

CONTRIBUTIONS:

1. SIDDHANT KUMAR(PES2201800129):RECOMMENDER SYSTEM(RECOMMENDING MOVIES BASED ON USER ATTRIBUTES)
2. SKANDAN KA(PES2201800064):PREDICTING THE MOST LIKED VIDEOS AND RECENTLY VIEWED
3. SAMEER PRASAD SUBHEDAR(PES2201800323): PREDICTING MOST PLAYED VIDEOS

Object Oriented Analysis and Design with Software Engineering Laboratory

Subject Code: UE18CS355

| Test Case ID | Name of Module | Test case description | Pre-conditions | Test Steps | Test data | Expected Results | Actual Result | Test Result |
|--------------|--------------------|---|---|---|-----------------|--|--|-------------|
| 1. | Recommender System | Recommended Movies based on User Behaviour(Collaborative Filtering) | The movie to be recommended or should be present in the dataset | 1.We will be using the KNN algorithm to compute similarity with cosine distance metric which is very fast and more preferable than pearson coefficient . 2.We first check if the movie name input is in the database and if it is we use our | Movie:"Memento" | Movies Similar to "Memento" should be displayed(recommended) | Movies Similar to "Memento" should be displayed(recommended) | PASS |

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|----|-----------------------|--|--|---|-----------------------|---|---|------|
| | | | | <p>recommendati on system to find similar movies and sort them based on their similarity distance and output only the top 10 movies with their distances from the input movie.</p> | | | | |
| 2. | Recommender System | Recommen d Movies based on User Behaviour(Collaborativ e Filtering) | The movie to be recommended or should be present in the dataset | <p>1.We will be using the KNN algorithm to compute similarity with cosine distance metric which is very fast and more preferable than pearson coefficient.</p> <p>2.We first check if the movie name input is in the database and if it is we use our recommendati on system to find similar movies and sort them based on their similarity distance and output only the top 10 movies with their distances from the input movie.</p> | Movie:”T oy Story” | Movies Similar to “Toy Story” should be displayed(recommen ded) | Movies Similar to “Toy Story” should be displayed(r ecommend ed) | PASS |

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|----|--------------------|--|---|--|-------------------------|---|---|------|
| 3. | Recommender System | Recommended Movies based on User Behaviour(Collaborative Filtering) | The movie to be recommended or should be present in the dataset | <p>1.We will be using the KNN algorithm to compute similarity with cosine distance metric which is very fast and more preferable than pearson coefficient.</p> <p>2.We first check if the movie name input is in the database and if it is we use our recommendation system to find similar movies and sort them based on their similarity distance and output only the top 10 movies with their distances from the input movie.</p> | Movie:" Dusk Till Dawn" | Movies Similar to "Dusk Till Dawn" should be displayed(recommended) | Movies Similar to "Dusk Till Dawn" should be displayed(recommended) | PASS |
| 4. | Recommender System | Recommended Movies based on User Behaviour(Collaborative Filtering) | The movie to be recommended or should be present in the dataset | <p>1.We will be using the KNN algorithm to compute similarity with cosine distance metric which is very fast and more preferable than pearson coefficient.</p> | Movie:" Wonder Woman" | Movies Similar to "Wonder Woman" should be displayed(recommended) | Movies Similar to "Wonder Woman" should be displayed(recommended) | PASS |

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|----|-------------------|--|---|---|------------------|---|---|------|
| | | | | <p>2.We first check if <u>the movie name input</u> is in the <u>database</u> and if it is we use our recommendation system to find similar movies and sort them based on their similarity distance and output only the top 10 movies with their distances from the input movie.</p> | | | | |
| 5. | Recomender System | Recommended Movies based on User Behaviour(Collaborative Filtering) | The movie to be recommended or should be present in the dataset | <p>1.We will be using <u>the KNN</u> algorithm to compute similarity with <u>cosine distance</u> metric which is very fast and more preferable than <u>pearson coefficient</u>.</p> <p>2.We first check if <u>the movie name input</u> is in the <u>database</u> and if it is we use our recommendation system to find similar movies and sort them based on their similarity distance and</p> | Movie:"IP man 3" | Movies Similar to "IP man 3" should be displayed(recommended) | Movies Similar to "IP man 3" should be displayed(recommended) | PASS |

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| | | | | output only the top 10 movies with their distances from the input movie. | | | | |
| 6. | Recommender System | Recommended Movies based on User Behaviour(Collaborative Filtering) | The movie to be recommended or should be present in the dataset | <p>1.We will be using the KNN algorithm to compute similarity with cosine distance metric which is very fast and more preferable than pearson coefficient.</p> <p>2.We first check if the movie name input is in the database and if it is we use our recommendation system to find similar movies and sort them based on their similarity distance and output only the top 10 movies with their distances from the input movie.</p> | Movie:” Usual Suspects” | Movies Similar to “Usual Suspects” should be displayed(recommended) | Movies Similar to “Usual Suspects” should be displayed(recommended) | PASS |
| 7. | Recommender System | Recommended Movies based on User Behaviour(Collaborative Filtering) | The movie to be recommended or should be present in the dataset | 1.We will be using the KNN algorithm to compute similarity with cosine distance metric which is very fast | Movie:”Bottle Rocket” | Movies Similar to “Bottle Rocket” should be displayed(recommended) | Movies Similar to “Bottle Rocket” should be displayed(recommended) | PASS |

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|----|--------------------|--|---|--|----------------|---|---|------|
| | | | | <p>and more preferable than pearson coefficient.</p> <p>2.We first check if <u>the movie name</u> input is in the <u>database</u> and if it is we use our recommendation system to find similar movies and sort them based on their similarity distance and output only the top 10 movies with their distances from the input movie.</p> | | | | |
| 8. | Recommender System | Recommended Movies based on User Behaviour(Collaborative Filtering) | The movie to be recommended or should be present in the dataset | <p>1.We will be using the KNN algorithm to compute similarity with cosine distance metric which is very fast and more preferable than pearson coefficient.</p> <p>2.We first check if <u>the movie name</u> input is in the <u>database</u> and if it is we use our recommendation system to find similar</p> | Movie:"Shazam" | Movies Similar to "Shazam" should be displayed(recommended) | Movies Similar to "Shazam" will not be displayed(recommended) as this movie isn't there in the dataset. | FAIL |

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| | | | | movies and sort them based on their similarity distance and output only the top 10 movies with their distances from the input movie. | | | | |
| 9. | Recommender System | Recommended Movies based on User Behaviour(Collaborative Filtering) | The movie to be recommended or should be present in the dataset | <p>1.We will be using the KNN algorithm to compute similarity with cosine distance metric which is very fast and more preferable than pearson coefficient.</p> <p>2.We first check if the movie name input is in the database and if it is we use our recommendation system to find similar movies and sort them based on their similarity distance and output only the top 10 movies with their distances from the input movie.</p> | Movie:" Kung Fu Panda" | Movies Similar to "Kung Fu Panda" should be displayed(recommended) | Movies Similar to "Kung Fu Panda" will not be displayed(recommended) as this movie isn't there. | FAIL |

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|-----|--------------------|--|---|--|----------------------------|--|--|------|
| 10. | Recommender System | Recommended Movies based on User Behaviour(Collaborative Filtering) | The movie to be recommended or should be present in the dataset | <p>1.We will be using the KNN algorithm to compute similarity with cosine distance metric which is very fast and more preferable than pearson coefficient.</p> <p>2.We first check if the movie name input is in the database and if it is we use our recommendation system to find similar movies and sort them based on their similarity distance and output only the top 10 movies with their distances from the input movie.</p> | Movie:” Avengers End Game” | Movies Similar to “Avengers End Game” should be displayed(recommended) | Movies Similar to “Avengers EndGame” will not be displayed(recommended) as this movie is not in the dataset. | FAIL |
|-----|--------------------|--|---|--|----------------------------|--|--|------|

| Test Case ID | Name of Module | Test case description | Pre-conditions | Test Steps | Test data | Expected Results | Actual Result | Test Result |
|--------------|-----------------|-------------------------------|-------------------------------------|---|--------------|------------------|---------------|-------------|
| 1. | Recently Viewed | Displays most recently viewed | Movie should be in the dataset used | 1.Import the Dataset. 2.Sort based on Timestamp. 3.Display the required | data.head(1) | Toy Story | Toy Story | PASS |

| | | | | Data | | | | |
|----|-----------------|---------------------------------|-------------------------------------|--|--------------|--|--|------|
| 2. | Recently Viewed | Displays 3 most recently viewed | Movie should be in the dataset used | 1.Import the Dataset. 2.Sort based on Timestamp. 3.Display the required Data | data.head(3) | Toy Story Grumpier Old Men Usual Suspects | Toy Story Grumpier Old Men Usual Suspects | PASS |
| 3. | Recently Viewed | Displays 5 most recently viewed | Movie should be in the dataset used | 1.Import the Dataset. 2.Sort based on Timestamp. 3.Display the required Data | data.head(5) | Toy Story Grumpier Old Men Usual Suspects Dusk Till Dawn Bottle Rocket | Toy Story Grumpier Old Men Usual Suspects Dusk Till Dawn Bottle Rocket | PASS |

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|----|-----------------|---------------------------------|-------------------------------------|--|--------------|---|---|------|
| 4. | Recently Viewed | Displays 4 most recently viewed | Movie should be in the dataset used | 1.Import the Dataset. 2.Sort based on Timestamp. 3.Display the required Data | data.head(4) | Toy Story Grumpier Old Men Usual Suspects Dusk Till Dawn | Toy Story Grumpier Old Men Usual Suspects Dusk Till Dawn | PASS |
| 5. | Recently Viewed | Displays 2 most recently viewed | Movie should be in the dataset used | 1.Import the Dataset. 2.Sort based on Timestamp. 3.Display the required Data | data.head(2) | Toy Story Grumpier Old Men | Toy Story Grumpier Old Men | PASS |

| Test Case ID | Name of Module | Test case description | Pre-conditions | Test Steps | Test data | Expected Results | Actual Result | Test Result |
|--------------|----------------|-----------------------|----------------|------------|------------|------------------|---------------|-------------|
| 1. | Liked | Displays | Movie | Import the | data.drop_ | Bill Hicks: | Bill Hicks: | PASS |

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|----|-------|----------------------------|--|--|---|---|--|------|
| | | most liked movies | displayed should be from the dataset | dataset, drop the duplicates following which we sort the movies based on rating | duplicates(subset='movie').sort_values('rating', ascending = False).head(1) | Revelations (1993) | Revelations (1993) | |
| 2. | Liked | Displays most liked movies | Movie displayed should be from the dataset | Import the dataset, drop the duplicates following which we sort the movies based on rating | data.drop_duplicates(subset='movie').sort_values('rating', ascending = False).head(2) | Bill Hicks: Revelations (1993) Rain (2001) | Bill Hicks: Revelations (1993) Rain (2001) | PASS |
| 3. | Liked | Displays most liked movies | Movie displayed should be from the dataset | Import the dataset, drop the duplicates following which we sort the movies based on rating | data.drop_duplicates(subset='movie').sort_values('rating', ascending = False).head(3) | Bill Hicks: Revelations (1993) Rain (2001) George Carlin: Life Is Worth Losing (2005) | Bill Hicks: Revelations (1993) Rain (2001) George Carlin: Life Is Worth Losing (2005) | PASS |
| 4. | Liked | Displays most liked movies | Movie displayed should be from the dataset | Import the dataset, drop the duplicates following which we sort the movies based on rating | data.drop_duplicates(subset='movie').sort_values('rating', ascending = False).head(4) | Bill Hicks: Revelations (1993) Rain (2001) George Carlin: Life Is Worth Losing | Bill Hicks: Revelations (1993)Your Juice in the Hood Rain (2001) George Carlin: Life Is Worth Losing (2005) What Men Talk | PASS |

| | | | | | | | | |
|--|--|--|--|--|--|--|--------------|--|
| | | | | | | (2005) What Men Talk About (2010) | About (2010) | |
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| Test Case ID | Name of Module | Test case description | Pre-conditions | Test Steps | Test data | Expected Results | Actual Result | Test Result |
|--------------|----------------|-------------------------------------|--|---|---|--|--|-------------|
| 1. | Most Played | Will display the most played videos | The videos played will be from the dataset | Import the tags dataset, make a list of tuples of the number of occurrences of a particular movie. Get the movie name from the movies dataset and map it to the number of occurrences of movieId. | for a in y: try: print('The movie',movies['title'][a[1]], 'has been viewed',a[0], 'times') except: continue | The movie Virtuosity (1995) has been viewed 181 times | The movie Virtuosity (1995) has been viewed 181 times | PASS |
| 2. | Most Played | Will display the most played videos | The videos played will be from the dataset | Import the tags dataset, make a list of tuples of the number of occurrences of a particular movie. Get the movie name from the movies dataset and map it to the number of occurrences of movieId. | for a in y: try: print('The movie',movies['title'][a[1]], 'has been viewed',a[0], 'times') except: continue | The movie Billy Elliot (2000) has been viewed 54 times | The movie Billy Elliot (2000) has been viewed 54 times | PASS |
| 3. | Most Played | Will display the most played videos | The videos played will be from the dataset | Import the tags dataset, make a list of tuples of the number of occurrences | for a in y: try: print('The movie',movies['title | The movie Grand Day Out with Wallace and | The movie Grand Day Out with Wallace and | PASS |

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|----|-------------|-------------------------------------|--|---|---|--|--|------|
| | | | | of a particular movie. Get the movie name from the movies dataset and map it to the number of occurrences of movieId. | e'] <code>[a[1]],'</code> has been viewed', <code>a[0], 'times'</code>) except: continue | Wallace and Gromit, A (1989) has been viewed 41 times | Gromit, A (1989) has been viewed 41 times | |
| 4. | Most Played | Will display the most played videos | The videos played will be from the dataset | Import the tags dataset, make a list of tuples of the number of occurrences of a particular movie. Get the movie name from the movies dataset and map it to the number of occurrences of movieId. | for a in y: try: print('The movie', <code>m</code> ovies['title'], <code>e']<code>[a[1]],'</code> has been viewed',<code>a[0], 'times'</code>)</code> except: continue | The movie Underneath (1995) has been viewed 35 times | The movie Underneath (1995) has been viewed 35 times | PASS |
| 5. | Most Played | Will display the most played videos | The videos played will be from the dataset | Import the tags dataset, make a list of tuples of the number of occurrences of a particular movie. Get the movie name from the movies dataset and map it to the number of occurrences of movieId. | for a in y: try: print('The movie', <code>m</code> ovies['title'], <code>e']<code>[a[1]],'</code> has been viewed',<code>a[0], 'times'</code>)</code> except: continue | The movie TiMER (2009) has been viewed 34 times | The movie TiMER (2009) has been viewed 34 times | PASS |
| 6. | Most Played | Will display the most played videos | The videos played will be from the dataset | Import the tags dataset, make a list of tuples of the number of occurrences of a particular movie. Get the movie name from the movies dataset and map it to the number of | for a in y: try: print('The movie', <code>m</code> ovies['title'], <code>e']<code>[a[1]],'</code> has been viewed',<code>a[0], 'times'</code>)</code> except: continue | The movie Tales from the Darkside: The Movie (1990) has been viewed 32 times | The movie Tales from the Darkside: The Movie (1990) has been viewed 32 times | PASS |

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|-----|-------------|-------------------------------------|--|---|---|---|---|------|
| | | | | occurrences of movieId. | | | | |
| 7. | Most Played | Will display the most played videos | The videos played will be from the dataset | Import the tags dataset, make a list of tuples of the number of occurrences of a particular movie. Get the movie name from the movies dataset and map it to the number of occurrences of movieId. | for a in y: try: print('The movie',movies['title'][a[1]], 'has been viewed',a[0], 'times') except: continue | The movie Quiz Show (1994) has been viewed 26 times | The movie Quiz Show (1994) has been viewed 26 times | PASS |
| 8. | Most Played | Will display the most played videos | The videos played will be from the dataset | Import the tags dataset, make a list of tuples of the number of occurrences of a particular movie. Get the movie name from the movies dataset and map it to the number of occurrences of movieId. | for a in y: try: print('The movie',movies['title'][a[1]], 'has been viewed',a[0], 'times') except: continue | The movie Tenet (2021) has been viewed 78 times | Key error | FAIL |
| 9. | Most Played | Will display the most played videos | The videos played will be from the dataset | Import the tags dataset, make a list of tuples of the number of occurrences of a particular movie. Get the movie name from the movies dataset and map it to the number of occurrences of movieId. | for a in y: try: print('The movie',movies['title'][a[1]], 'has been viewed',a[0], 'times') except: continue | The movie End Game (2019) has been viewed 104 times | Key error | FAIL |
| 10. | Most Played | Will display the most played videos | The videos played will be from the dataset | Import the tags dataset, make a list of tuples of the number of occurrences of a particular | for a in y: try: print('The movie',movies['title'][a[1]], 'has been | The movie John Wick (2014) has been | Key error | FAIL |

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|--|--|--|--|---|--|-----------------|--|--|
| | | | | movie. Get the movie name from the movies dataset and map it to the number of occurrences of movieId. | has been viewed',a [0], 'times') except: continue | viewed 78 times | | |
|--|--|--|--|---|--|-----------------|--|--|