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

Date	23 june 2025
Team ID	LTVIP2025TMID51515
Project Name	Comprehensive analysis and dietary strategies with tableau: A college food choice case study
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table2

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	Data source	Raw data collected from food surveys,meal logs,and student feedback	Excel/CSV/google sheets
2.	Data preparation	Cleans,transforms,and loads data into tableau	Tableau prep/Python/SQL
3.	Data storage	Centralized storage for processed data	Google drive/Microsoft one drive/local storage
4.	Data visualization tool	Creates dashboards and visual analytics	Tableau desktop
5.	User interface	Web or embedded view where users interact with dashboard	Tableau public
6.	Access control	Manages user roles and access levels	Tableau server
7.	Report sharing	Mechanism to export and distribute insights	Tableau sheet
8.	Feedback collection	Collects feedback from users about the dashboards	Google forms

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Usability	Easy to use dashboard with filters,tooltips,and clean layout	Tableau UX/UI design best practices
2.	Performance	Fast data loading and interaction with filters	Tableau extracts (TDE/Hyper),optimized SQL.
3.	Security	Role based access and secure data handling	Tableau permissions/HTTPS
4.	Scalability	Can handle growth in food choice data anf future college surveys	Tableau public (baseic)or cloud hosting
5.	Availability	Dashboard accessible 24/7 with minimal downtime	Tableau connectors/APIs

References:

https://c4model.com/

https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/

https://www.ibm.com/cloud/architecture

https://aws.amazon.com/architecture

https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d