**TO DESIGN A DATABASE FOR IMDB**

**1. Movie:**

- movie\_id (Primary Key)

- title

- release\_date

- duration

- description

**2. Media:**

- media\_id (Primary Key)

- movie\_id (Foreign Key referencing Movie.movie\_id)

- media\_type (e.g., video, image)

- media\_url

**3. Genre:**

- genre\_id (Primary Key)

- genre\_name

**4. Movie\_Genre:**

- movie\_id (Foreign Key referencing Movie.movie\_id)

- genre\_id (Foreign Key referencing Genre.genre\_id)

**5. Review:**

- review\_id (Primary Key)

- movie\_id (Foreign Key referencing Movie.movie\_id)

- user\_id (Foreign Key referencing User.user\_id)

- rating

- comment

**6. User:**

- user\_id (Primary Key)

- username

- email

**7. Artist:**

- artist\_id (Primary Key)

- name

- bio

**8. Artist\_Skill:**

- artist\_id (Foreign Key referencing Artist.artist\_id)

- skill

**9. Film\_Credit:**

- credit\_id (Primary Key)

- movie\_id (Foreign Key referencing Movie.movie\_id)

- artist\_id (Foreign Key referencing Artist.artist\_id)

- role

This design includes the following tables:

1. Movie: Contains information about movies such as title, release date, duration, and description.

2. Media: Allows movies to have multiple media items associated with them, like videos or images.

3. Genre: Stores different genres identified by a unique genre\_id.

4. Movie\_Genre: Establishes a many-to-many relationship between movies and genres.

5. Review: Stores reviews given by users for movies, including the rating and comment.

6. User: Stores information about users, including their username and email.

7. Artist: Contains information about artists, such as their name and bio.

8. Artist\_Skill: Allows artists to have multiple skills.

9. Film\_Credit: Establishes the relationship between movies and artists, including the roles performed by artists in movies.

This design enables efficient storage and management of movie-related data, including genres, reviews, users, artists, and their film credits.

**EXAMPLE MOVIE LIST CAN FIT INTO THE ABOVE IMDB DATABASE FORMAT:**

**Movie Table:**

| movie\_id | title | release\_date | duration(min) | description |

| 1 | The Shawshank Redemption | 1994-09-23 | 142 | Two imprisoned men bond over a number of years, finding solace and eventual redemption through acts of common decency. |

| 2 | The Godfather | 1972-03-24 | 175 | The aging patriarch of an organized crime dynasty transfers control of his clandestine empire to his reluctant son. |

| 3 | Pulp Fiction | 1994-10-14 | 154 | The lives of two mob hitmen, a boxer, a gangster's wife, and a pair of diner bandits intertwine in four tales of violence and redemption. |

| 4 | The Dark Knight | 2008-07-18 | 152 | When the menace known as the Joker emerges from his mysterious past, he wreaks havoc and chaos on the people of Gotham. |

| 5 | Fight Club | 1999-10-15 | 139 | An insomniac office worker and a devil-may-care soapmaker form an underground fight club that evolves into something much, much more. |

| 6 | Inception | 2010-07-16 | 148 | A thief who steals corporate secrets through the use of dream-sharing technology is given the inverse task of planting an idea into the mind of a C.E.O. |

| 7 | The Matrix | 1999-03-31 | 136 | A computer hacker learns from mysterious rebels about the true nature of his reality and his role in the war against its controllers. |

| 8 | Forrest Gump | 1994-07-06 | 142 | The presidencies of Kennedy and Johnson, the Vietnam War, the Watergate scandal, and other historical events unfold through the perspective of an Alabama man with an IQ of 75. |

| 9 | The Lord of the Rings: The Fellowship of the Ring | 2001-12-19 | 178 | A meek Hobbit from the Shire and eight companions set out on a journey to destroy the powerful One Ring and save Middle-earth from the Dark Lord Sauron. |

| 10 | Interstellar | 2014-11-07 | 169 | A team of explorers travel through a wormhole in space in an attempt to ensure humanity's survival. |

**Media Table:**

| media\_id | movie\_id | media\_type | media\_url |

| 1 | 1 | video | https://example.com/shawshank\_redemption.mp4 |

| 2 | 1 | image | https://example.com/shawshank\_redemption.jpg |

| 3 | 2 | video | https://example.com/godfather.mp4 |

| 4 | 3 | video | https://example.com/pulp\_fiction.mp4 |

| 5 | 3 | image | https://example.com/pulp\_fiction.jpg |

| 6 | 4 | video | https://example.com/dark\_knight.mp4 |

| 7 | 5 | video | https://example.com/fight\_club.mp4 |

| 8 | 5 | image | https://example.com/fight\_club.jpg |

| 9 | 6 | video | https://example.com/inception.mp4 |

| 10 | 7 | video | https://example.com/matrix.mp4 |

| 11 | 7 | image | https://example.com/matrix.jpg |

| 12 | 8 | video | https://example.com/forrest\_gump.mp4 |

| 13 | 9 | video | https://example.com/fellowship\_of\_the\_ring.mp4 |

| 14 | 9 | image | https://example.com/fellowship\_of\_the\_ring.jpg |

| 15 | 10 | video | https://example.com/interstellar.mp4 |

**Genre Table:**

| genre\_id | genre\_name |

| 1 | Drama |

| 2 | Crime |

| 3 | Thriller |

| 4 | Action |

| 5 | Sci-Fi |

| 6 | Adventure |

| 7 | Fantasy |

**Movie\_Genre Table:**

| movie\_id | genre\_id |

| 1 | 1 |

| 2 | 1 |

| 2 | 2 |

| 3 | 1 |

| 3 | 2 |

| 3 | 3 |

| 4 | 4 |

| 5 | 1 |

| 5 | 3 |

| 6 | 5 |

| 6 | 3 |

| 7 | 5 |

| 7 | 3 |

| 8 | 1 |

| 9 | 6 |

| 9 | 7 |

| 10 | 5 |

**Review Table:**

| review\_id | movie\_id | user\_id | rating | comment |

| 1 | 1 | 1 | 9 | Great movie! Highly recommend. |

| 2 | 1 | 2 | 8 | A classic that never gets old. |

| 3 | 2 | 3 | 10 | An epic masterpiece. |

| 4 | 3 | 4 | 9 | Mind-blowing storytelling. |

| 5 | 4 | 5 | 9 | Heath Ledger's performance was outstanding. |

| 6 | 4 | 6 | 8 | Gripping and intense. |

| 7 | 5 | 7 | 10 | One of my all-time favorites. |

| 8 | 5 | 8 | 9 | The twist at the end was mind-blowing. |

| 9 | 6 | 9 | 8 | Complex and thought-provoking. |

| 10 | 7 | 10 | 9 | Revolutionary visual effects. |

**User Table:**

| user\_id | username | email |

|---------|----------|------------------------|

| 1 | user1 | user1@example.com |

| 2 | user2 | user2@example.com |

| 3 | user3 | user3@example.com |

| 4 | user4 | user4@example.com |

| 5 | user5 | user5@example.com |

| 6 | user6 | user6@example.com |

| 7 | user7 | user7@example.com |

| 8 | user8 | user8@example.com |

| 9 | user9 | user9@example.com |

| 10 | user10 | user10@example.com |

**Artist Table:**

| artist\_id | name | bio |

| 1 | Tim Robbins | Tim Robbins is an American actor, screenwriter, and director. |

| 2 | Marlon Brando | Marlon Brando was an American actor and film director. |

| 3 | John Travolta | John Travolta is an American actor, producer, dancer, and singer. |

| 4 | Christian Bale | Christian Bale is a British actor. |

| 5 | Brad Pitt | Brad Pitt is an American actor and film producer. |

| 6 | Leonardo DiCaprio | Leonardo DiCaprio is an American actor and film producer. |

| 7 | Keanu Reeves | Keanu Reeves is a Canadian actor, producer, and musician. |

| 8 | Tom Hanks | Tom Hanks is an American actor and filmmaker. |

| 9 | Elijah Wood | Elijah Wood is an American actor and film producer. |

| 10 | Matthew McConaughey | Matthew McConaughey is an American actor and producer. |

**Artist\_Skill Table:**

| artist\_id | skill |

| 1 | Actor |

| 2 | Actor |

| 3 | Actor |

| 4 | Actor |

| 5 | Actor |

| 6 | Actor |

| 7 | Actor |

| 8 | Actor |

| 9 | Actor |

| 10 | Actor |

**Film\_Credit Table:**

| credit\_id | movie\_id | artist\_id | role |

| 1 | 1 | 1 | Actor |

| 2 | 2 | 2 | Actor |

| 3 | 3 | 3 | Actor |

| 4 | 4 | 5 | Actor |

| 4 | 4 | 5 | Producer |

| 5 | 5 | 5 | Actor |

| 5 | 5 | 5 | Producer |

| 6 | 6 | 6 | Actor |

| 7 | 7 | 7 | Actor |

| 8 | 8 | 8 | Actor |

| 9 | 9 | 9 | Actor |

| 10 | 10 | 6 | Actor |