

## Project Design Phase-II

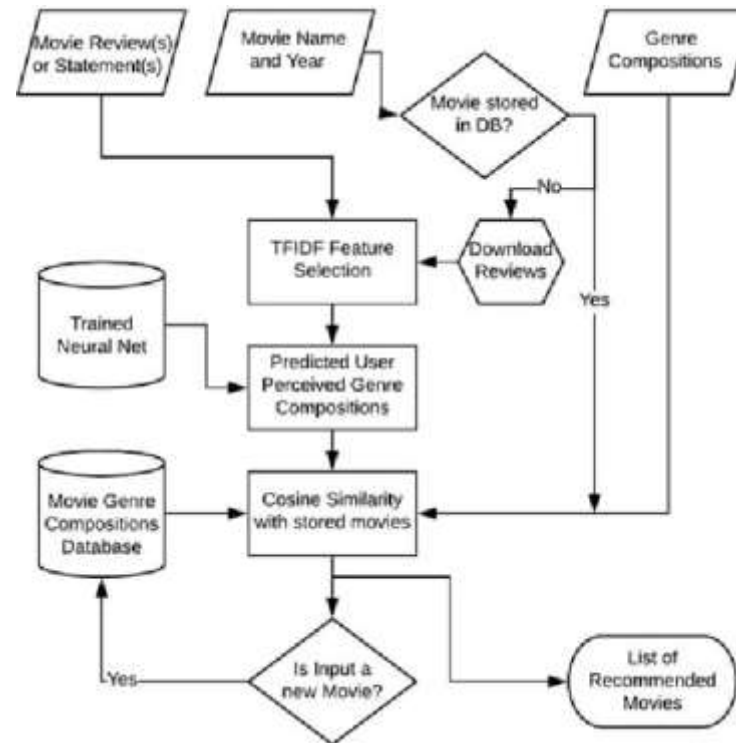
### Data Flow Diagram & User Stories

Intern Name	Aditya Ashok Pise
Project Name	Movie Genre Classification

#### 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.

#### Example:



## User Stories

Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria
Genre Classification System	CHURN-001	As a data scientist, I want to collect and prepare a diverse dataset of movies for training the genre classification model.	<ol style="list-style-type: none"><li>Dataset includes a variety of movies spanning different genres.</li><li>Data is preprocessed, including text cleaning for plot summaries and image preprocessing for visual features.</li></ol>
Model Development	CHURN-002	As a machine learning engineer, I want to develop a genre classification model using state-of-the-art techniques.	<ol style="list-style-type: none"><li>Implement a deep learning model that combines text and image inputs for genre classification.</li><li>Train the model on the prepared dataset with high accuracy (&gt;85%).</li></ol>
Integration with Streaming Platform	CHURN-003	As a product manager, I want to integrate the genre classification model into our streaming platform for improved movie recommendations.	<ol style="list-style-type: none"><li>Genre predictions are seamlessly integrated into the platform's recommendation algorithm.</li><li>The model is tested in a staging environment to ensure no adverse impact on user experience.</li></ol>
Real-time Genre Prediction	CHURN-004	As a software developer, I want to enable real-time genre prediction for newly added movies on the platform.	<ol style="list-style-type: none"><li>The system can predict genres for new movies within seconds of their addition.</li><li>Real-time predictions maintain high accuracy, similar to the offline training scenario.</li></ol>
Continuous Model Improvement	CHURN-005	As a data scientist, I want to implement a system for continuous model improvement based on user feedback.	<ol style="list-style-type: none"><li>Regularly analyze user feedback to identify patterns and improve the model.</li><li>Implement model updates based on feedback analysis to enhance genre prediction accuracy.</li></ol>