

4.1 Implementation

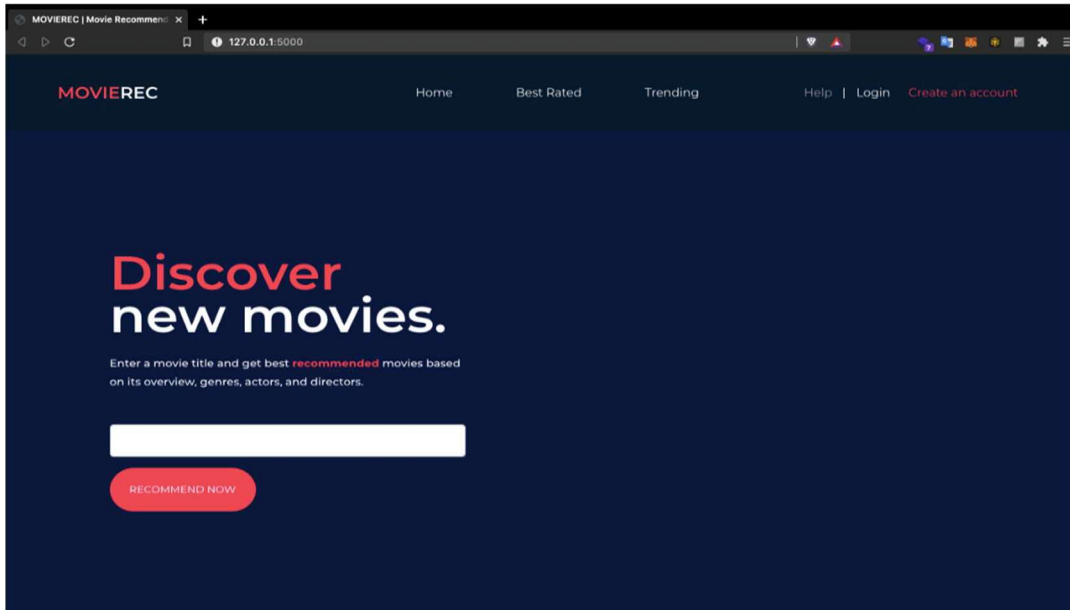


Figure 4.1 GUI of Final Project

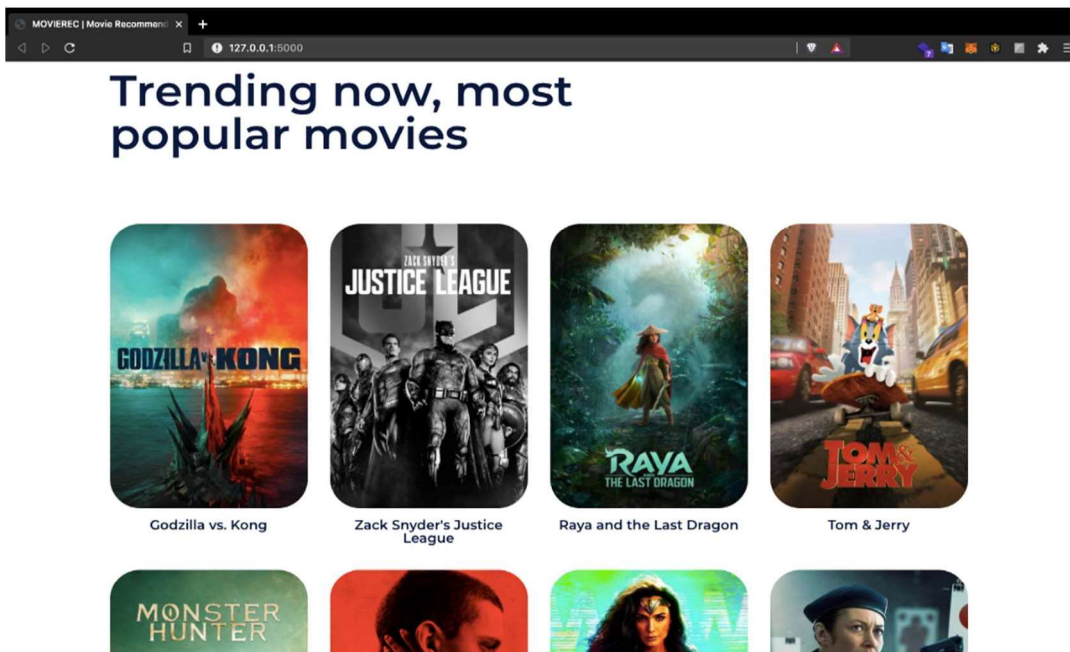


Figure 4.2 Trending Movies

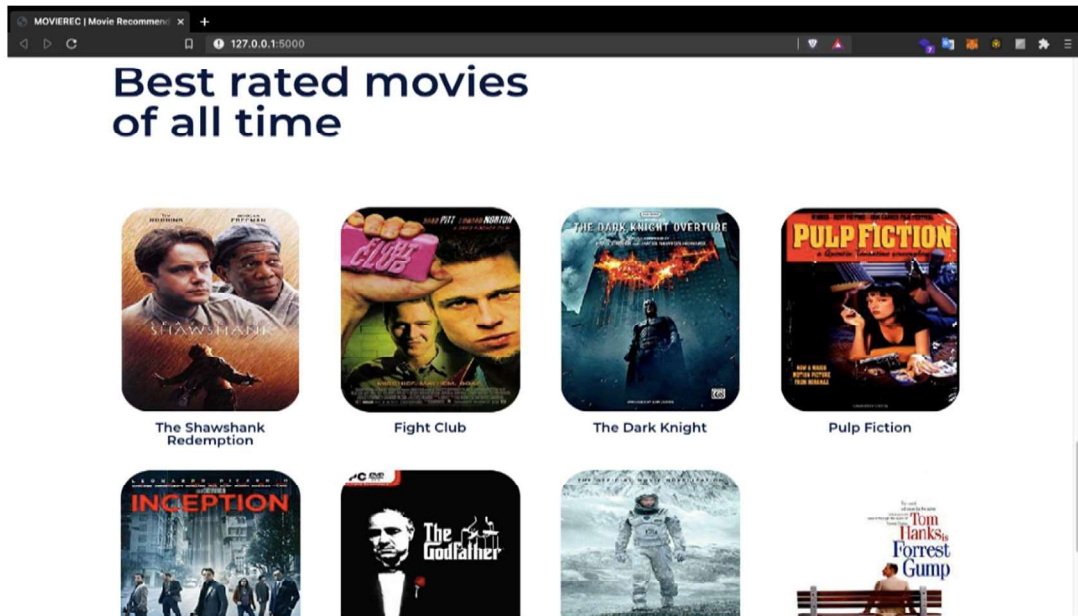


Figure 4.3 Best rated movies

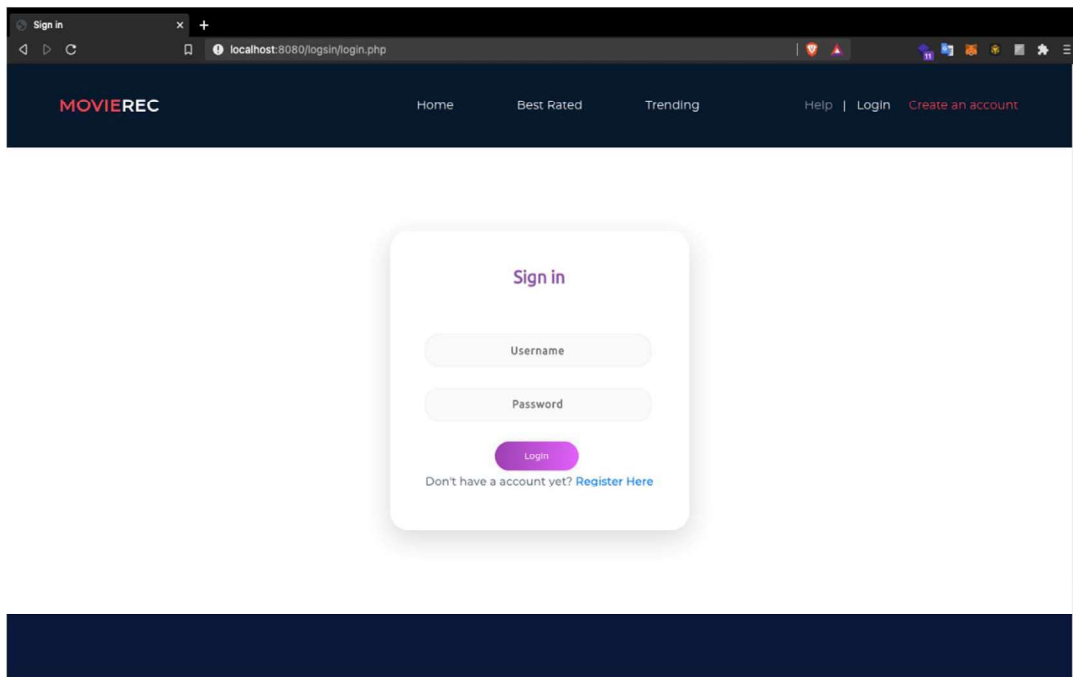


Figure 4.4 Log in page

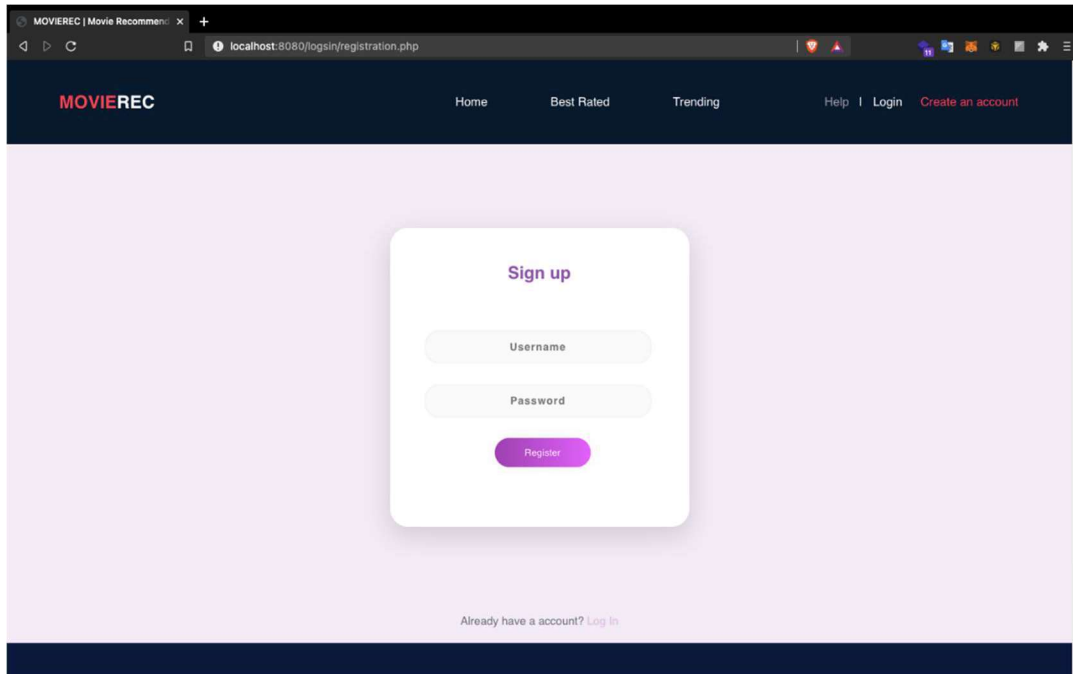


Figure 4.5 Signup page

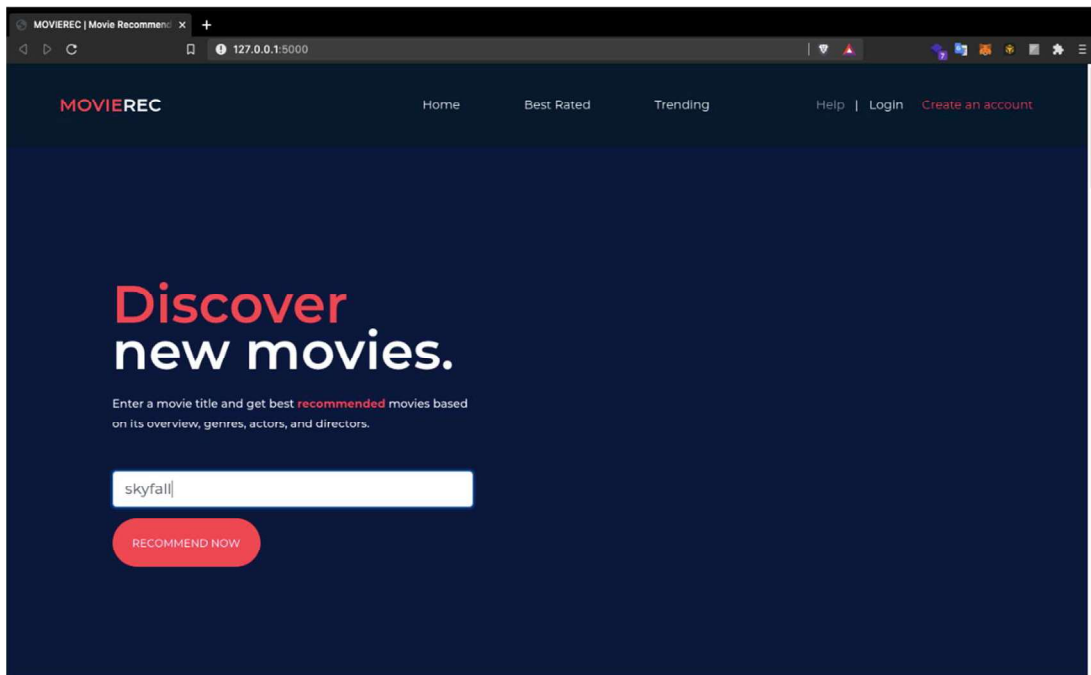


Figure 4.6 Entered search String "Skyfall".

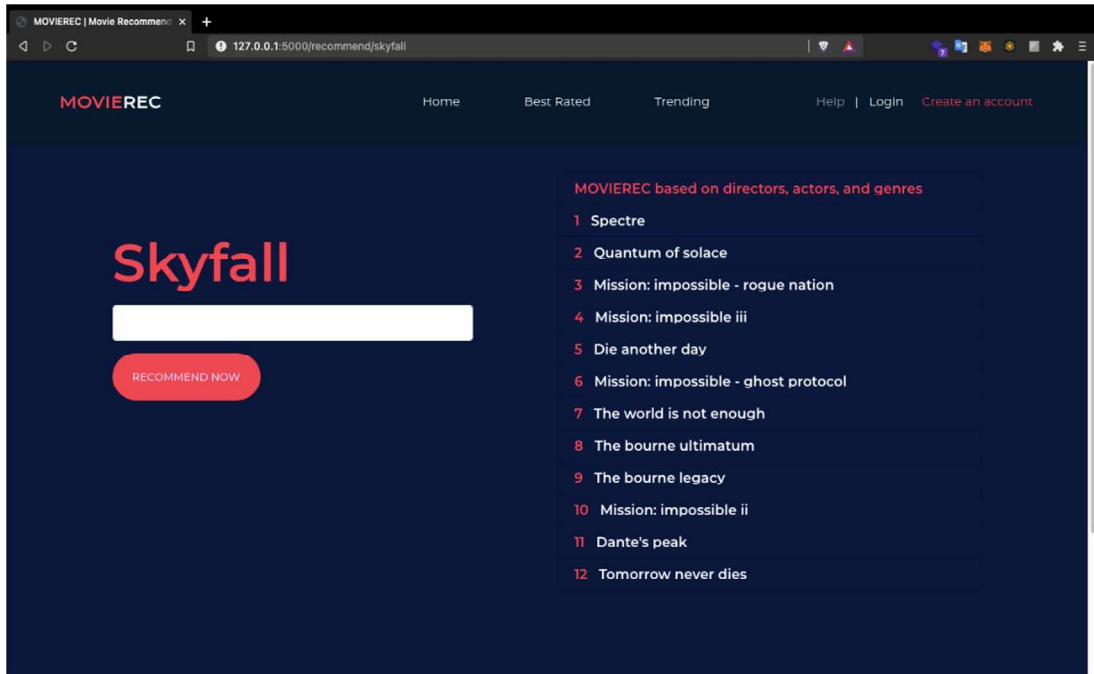


Figure 4.7 Displaying Search Result of the entered String “Skyfall”.

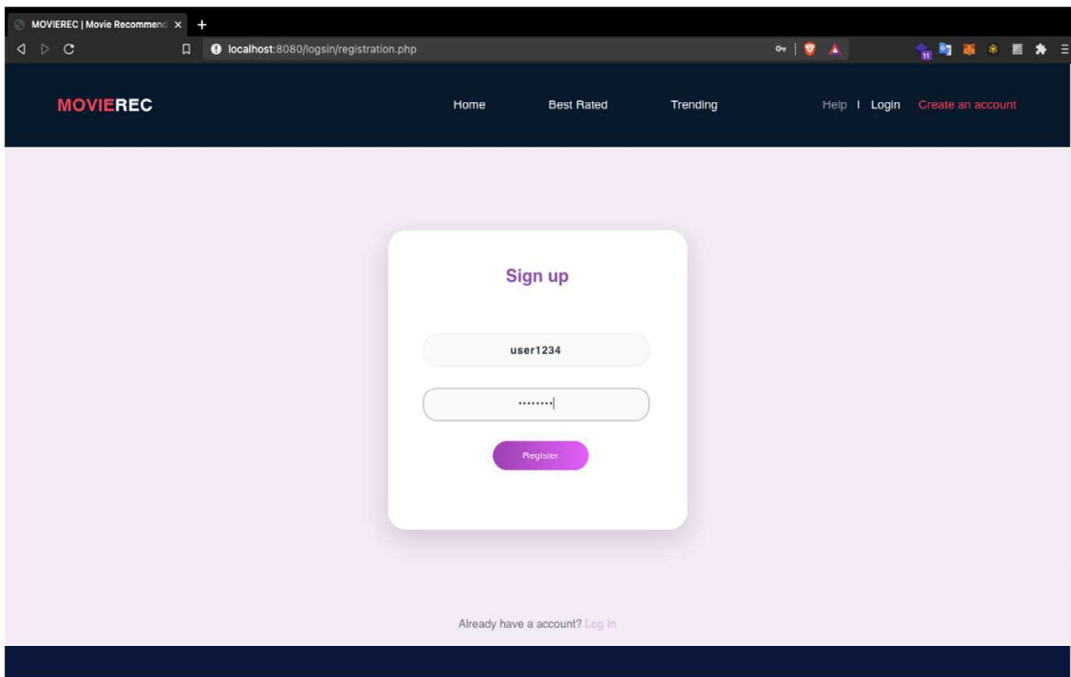


Figure 4.8: User creating an account.

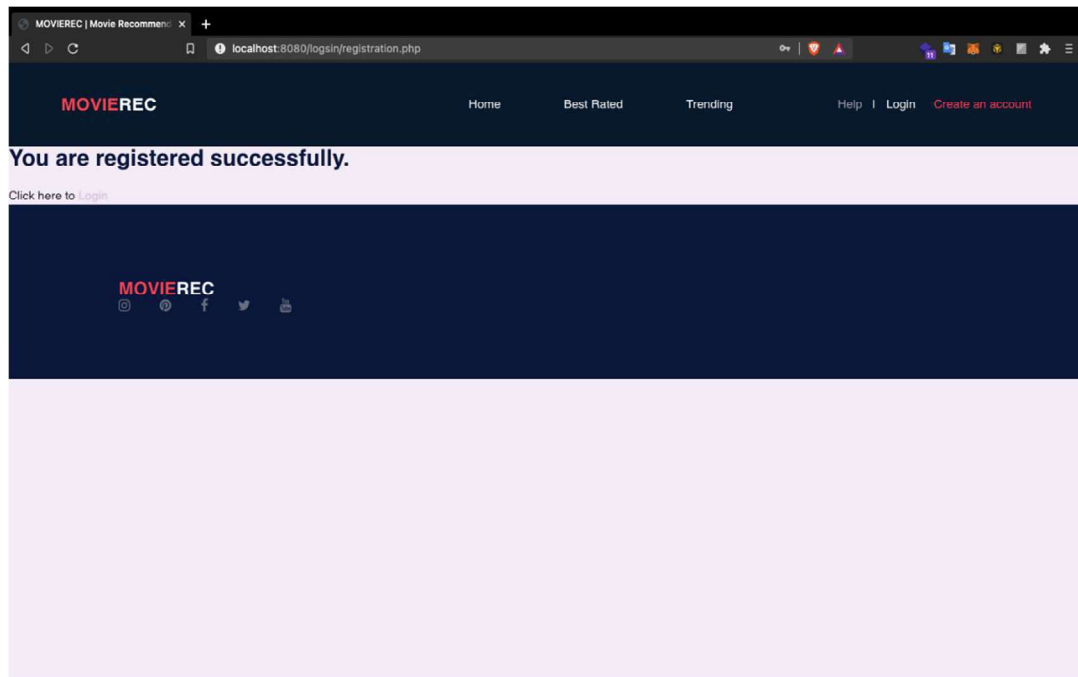


Figure 4.9: Account Created Successfully.

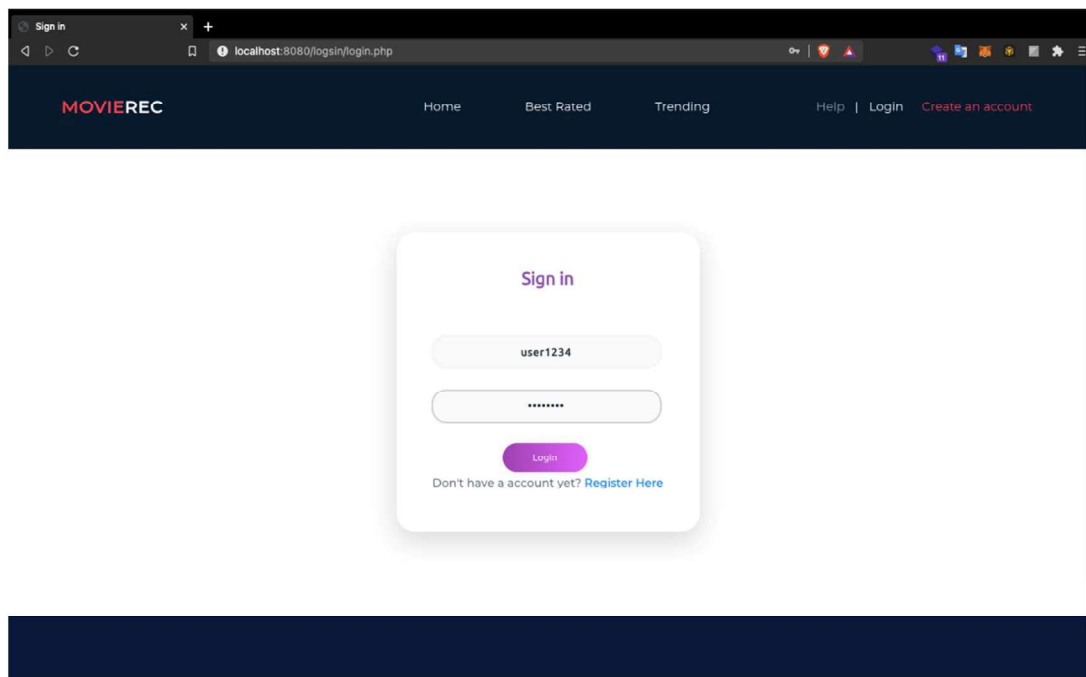


Figure 4.10: User login with created account.

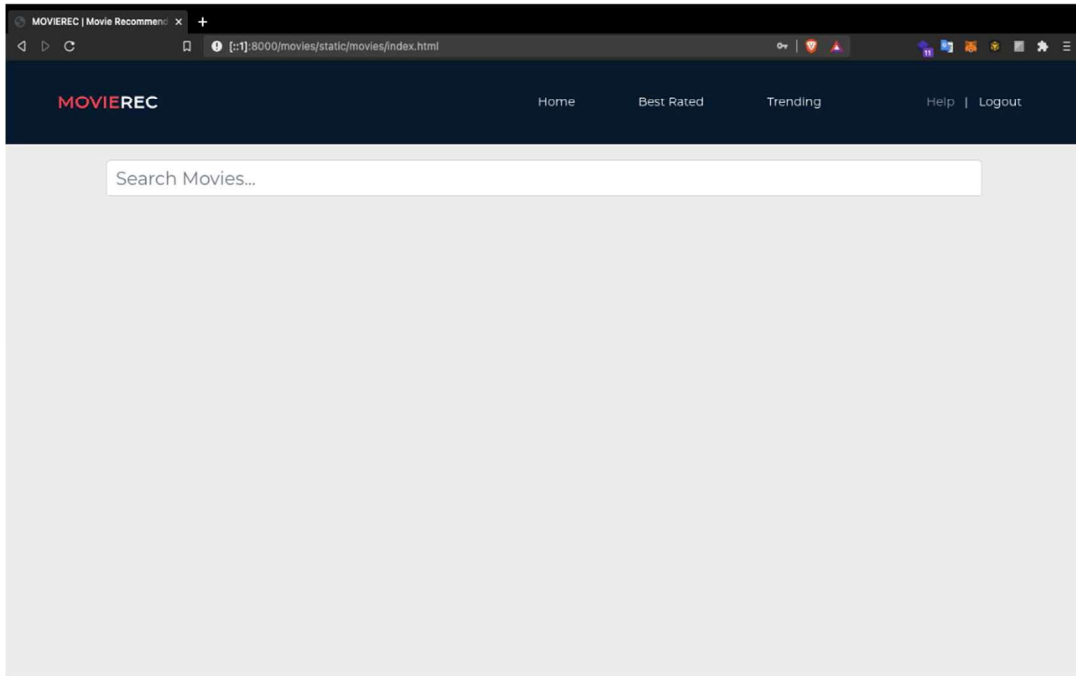


Figure 4.11: Post Login Page.

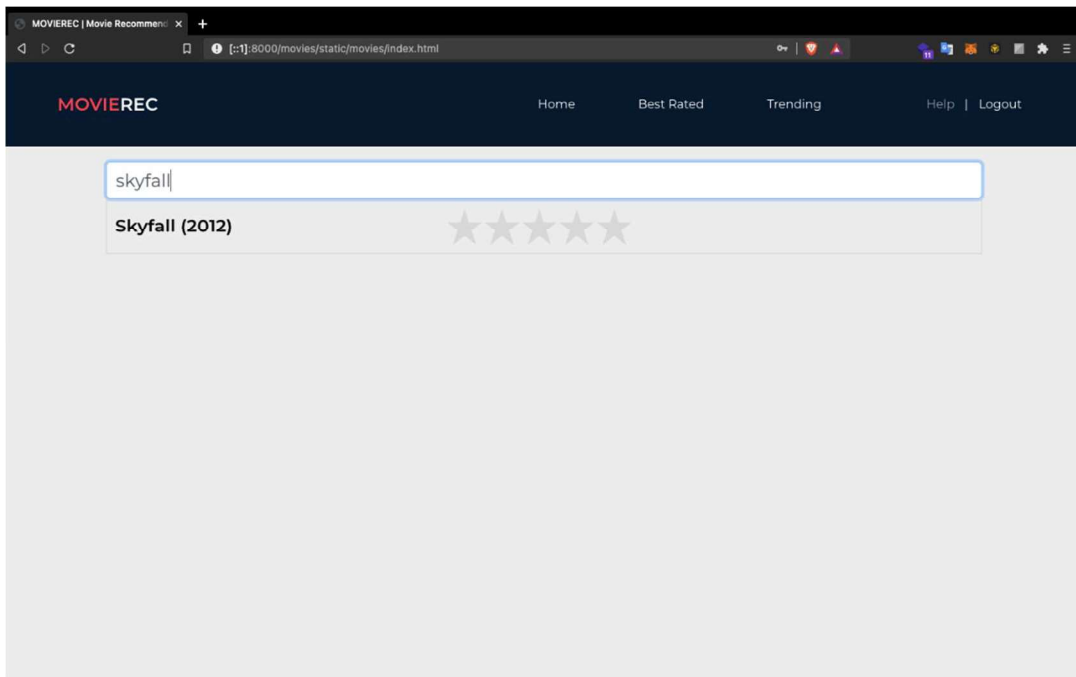


Figure 4.12: User enters the movie name “Skyfall”.

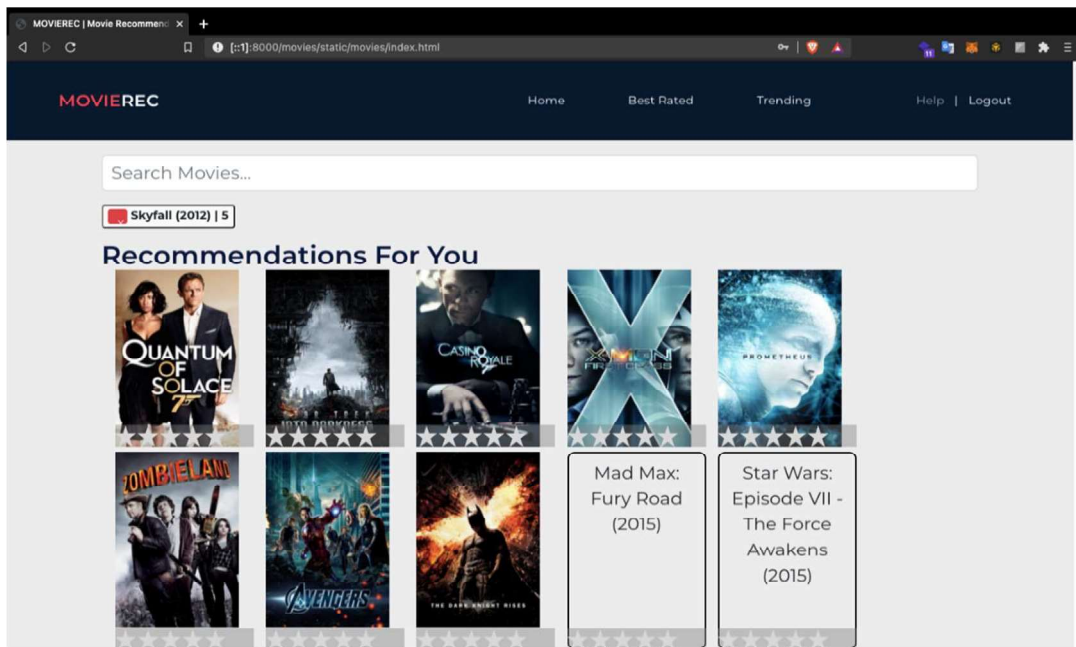


Figure 4.13: User gets recommendations after rating the movie.

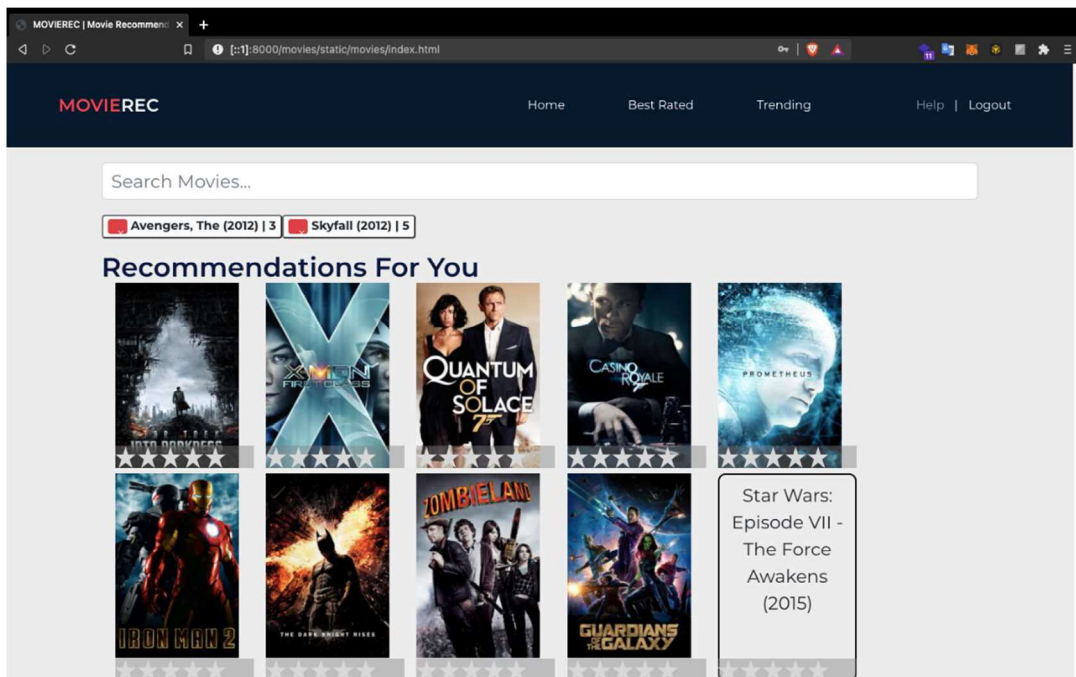


Figure 4.14: Recommendation based upon movies "Skyfall" and "Avengers".

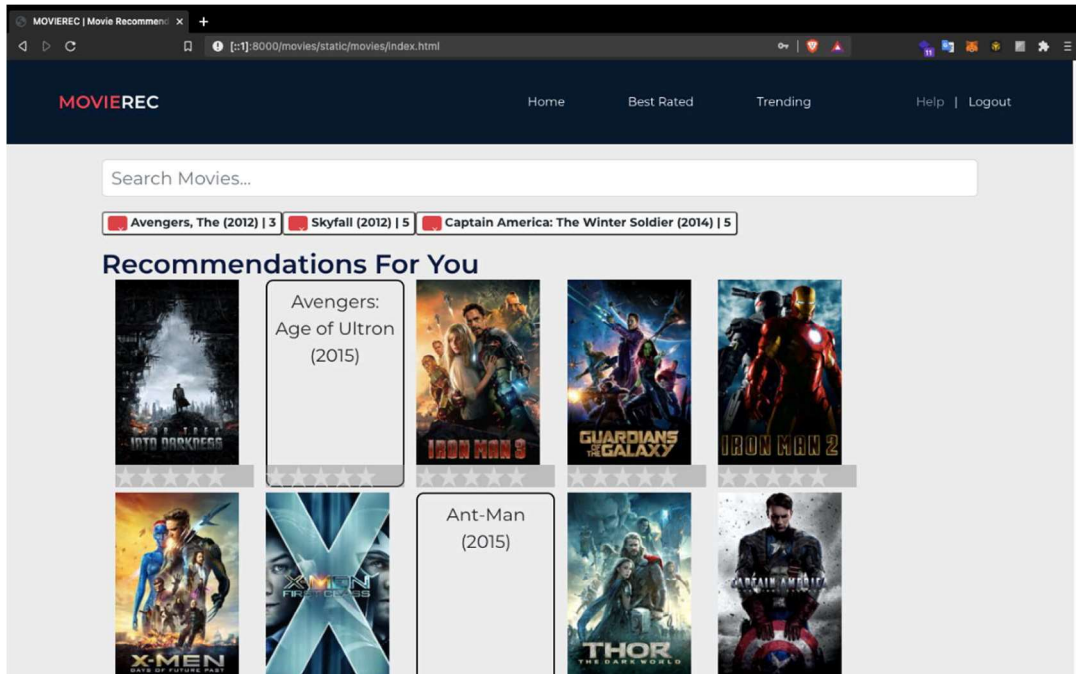


Figure 4.15: Recommendation based upon multiple movies.

4.2 Results

Matrix Factorization- based Collaborative Filtering:

- build SVD algorithm
- evaluation metrics setup
 - * cross-validation
 - * accuracy on training and test set data
 - a. RMSE
 - b. MAE
 - * coverage
 - a. catalog-coverage
 - b. user-coverage
 - c. item-coverage

Cross Validation:

Accuracy on train and test data: