Step 1: HTML

```
signUp.html X
                                     JS myJavascript.js 3
                                                          JS index.js 9+
                                                                           JS app.js 4
public > ♦ signUp.html > ♦ html > ♦ body > ♦ form > ♦ input#passSignUp
      <!DOCTYPE html>
      <html lang="en">
           <title>Sign up Page</title>
           <link rel="stylesheet" href="/stylesheets/style.css">
           <script src="javascripts/myJavascript.js"></script>
           <h1>Sign up Page</h1>
           Enter your Sign up details here:
 11
           <form>
 12
               <label for="userSignUp">Enter a new Username</label>
 13
               <input type="text" id="userSignUp"/>
               <br>
               <label for="passSignUp">Enter a new Password</label>
 17
               <input type="password" id="passSignUp"/>
               (br)
               <button type="button" onclick="mySignUpFunc()">click to sign up</button>
           </form>
      </body>
```

Step 2: Client side AJAX

```
function mySignUpFunc(){
    let signUpData = {
        username: document.getElementById('userSignUp').value,
        password: document.getElementById('passSignUp').value
    };

let myxhttp = new XMLHttpRequest();
    myxhttp.open('POST', '/signup');
    myxhttp.setRequestHeader('content-type', 'application/json');
    myxhttp.send(JSON.stringify(signUpData));
}
```

Step 3: Set up app.js by adding session

```
JS myJavascript.js 3
                                                                          JS app.js 4 X
> Loginpage.html
                   signUp.html
                                                         JS index.js 9+
JS app.js > ...
     var express = require('express');
     var path = require('path');
     var cookieParser = require('cookie-parser');
     var logger = require('morgan');
 5 var session = require('express-session');
     var indexRouter = require('./routes/index');
      var usersRouter = require('./routes/users');
      var app = express();
      app.use(logger('dev'));
12
      app.use(express.json());
      app.use(express.urlencoded({ extended: false }));
      app.use(cookieParser());
      app.use(session({
       resave: false,
        saveUninitialized: true,
        secret: 'super secret string of my choice',
        secure: false
      }));
      //this is used to log the logins
      app.use(function(req, res, next){
        console.log("The current user is: " + req.session.username);
        next();
      });
29
      app.use(express.static(path.join(__dirname, 'public')));
      app.use('/', indexRouter);
      app.use('/users', usersRouter);
```

STEP 4: Step up the server index.js

```
router.post('/signup', function(req, res, next){
  let getUsername = req.body.username;
  let getPassword = req.body.password;
  console.log('Username entered: ' + getUsername + ' and the password is: ' + getPassword);

if (!(getUsername in users)) {
  users[getUsername] = { password: getPassword };
  console.log('New user ' + getUsername + ' has been created.');
  res.sendStatus(200); // Send a success response back to the client
  } else {
  console.log('User already exists');
  res.status(409).send('User already exists'); // Send a conflict response back to the client
  }
});
```