

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

Date	17 October 2023
Team ID	
Project Name	Depression: A Common Mental Disorder
Maximum Marks	4 Marks

Technical Architecture:

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

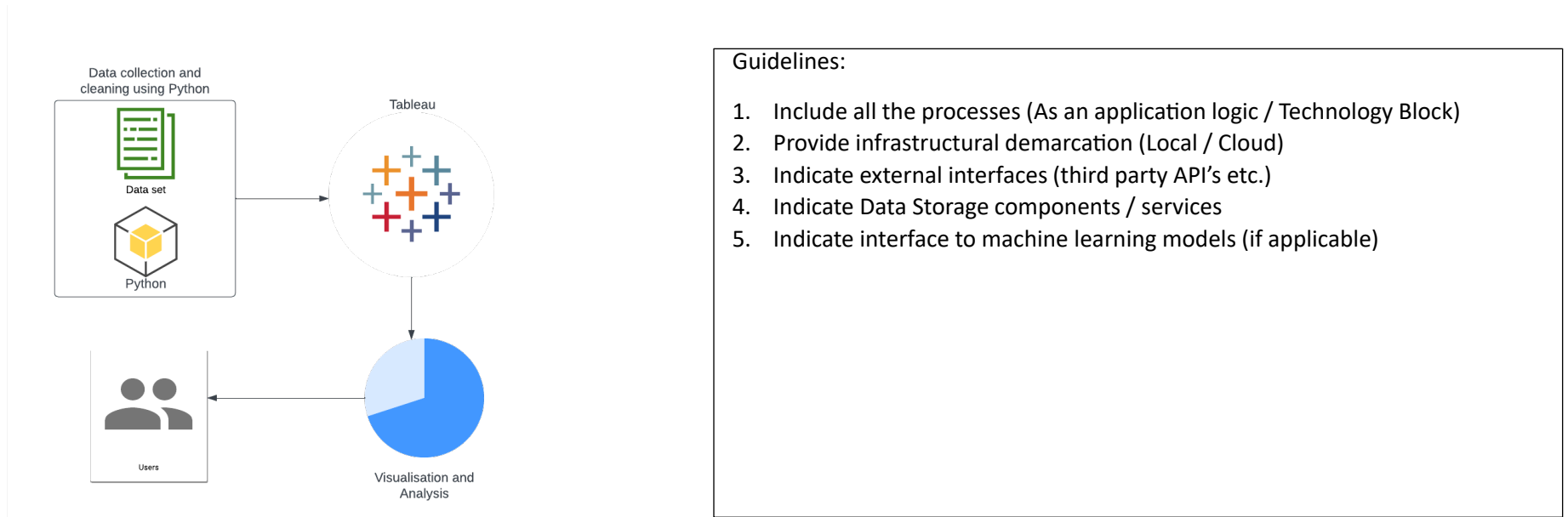


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	Data Sources	Diverse data sources such as healthcare records, surveys, social media, and international organizations.	Kaggle
2.	Data preprocessing and cleaning	Big data processing and transformation.	Jupyter Notebook, Python, pandas
3.	Data Storage	Storage for the processed data.	Local device
4.	Business Intelligence and Data Visualization	Data analysis and visualization.	Tableau

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Technology of Opensource framework
2.	Security Implementations	List all the security / access controls implemented,use of firewalls etc.	e.g. SHA-256, Encryptions, IAMControls, OWASP etc.
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Technology used

S.No	Characteristics	Description	Technology
4.	Availability	Justify the availability of application (e.g. use ofload balancers, distributed servers etc.)	Technology used
5.	Performance	Design consideration for the performance of theapplication (number of requests per sec, use of Cache, use of CDN's) etc.	Technology used

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>