ProjectDesignPhase-II
DataFlowDiagram&UserStories

Date	21June2025
Team ID	LTVIP2025TMID59746
ProjectName	Visualizing Housing Market Trends:An Analysis Of Sale Prices And Features Using
MaximumMarks	4 Marks

DataFlowDiagrams:
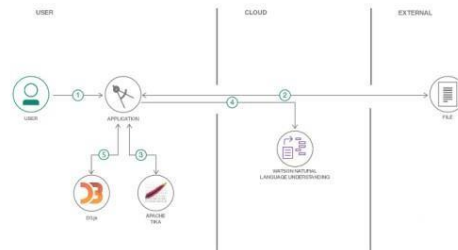
ADataFlowDiagram(DFD)isatraditionalvisualrepresentationoftheinformationflowswithin a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

DFDLevel0:Overview

• ExternalEntities:Policymaker,Researcher,GeneralUser,Administrator

 • Processes:UploadDataset,AnalyseData,GenerateVisualizations,ExportReports

• DataStores:RawData,FilteredResults,UserAccounts

Example:(Simplified)

1. User configures credentials for the Watson Natural Language Understanding service and starts the app.
2. User selects data file to process and load.
3. Apache Tika extracts text from the data file.
4. Extracted text is passed to Watson NLU for enrichment.
5. Enriched data is visualized in the UI using the D3.js library.

UserStories

Usethebelowtemplatetolistalltheuserstoriesfortheproduct.

UserType	Functional Requirement (Epic)	User Story Number	UserStory/Task	Acceptance criteria	Priority	Release
Policymaker	Data Analysis &Visualization	USN-1	AsaPolicymaker,Iwanttoview a world map showing economic freedom scores by country, so thatIcanquicklyidentifyregions with high or low economic prosperityandpotentialpolicy impact areas.	Themapcorrectly displayseconomic freedom scores, and I can identify regions visually.	High	Sprint-1
Economic Researcher	Data Analysis &Visualization	USN-2	As an Economic Researcher, I want to filter economic data by specific years and countries, so that I can conduct in-depth analysisonhistoricaltrendsand compare performance across differentnations.	I can apply filters for years and countries,andthe data displayed updates accordingly.	High	Sprint-1
Investor	Data Analysis &Visualization	USN-3	AsanInvestor,Iwanttoseethe top 40 and least ranked countries based on their economic index, so that I can identify potential investment opportunities or risks in various markets.	Thelistoftopand least ranked countries is accurate and easilyaccessible.	High	Sprint-1
User	Data Ingestion &Management	USN-4	AsaUser,Iwanttouploadnew economic datasets (e.g., CSV, Excel),sothatIcanincorporate the latest information into the analysisandupdatetheindex.	Icansuccessfully uploadadataset, and its data is visible in the system.	Medium	Sprint-2
Economic Researcher	Data Analysis &Visualization	USN-5	As an Economic Researcher, I want to view correlations betweeneconomicfreedomand indicators like unemployment rate and GDP growth, so that I canunderstandthemultifaceted impactsofeconomicpolicies.	The system generatesareport with selected criteria, and I can download it in my desired format (e.g.,PDF).	High	Sprint-2
User	Reporting& Export	USN-6	As a User, I want to export visualizations (e.g., charts, maps)asimagefiles,sothatI can easily include them in presentations or reports.	I can export displayed visualizationsas imagefiles(e.g., PNG, JPEG).	Medium	Sprint-1
Administrator	User Management & Authorization	USN-7	As an Administrator, I want to manage user accounts and roles,sothatIcanaccesslevels tosensitivedataand functionalities.	I can add, edit, and removeusers,and assign.	High	Sprint-1