**PROJECT PROPOSAL**

**MOVIE RECOMMENDATION SYSTEM**

**ABSTRACT:**

Movie recommendation system is a Machine learning project that will recommends movie to the user on the basis of certain attributes like genre, actors, directors etc.

In this will use the dataset of movies that will have attributes like genre, actors, etc. On the basis of which we will train our AI model. Our system will use KNN algorithm for checking the similarities between different movies. We will use Euclidean distance formula or cosine distance formula for comparing and selecting movies because these formulas will be very fast and more preferable for us.

In this our basic principle is that we will take movie name as input from user. Then we will check the movie name in our database and if it is we will use our recommendation system for finding similar movies on the basis of certain attributes of movie and will sort them. Then we will select and show user the most similar movies.

**STEPS FOLLOWED:**

1. We will load dataset of movies
2. We will train our model by giving it this dataset
3. We will calculate similarities between movies on basis of many features.
4. We will use Euclidean or cosine distance formula depending on the results.
5. We will take k nearest neighbors of our input movie name.
6. We will sort and display the most similar movies to the user.

**FUNCTIONALITIES:**

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| --- | --- | --- | --- |
| **Module/Project Name** | **List of Functionalities** | **Tools/ Technologies/ Languages** | **Group member responsible** |
| Movie Recommendation System | Use knn for classification and training model.  Calculate distance between movies  Sort the movies which are closer to the input movie  Display movies to user | Python language will be used for the whole project  Will use pandas and numpy library for loading the dataset and cleaning it.  Will use sklearn library for training our AI model.  Will use visual studio code as an environment for development. | * Harris Baig   (FA20-BCS-052)   * Hassan Munawar (FA20-BCS-56) |

**We have taken dataset from.**

[movies.csv - Google Drive](https://drive.google.com/file/d/1cCkwiVv4mgfl20ntgY3n4yApcWqqZQe6/view)