Tufts University Department of Computer Science COMP 20: Web Programming Spring 2017 Practice Quiz 3. Closed Book.

Quiz 3 will cover the following topics:

- Web application (Node.js + Express)
- Database (MongoDB)
- Basic web security
- Assignment 3
- Lab 8

You will not be tested on Heroku or on jQuery.

Practice Question

Below is a table / spreadsheet of actors and actresses in movies. Consider the name of this table / spreadsheet as "movies":

| name | m_f | title | year |
|---------------|-----|--------------------|------|
| Carrie Fisher | f | Star Wars: A New | 1977 |
| | | Норе | |
| Carrie Fisher | f | The Empire Strikes | 1980 |
| | | Back | |
| Carrie Fisher | f | Return of the Jedi | 1983 |
| Mark Hamill | m | Star Wars: A New | 1977 |
| | | Норе | |
| Mark Hamill | m | The Empire Strikes | 1980 |
| | | Back | |
| Mark Hamill | m | Return of the Jedi | 1983 |
| Harrison Ford | m | Star Wars: A New | 1977 |
| | | Норе | |
| Harrison Ford | m | The Empire Strikes | 1980 |
| | | Back | |
| Harrison Ford | m | Return of the Jedi | 1983 |
| Harrison Ford | m | Indiana Jones | 1981 |

- 1. Write the *MongoDB commands* to insert each row in the table as a document into a MongoDB.
- 2. Write the *MongoDB command* to find all the movies that Harrison Ford have been in.

For questions 3 to 5, consider the following working code and assume that it is up-and-running on your workstation:

```
var express = require('express');
var bodyParser = require('body-parser');
var app = express();
app.use(bodyParser.json());
app.use(bodyParser.urlencoded({ extended: true }));
app.get('/status.json', function(foo, bar) {
      bar.set('Content-Type', 'text/json');
      bar.send('{"status":"good"}');
});
app.post('/sendMessage', function(foo, bar) {
      msq = foo.body.msq;
      // store msg into a database
      bar.send("You sent me the message: " + msg + "\n");
});
app.get('/messages', function(foo, bar) {
      msg = foo.query.msg;
      bar.set('Content-Type', 'text/html');
      bar.send("You sent me the message: " + msg + "\n");
});
app.listen(process.env.PORT || 3000);
```

- 3 (2 points). Will accessing http://localhost:3000/messages on a modern web browser function properly? YES | NO (CIRCLE ONE)
- 4 (2 points). Will accessing http://localhost:3000/sendMessage on a modern web browser function properly? YES | NO (CIRCLE ONE)
- 5 (2 points). Will accessing http://localhost:3000/status.json on a modern web browser function properly? YES | NO (CIRCLE ONE)

Answers

- 1. db.movies.insert({"name":"Carrie Fisher", "m_f":"f", "title":"Star Wars: A New Hope", "year":1977}); you get the idea...
- db.movies.find({"name":"Harrison Ford"});
- 3. Yes
- 4. No
- 5. Yes