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

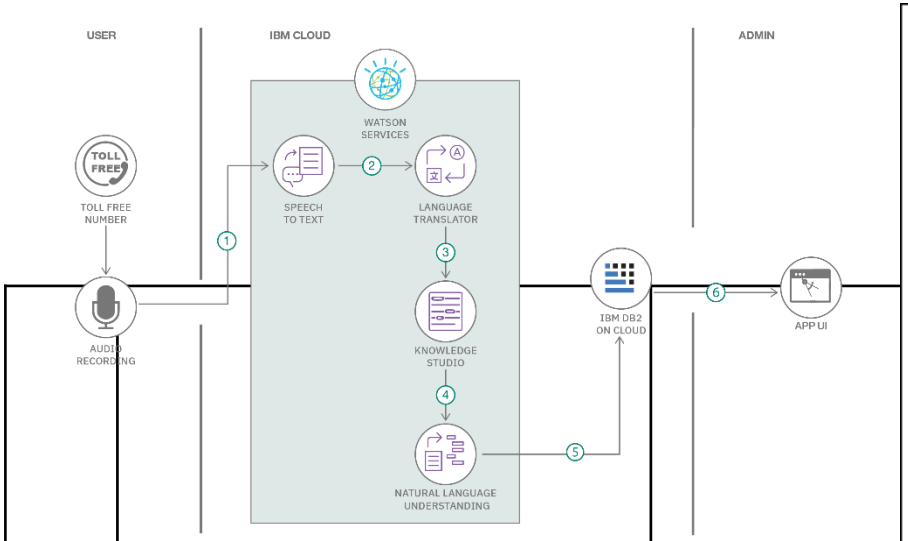
Date	24 June 2025
Team ID	LTVIP2025TMID51428
Project Name	Measuring the Pulse of Prosperity: An Index of Economic Freedom Analysis
Maximum Marks	4 Marks

Technical Architecture:

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

Example: Order processing during pandemics for offline mode

Reference: https://developer.ibm.com/patterns/ai-powered-backend-system-for-order-processing-during-pandemics/



Guidelines:

Include all the processes (As an application logic / Technology Block)
Provide infrastructural demarcation (Local / Cloud)
Indicate external interfaces (third party API's etc.)
Indicate Data Storage components / services
Indicate interface to machine learning models (if applicable)

S.No	Component	Description	Technology
1.	Data Visualization	To design interactive dashboards for exploring and comparing data	Tableau Public
2.	Data Source	The cleaned dataset with 12 economic freedom indicators and metadata	CSV / Excel
3.	Data Preparation	Initial cleaning, formatting, and basic calculations	Microsoft Excel /Google Sheets
4.	User Interface Elements	Interactive filters, dropdowns, tooltips, and charts within dashboard	Tableau UI Components
5.	Dashboard Hosting	Platform where the final dashboard is published and accessed	Tableau Public
6.	Documentation	For writing report, user stories, and requirement analysis	MS Word / Google Docs
7.	Collaboration Tools	Used for teamwork, empathy mapping, brainstorming, and sprint planning	Mural / Whatsapp / Zoho Meet

8.	Project Planning Phase	Initial phase defining goals, problem statement, and task breakdown	Google Docs,Mural
9.	Project Design Phase	Sketch layout, storyboard,define visuals	Tableau (Wireframing + Story)
10.	Performance Testing	Check dashboard responsiveness and loading time	Tableau Test View / Peer Review
11.	Worksheets (Tableau)	Create visuals for each indicator or region	Tableau Public
12.	Dashboards	Combine multiple charts with interactivity	Tableau Dashboard Builder
13.	Stories (Tableau)	Narrative view connecting dashboards/worksheets logically	Tableau Story Feature

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Usability	Easy to use interface with filters, labels, and tooltips for clarity	Tableau Interface
2.	Security	Public data access with no login, ensuring safe sharing without sensitive info	Tableau Public
3.	Reliability	Dashboard should always load and respond correctly to inputs	Tableau Hosting / Cloud

4.	Performance	Fast loading and smooth interaction when using filters or viewing visuals	Tableau Engine
5.	Availability	Dashboard and accessible online at any time after publishing	Tableau Public Cloud
6.	Scalability	Ability to handle future data additions	Tableau data Model / Excel

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