

Project Design Phase-II

Data Flow Diagram & User Stories

Project Name	AI-enhanced intrusion detection system
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Data Flow Diagrams:

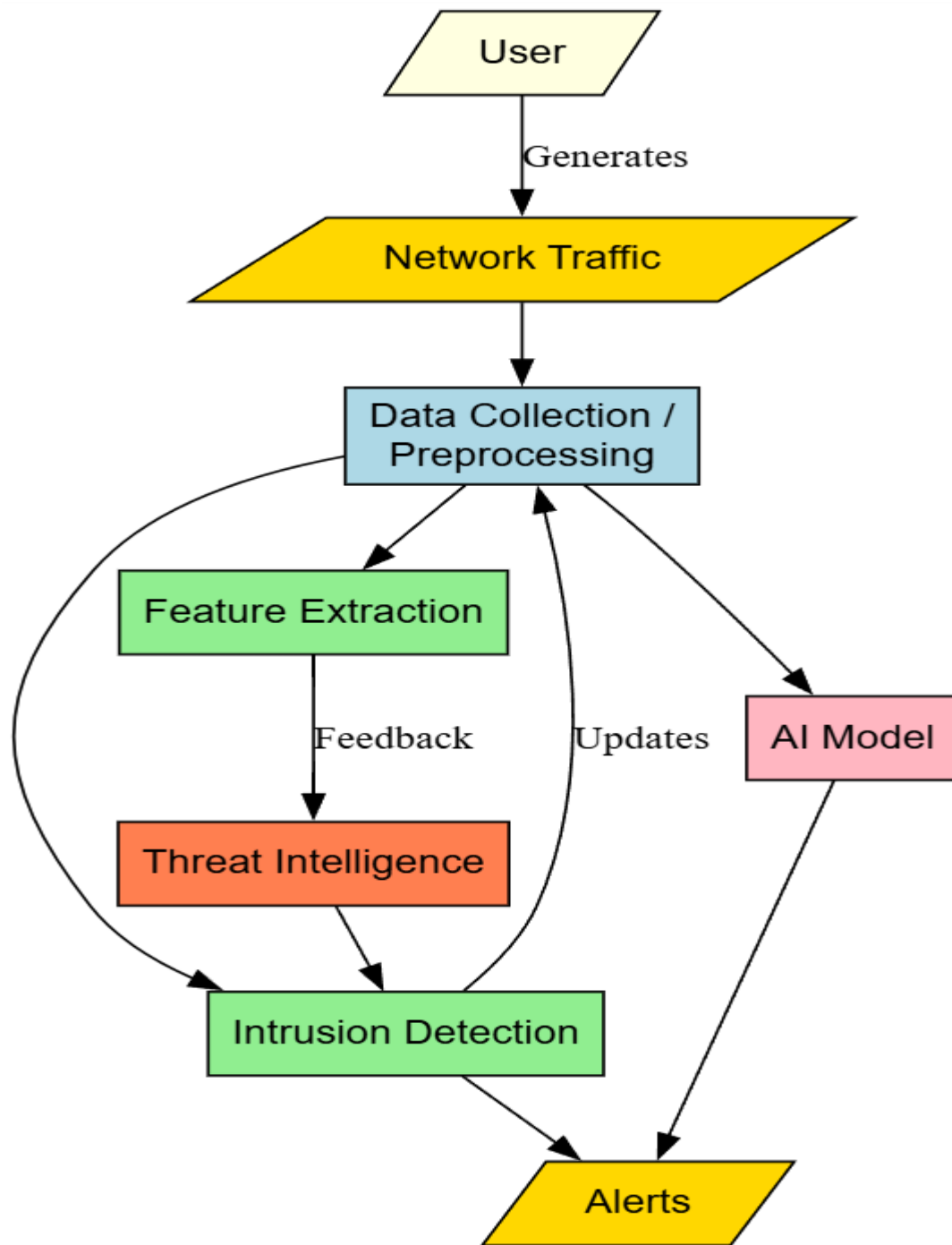


Figure: DFD Level 0

User Stories:

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Admin	User Authentication	USN-1	As an admin, I can log in securely using email and password.	Login is successful and session is started securely.	High	Sprint-1
Admin	Dashboard Access	USN-2	As an admin, I can view a dashboard with real-time alerts.	Admin sees current alerts, statistics, and graphs.	High	Sprint-1
System	Data Collection	USN-3	As a system, I can continuously collect network traffic data.	Network data is logged and passed to preprocessing.	High	Sprint-1
System	Data Preprocessing	USN-4	As a system, I preprocess data for feature extraction.	Cleaned and normalized data is passed to model.	High	Sprint-1
System	AI-Based Detection	USN-5	As a system, I use an AI model to detect anomalies.	Intrusions are detected and flagged with accuracy.	High	Sprint-2
Admin	Alert Notification	USN-6	As an admin, I receive alerts when intrusions are detected.	Alerts are pushed to dashboard/email/SMS.	High	Sprint-2
Admin	Threat Intelligence Feedback	USN-7	As an admin, I can provide feedback to improve detection.	Feedback updates model/training data.	Medium	Sprint-3

System	Log Analysis	USN-8	As a system, I can analyze logs to detect past intrusion patterns.	System generates historical attack reports.	Medium	Sprint-3
Admin	Report Generation	USN-9	As an admin, I can generate detailed reports of intrusion events.	Downloadable reports with date, time, type, and action.	Medium	Sprint-3
Admin	Role Management	USN-10	As an admin, I can assign roles to different users.	Only authorized users can access specific modules.	Low	Sprint-4