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COMP 20

Codes for Assignment 13

Inserting Data to MongoDB:

```javascript
const MongoClient = require('mongodb').MongoClient;
const assert = require('assert');
const csv = require('csv-parser');
const fs = require('fs');

const url = "mongodb+srv://erenaci:ljmSt65s48IulZUf@cluster0-
bny5d.mongodb.net/test?w=majority";

const dbName = 'Companies';

function insertData(client) {
      var dbo = client.db(dbName);
      var collection = dbo.collection('companies');

      fs.createReadStream('companies.csv')
      .pipe(csv())
      .on('data', function (data) {
      collection.insertOne(data, function(err, res) {
                if (err) throw err;

                console.log("data inserted");
          })
      })
}

var client = MongoClient.connect(url, {useNewUrlParser: true,
useUnifiedTopology: true});
client.then(client => insertData(client))
client.catch(err => console.log(err));
```

index.html:

```html
<!doctype html>
<html>
      <head>
            <meta charset="utf-8">
            <title>Stock Tickers</title>
        <script lang="javascript">

            var url = window.location.port;
            console.log("port is: ", url);

            function setNameAsTicker() {
                    document.getElementById('textbox').setAttribute("name",
"ticker");
            }

            function setNameAsCompany() {
```

```
                        document.getElementById('textbox').setAttribute("name",
"company");
                }

        </script>
    </head>

    <body>
        <h2>This is Stock Ticker / Company Name Covnerter</h2>
            <h3>Please select:</h3>
            <input type='radio' id='ticker' value='ticker'
onclick="setNameAsTicker()">
        <label for='ticker'>Stock Ticker</label>
        <input type='radio' id='company' value='company'
onclick="setNameAsCompany()">
        <label for='company'>Company Name</label>

            <h3>Please enter what you have selected:</h3>
        <form id='forms' method='GET'
action=http://localhost:3000/result.html>
            <script>
                if (url != 3000) {
                document.getElementById('forms').setAttribute("action",
`http://localhost:${url}/result.html`);
                }
            </script>
            <input type='text' id='textbox'>
            <button type='submit'id='submit'>Submit</button>
        </form>
    </body>
</html>
```

Querying data from the database:

```
const http = require('http');
const MongoClient = require('mongodb').MongoClient;
const assert = require('assert');
const express = require('express');
const bodyParser = require('body-parser');
const app = express();

app.use(bodyParser.json());
app.use(bodyParser.urlencoded({ extended: true }));
app.use(express.static(__dirname + '/public'));

const url = "mongodb+srv://erenaci:ljmSt65s48IulZUf@cluster0-
bny5d.mongodb.net/test?w=majority";
const dbName = 'Companies';

const port = process.env.PORT || 8080;

app.get('/', function (req, res) {
    res.sendFile(__dirname + '/index.html');
});
```

```javascript
app.listen(port, function () {
      console.log(`Server running at http://localhost:${port}/`);
})


function displayData(client) {
      var dbo = client.db(dbName);
      var collection = dbo.collection('companies');

      app.get('/result.html', function (req, res) {
            if (req.query['company'] == null) {
                  var toFind = { Ticker: `${req.query['ticker']}` };
                  var query = collection.findOne(toFind, function(err, item)
{
                  res.send('This stock ticker is of ' + item.Company);
                  });
            }
            else if (req.query['ticker'] == null) {
                  var toFind = { Company: `${req.query['company']}` };
                  var query = collection.findOne(toFind, function(err, item)
{
                  res.send("This company's stock ticker is  " + item.Ticker);
                  });
            }
      });
}


var client = MongoClient.connect(url, {useNewUrlParser: true,
useUnifiedTopology: true});
client.then(client => displayData(client))
client.catch(err => console.log("Error ocurred connecting to MongoDB."));
```