

# README

## # ■ Movie Recommendation System

### ## ■ Overview

This project is a **Movie Recommendation System** built using Python and Machine Learning. It recommends movies to users based on similarity in content, using **content-based filtering** techniques.

### ## ■ Features

- Recommends movies similar to a given movie.
- Uses **cosine similarity** on movie metadata (genre, overview, etc.).
- Clean and interactive **Jupyter Notebook** implementation.
- Can be extended to collaborative filtering or hybrid approaches.

### ## ■■ Tech Stack

- Python
- Pandas, NumPy
- Scikit-learn
- NLTK / re (for text processing)
- Streamlit (for deployment - optional)

### ## ■ Project Structure

- Movie\_recommendation\_system.ipynb # Main notebook
- requirements.txt # Required libraries
- README.md # Project documentation

### ## ■ How to Run

1. Clone the repo:

```
git clone https://github.com/your-username/movie-recommendation-system.git
```

2. Install dependencies:

```
pip install -r requirements.txt
```

3. Run the notebook:

```
jupyter notebook Movie_recommendation_system.ipynb
```

### ## ■ Future Enhancements

- Add collaborative filtering.
- Build a hybrid recommendation model.
- Deploy with **Streamlit** for interactive web app.

### ## ■ Acknowledgements

Dataset: [MovieLens / TMDb dataset]