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Project Design Phase-II
Data Flow Diagram & User Stories
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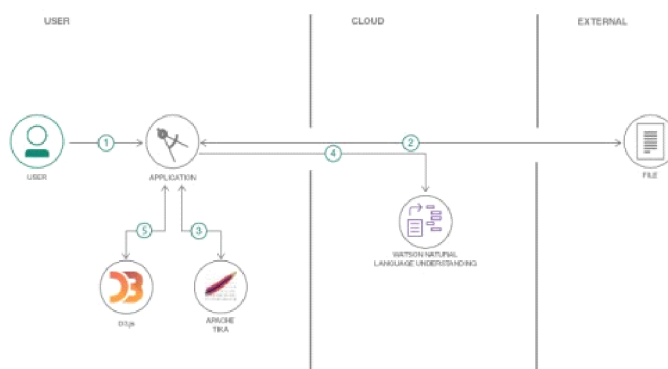
Date	21 November 2023
TeamID	Team-592288
ProjectName	Weather Classification Using Deep Learning

DataFlowDiagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the rightamount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data isstored.

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.

DFD Diagram for weather classification using deep learning

```mermaid
flowchart TD
    A[Weather Enthusiast] --> B[Travel Planner]
    B --> C[Meteorological Data]
    C --> D[System Administration]
    D --> E[Mobile App user]
```

- Weather Enthusiast
- Travel Planner
- Meteorological Data
- System Administration
- Mobile App user

UserStories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Weather Enthusiast	Real-time Weather Classification	1	Receive Current Weather Information	- Real-time weather data for the user's location	High	Sprint-1
Weather Enthusiast	Real-time Weather Classification	2	View Weather Trends Over Time	- Historical weather trends displayed with graphs	Medium	Sprint-2
Travel Planner	Historical Weather Data	3	Access Historical Weather Reports	- Access to historical weather data for chosen destinations	High	Sprint-2
Meteorological Data	Data Upload and Model Training	4	Upload New Weather Data for Analysis	- Secure upload process with confirmation of ingestion	High	Sprint-1
System Administrator	Model Performance Monitoring	5	Monitor Deep Learning Model Performance	- Metrics, charts, and alerts for model performance	High	Sprint-1
System Administrator	Model Performance Monitoring	6	Ensure Data Security and Privacy Compliance	- Regular security audits and compliance with regulations	High	Sprint-1
Mobile App User	User Interface and Notifications	7	Receive Push Notifications for Severe Weather	- Push notifications for severe weather conditions	High	Sprint-1
Mobile App User	User Interface and Notifications	8	User-Friendly Interface for Weather Exploration	- Intuitive interface for exploring current and historical weather	Medium	Sprint-2

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		1	Receive Current Weather Information	- Real-time weather data for the user's location		Sprint-1
		2	View Weather Trends Over Time	- Historical weather trends displayed with graphs		Sprint-2
		3	Access Historical Weather Reports	- Access to historical weather data for chosen destinations		Sprint-2