	Utilize HTTP caching headers to control client-side caching of web resources.