**Project Design Phase-II**

**Data Flow Diagram & User Stories**

|  |  |
| --- | --- |
| Date | 27-10-2023 |
| Team Leader | M. Akash |
| Project Name | Online Payments Fraud Detection Using Machine Learning |

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

Data Flow Diagram:

2

2

2.0

Give request to user

Give info about DB

Query

Process Query

Check Availability of or for query processing

Accept Query

User

**User Stories**

Use the below template to list all the user stories for the product.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| User Type | Functional Requirement (Epic) | User Story Number | User Story / Task | Acceptance criteria | Priority | Release |
| **Merchant** | **Fraud Detection** | **US001** | **As a merchant , I want to receive real time fraud alerts** | **Merchant receives an alert with in 1 second of a suspicious transaction** | **High** | **1.0** |
|  |  |  |  | **Alert includes transaction details for quick verification** |  |  |
|  |  |  |  | **Merchant can acknowledge or reject the alert** |  |  |
| **Analyst** | **Fraud investigation** | **US002** | **As a fraud analyst, I want to view detailed transaction history for the flagged transactions** | **Analyst can view transaction history and user details** | **High** | **1.0** |
|  |  |  |  | **Transaction details include user IP , device info and past transaction patterns** |  |  |
|  |  |  |  | **Analyst can add notes and comments for future reference** |  |  |
| **Coustomer** | **Account Security** | **US003** | **As a customer, I want to receive notifications for every transaction exceeding in a certain amount** | **Customer receives an email/SMS for every transaction** | **Medium** | **1.1** |
|  |  |  |  | **Notification includes transaction amount and merchant details** |  |  |
|  |  |  |  | **Customer can opt-out of receiving notifications** |  |  |
| **System** | **Performance Optimization** | **US004** | **As the system, I want to process 1000 transactions per second without performance degradation** | **System can process 1000 transactions per second** | **High** | **1.0** |
|  |  |  |  | **Respinse time for scoring transactions is below 50 milliseconds** |  |  |
|  | **Scalability** | **US005** | **As the system , I want to scale horizontally to handle increase transaction volume** | **System can scale horizontally to handle increased transaction volume** | **High** | **1.1** |
|  |  |  |  | **Load tests show stable performance with increased user load** |  |  |
| **Compilance** | **Rgulatory Compilance** | **US006** | **Aas the compilance team , I want the system to comply with data protection regulations** | **System adheers to GDPR,PCIDSS and others relevant data protection regulations** | **High** | **1.0** |
|  |  |  |  | **Regular audits confirm adherence to compilance to standards** |  |  |