

## CONTEXT-AWARE MOVIE ASSISTANT - BEGINNER GUIDE

### Step 1: Building the movie shelf

- dataset.py reads a giant movie list (name, year, actors, genre, plot) and sorts it so we can search by any detail.

### Step 2: Pretending to be the user

- user\_sim.py plays the role of a chatty movie lover. It asks for a genre, then keeps switching: sometimes it wants a certain actor, sometimes a language, sometimes just a mood change.

### Step 3: The assistant replies

- system.py looks at the latest message, figures out the current wishes (genre, actors, language, etc.), grabs matching movies, and sends a short friendly note (or prints a warning if Ollama is offline).

### Step 4: Running practice sessions

- simulate.py links the pretend user with the assistant for 20 turns; batch\_run.py repeats this for every model you list in config.py and saves the chats under logs/.

### Step 5: Scoring the chats

- evaluate.py checks how well the assistant kept up: Did it notice new topics? How long did recovery take? Did it mix old and new ideas? It now uses a TF-IDF similarity brain when the heavy transformer brain is not available.
- It also loads the topic model from models/ (train it once with python train\_lda.py) for better topic labels.

### Step 6: Visual stories

- analyze\_results.py reads the scores and paints comparison charts, radar plots, and smooth curves so you can spot which model remembered the user best.

Keywords to remember: dataset, simulator, CRS system, embeddings, LDA topics, evaluation metrics, visualization, batch\_run.