

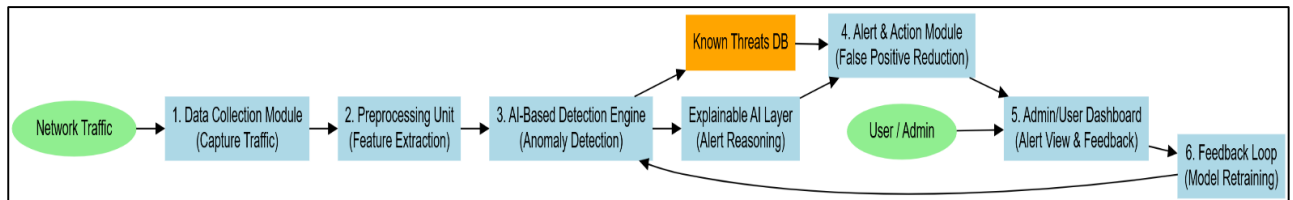
## Project Design Phase-II

### Data Flow Diagram & User Stories

Project Name	"AI-Enhanced Intrusion Detection System"
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#### Data Flow Diagrams:

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 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.



#### User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Network Admin	Data Collection	USN-1	As a network admin, I want to collect real-time traffic data from all connected nodes.	Data is collected in real-time and passed to the preprocessing module.	High	Sprint-1
AI Engineer	Preprocessing	USN-2	As an AI engineer, I want the raw data to be cleaned and features extracted automatically.	Cleaned and feature-extracted data is stored and ready for ML processing.	High	Sprint-1
Security Analyst	Threat Detection	USN-3	As a security analyst, I want the AI model to	Alerts generated for real threats, false	High	Sprint-2

			detect threats with high accuracy.	positives minimized.		
Network Admin	Alert System	USN-4	As a network admin, I want to get real-time alerts with explainable reasoning.	Alerts are shown with descriptions using explainable AI layer.	Medium	Sprint-2
Admin	Dashboard	USN-5	As an admin, I want to monitor threats and feedback from a centralized dashboard.	Dashboard displays real-time alerts, logs, and performance stats.	High	Sprint-2
Security Analyst	Feedback Loop	USN-6	As a security analyst, I want to provide feedback on false alerts to improve the AI system.	Feedback form available; model is updated with feedback.	Medium	Sprint-3
AI Developer	Threat DB Update	USN-7	As a developer, I want to update the known threats database regularly.	System integrates and detects new threat patterns via database updates.	Medium	Sprint-3
Executive Manager	Report Generation	USN-8	As a manager, I want to generate weekly reports on threat detection and system performance.	Reports are generated and downloadable in PDF/CSV format.	Low	Sprint-4