

Loading, cleaning data.  
Generating sentiments.  
Converting data into a  
user-item matrix.

Hide 5 ratings from each  
user. Allocate to test and  
validation sets. Remaining  
ratings form training set.

Build the respective  
recommender model (e.g.  
NCF).

Data Preparation

Data  
Partitioning

Build Model

Evaluate the final  
trained model using test  
data.

Using validation data,  
optimise the parameters  
of model.

Using training data, train  
the model. Model learns  
user-item interactions.

Predictive  
Accuracy

Evaluation

Validation

Train Model

Predictive  
Accuracy

Hyperparameter Tuning

