```
1 // Module: IT8904 BDD
 2 // Assignment 1 - CA1
 3 // Student No: P7461072
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 6 // Filename: movie.js
7 // Directory: P7461072_BDD_CA1/model/
8 // This file is under the model layer and is focused in
9 // processing of data between Controller and Database
10 // Controller <--> Model (movie.js) <--> Database
11 // This file is to connect to mySQL and write fctions
12 // to query the database table and retrieve the results.
13
14 var db = require("./databaseConfig");
15
16 var movieDB = {
     // POST /movie - Add new movie
17
18
     addMovie: function (
19
       movie_name,
20
       movie_description,
21
       release_date,
22
       image_url,
23
       genre_id,
24
       active,
25
       callback
26
     ) {
       var dbConn = db.getConnection(); //get configuration settings of mySQL DB
27
28
29
       // Callback function to handle result from connection
30
       dbConn.connect(function (err) {
31
         // Error from connection detected
32
         if (err) {
33
           console.log("movie DB connect error msg: " + err);
34
           return callback(err, null);
35
         }
         // Successful connection, proceed to do the query
36
37
         else {
           console.log("Database Connected Successfully!");
38
39
           var sql =
40
             "insert into
   movie(movie_name,movie_description,release_date,image_url,genre_id,active)
   values(?,?,?,?,?)";
41
           dbConn.query(
42
             sql,
43
             [
44
               movie_name,
45
               movie_description,
46
               release_date,
47
               image_url,
               genre_id,
48
49
               active,
50
             ],
             function (err, results) {
51
               dbConn.end(); //End the connection
52
               console.log("movie sql error: " + err);
53
               console.log("movie sql results: " + JSON.stringify(results));
54
55
56
               return callback(err, results);
             }
57
           ); //dbConn.query
58
59
         }
60
       }); //dbConn.connect
```

```
61
     }, //addMovie
62
63
      // GET /movie?active=Y - Retrieve all active screening movies
64
     // (Can also set active=N to retrieve non-active movies)
65
      getActiveMovie: function (active, callback) {
       var dbConn = db.getConnection(); //get configuration settings of mySQL DB
66
67
        // Callback function to handle result from connection
68
69
        dbConn.connect(function (err) {
70
          // Error from connection detected
71
          if (err) {
72
            console.log("movie DB connect error msg: " + err);
73
            return callback(err, null);
74
75
          // Successful connection, proceed to do the query
76
          else {
77
            console.log("Database Connected Successfully!");
78
79
            var sql = "select * from movie where active=?";
            // var sql = "select * from movie";
80
            dbConn.query(sql, [active], function (err, results) {
81
              dbConn.end(); //End the connection
82
              console.log("movie sql error: " + err);
83
              console.log("movie sql results: " + JSON.stringify(results));
84
85
86
              return callback(err, results);
87
            }); //dbConn.query
          }
88
89
        }); //dbConn.connect
      }, //getMovie?active=Y
90
91
     // GET /movie?substr=<pat>&genreid=<num> (user is to supply substring of movies
92
   and genreid)
93
     // Retrieve movies based on substring of movie name OR genre id,
      // sort in ascending release date
94
95
      getSortedMovie: function (substr, genre_id, callback) {
96
        var dbConn = db.getConnection(); //get configuration settings of mySQL DB
97
98
        // Callback function to handle result from connection
99
        dbConn.connect(function (err) {
100
          // Error from connection detected
          if (err) {
101
            console.log("movie DB connect error msg: " + err);
102
103
            return callback(err, null);
104
          }
          // Successful connection, proceed to do the query
105
106
          else {
            console.log("Database Connected Successfully!");
107
108
            // user provides both substr and genreid
109
110
            // if (substr !== undefined && genre id !== undefined) {
111
            var sql =
              "select * from movie where movie name like ? or genre id=? order by
112
   release_date";
113
            dbConn.query(sql, [substr, genre id], function (err, results) {
              dbConn.end(); //End the connection
114
              console.log("movie sql error: " + err);
115
              console.log("movie sql results: " + JSON.stringify(results));
116
117
118
              return callback(err, results);
119
            }); //dbConn.query
120
```