# ****Deployment Guide / User Manual****

### ****Deployment Guide:****

### ****Movie Recommendation System with Dashboards****

### 1. System Requirements

* **OS**: Windows 10 or above
* **Python Version**: 3.10+
* **Power BI Desktop**: Latest version (for dashboard viewing)
* **RAM**: Minimum 4 GB
* **Internet**: Required for TMDB API poster fetching

### 2. Software/Library

### Installation

Use the following command to install required libraries:

* pip install streamlit pandas numpy scikit-learn requests

### 3. File & Folder Structure

| **File** | **Description** |
| --- | --- |
| app.py | Main Streamlit file to run the web app |
| movie\_list.pkl | Preprocessed movie metadata |
| similarity.pkl | Cosine similarity matrix |
| movies.csv | Original dataset |
| recommendations.csv | Stores movie suggestions |
| dashboard.pbix | Power BI dashboard file |

### 4. Running the Web App (Streamlit)

1. Open terminal
2. Navigate to project folder
3. Run:

* streamlit run app.py

1. App will open in browser
2. Select a movie and see recommendations with posters

### 5. Using Power BI Dashboard

1. Open dashboard.pbix in Power BI Desktop
2. Apply filters:

* Genre
* Year
* Cluster

1. Explore:

* Popular movies
* Blockbuster vs Flop
* Genre trends
* Average rating, vote count etc.

### 6. Common Errors and Fixes

| **Issue** | **Solution** |
| --- | --- |
| Poster not loading | TMDB API might be slow; check internet |
| Dropdown empty | Load movie\_list.pkl correctly |
| Power BI slow | Apply limited filters, reduce data size |
| No recommendations | Check if movie name exists in list |

### 7. Additional Notes

* Poster images are loaded dynamically — app requires internet.
* App can be hosted on Streamlit Cloud or deployed locally.
* Dashboard works offline in Power BI Desktop once loaded.

## Conclusion :

This guide will help anyone run the system smoothly and explore visual analytics without technical knowledge. It ensures the system is easy to use, test, and present during review or demonstration.