User Manual

- **Introduction to the application**
  Our application is a recommendation service whose main purpose is to assist users to find the movies that they were looking for or at least the most similar ones to them. The app does so by giving the user various different ways to get recommendations which in most of the cases will include a list of several movies that should suit the best for the user origin request which should be : short description of the movie, genre , preference of directors and actors , movies that are related to collection of favorite movie and etc.

- **Design of the application**
  The application's UI design is based on a virtual movies library , i.e the main page includes displays of the movies which contains a title , image and short description of the movie. At the top of the app page there is a search toolbar where the user should select which recommendation option he wants to use(based on the queries that run in the backend of the app) and the input he specifies.
  Afterwards , if there were at least one result that was returned by the recommendation engine that runs in the backend then it will be displayed to the user as a list of movies that should suit the best for him. Otherwise, the app will display an error message that it couldn't find a recommendation for this specific request.

- **Demo**
  We prepared an input example for each of the queries we support. This demo can be found in SRC/show_queries_output.py . Notice that the demo code is in comment and in order to execute it one should uncomment the relevant query lines of code.
  Examples :

  Execute query 1:
  how to run the query in SRC/show_queries_output.py:

```
187  connectionObject = pymysql.connect(host="mysqlsrv1.cs.tau.ac.il", user="DbMysql45", password="DbMysql45", db="DbMysql45",
188                                     port=3306)
189  show_query_1("Spider-Man: No Way Home", connectionObject)
```

  Query output:

```
nova:~/dbhw3/SRC> python3 show_queries_output.py
Total number of rows in table:  3

The results of your query are

1)  Spider-Man: Homecoming
2)  Spider-Man: Far From Home
3)  Spider-Man: No Way Home
```

Execute query 2:

how to run the query in SRC/show_queries_output.py:

```
191  connectionObject = pymysql.connect(host="mysqlsrv1.cs.tau.ac.il", user="DbMysql45", password="DbMysql45", db="DbMysql45",
192                                     port=3306)
193  show_query_2("Tom Holland", connectionObject)
```

Query output:

```
nova:~/dbhw3/SRC> python3 show_queries_output.py
Total number of rows in table:  5

The results of your query are

1)  Venom: Let There Be Carnage
2)  Spider-Man: Homecoming
3)  Spider-Man: Far From Home
4)  Avengers: Infinity War
5)  Avengers: Endgame
```

Execute query 3:

how to run the query in SRC/show_queries_output.py:

```
195  connectionObject = pymysql.connect(host="mysqlsrv1.cs.tau.ac.il", user="DbMysql45", password="DbMysql45", db="DbMysql45",
196                                     port=3306)
197  show_query_3(100, "Comedy", connectionObject)
```

Query output:

```
nova:~/dbhw3/SRC> python3 show_queries_output.py
Total number of rows in table:  5

The results of your query are

1)  Clifford the Big Red Dog
2)  Diary of a Wimpy Kid
3)  The Simpsons in Plusaversary
4)  Christmas ...Again?!
5)  Jack Black: Spider-Man
```

Execute query 4:

how to run the query in SRC/show_queries_output.py:

```
200 connectionObject = pymysql.connect(host="mysqlsrv1.cs.tau.ac.il", user="DbMysql45", password="DbMysql45", db="DbMysql45",
201                                    port=3306)
202 show_query_4("Peter Parker", connectionObject)
```

Query output:

```
nova:~/dbhw3/SRC> python3 show_queries_output.py
Total number of rows in table:  5

The results of your query are

1)  Spider-Man: No Way Home
2)  Spider-Man: Homecoming
3)  Spider-Man: Far From Home
4)  The Amazing Spider-Man
5)  The Amazing Spider-Man 2
```

Execute query 5:

how to run the query in SRC/show_queries_output.py:

```
204 connectionObject = pymysql.connect(host="mysqlsrv1.cs.tau.ac.il", user="DbMysql45", password="DbMysql45", db="DbMysql45",
205                                    port=3306)
206 show_query_5("2019-01-01", "2021-01-01", connectionObject)
```

Query output:

```
nova:~/dbhw3/SRC> python3 show_queries_output.py
Total number of rows in table:  5

The results of your query are

1)  A.J. Briones
2)  Aaron Moorhead
3)  Aaron Schneider
4)  Aaron Woodley
5)  Adam B. Stein
```

Execute query 6:

how to run the query in SRC/show_queries_output.py:

```
connectionObject = pymysql.connect(host="mysqlsrv1.cs.tau.ac.il", user="DbMysql45", password="DbMysql45", db="DbMysql45",
                                   port=3306)
show_query_6("Tom Holland", "Jon Watts", connectionObject)
```

Query output:

```
nova:~/dbhw3/SRC> python3 show_queries_output.py
Total number of rows in table:  3

The results of your query are

1)  Spider-Man: Homecoming
2)  Spider-Man: Far From Home
3)  Peter's To-Do List
```

Execute query 7:

how to run the query in SRC/show_queries_output.py:

```
connectionObject = pymysql.connect(host="mysqlsrv1.cs.tau.ac.il", user="DbMysql45", password="DbMysql45", db="DbMysql45",
                                   port=3306)
show_query_7("Quentin Tarantino", "Action", "2005-01-01", "2021-01-01", connectionObject)
```

Query output:

```
nova:~/dbhw3/SRC> python3 show_queries_output.py
Total number of rows in table:  4

The results of your query are

1)  Death Proof
2)  Kill Bill: The Whole Bloody Affair
3)  Sin City
4)  Inglourious Basterds
```