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

Date	28 june 2025
Team ID	PLTVIP2025TMID51410
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

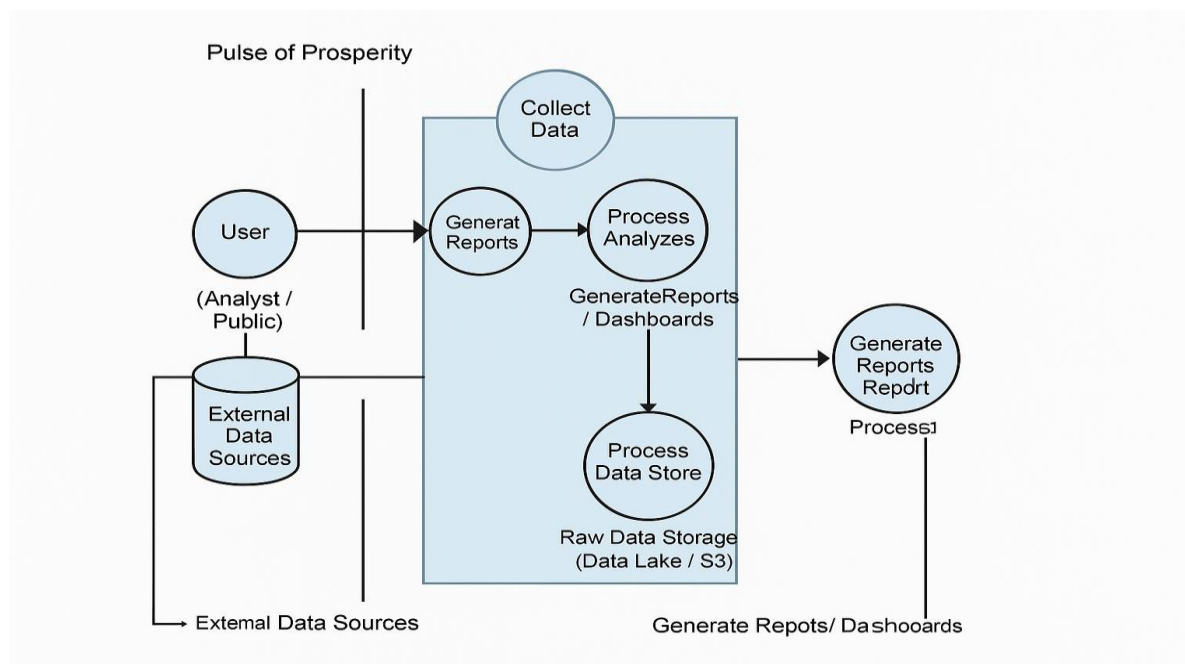**Example: Order processing during pandemics for offline mode**

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web and mobile dashboards for data viewing	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Handling filters, comparisons, and data analysis	Java / Python
3.	Database	Stores economic data and user info	MySQL, NoSQL, etc.
4.	Cloud Database	Cloud – based database for scalability	IBM DB2, IBM Cloudant etc.
5.	File Storage	Stores downloadable files like reports	IBM Block Storage or Other Storage Service or Local Filesystem
6.	External API-1	Gets economic indicators or live data	IBM Weather API, etc.
7.	External API-2	Country metadata (names, flags etc.,)	Aadhar API, etc.
8.	Machine Learning Model	Predicts economic trends	Object Recognition Model, etc.
9.	Infrastructure (Server / Cloud)	Cloud hosting and deployment	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Use of open – source tools for front- end, back-end, and visualization	Technology of Opensource framework
2.	Security Implementations	Secure login, encrypted data, API access control, use of firewalls	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Supports scaling using micro services and tiered architecture	Technology used
4.	Availability	Ensures system uptime with distributed servers and load balancers	Technology used

S.No	Characteristics	Description	Technology
5.	Performance	Optimized for fast data load and response using cache and CDNs	Technology used