

## Module 3 - Question 3 [20 points total]

[ ] 20 points: perfect [ ] 7 points: clearly wrong, some correct elements  
 [ ] 14 points: essentially correct but with small mistakes [ ] 0 points: for anything else

Study these abbreviated HTML, JavaScript, and Python files from our music app:

```
<html>
<head>
  <title>Login to Rate Songs</title>
  <script src="https://cdn.jsdelivr.net/npm/node-forge@0.7.0/dist/forge.min.js"></script>
  <script src="security.js"></script>
</head>
<body onload="getKey();">

<h2>Register</h2>
Username: <input type="text" id="register_username"/><br/>
Password: <input type="password" id="register_password"/><br/>
<button onClick="register();">Register</button>

</body>
</html>
```

**index.html on hosting server**

```
function getKey(){
  ajaxGetRequest("key", gotKey);
}

function gotKey(response){ /* definition omitted – not relevant for question */ }

function ajaxGetRequest(path, callback){
  var request = new XMLHttpRequest();
  request.onreadystatechange = function(){
    if (this.readyState === 4 && this.status === 200){
      callback(this.response);
    }
  };
  request.open("GET", path);
  request.send();
}
```

**security.js on hosting server**

```
@bottle.route('/')
def index():
    return bottle.static_file("front_end/index.html", root="")

@bottle.route('/key')
def key():
    with open("public.pem") as f:
        data = f.read()
        response = {'key': data}
        return json.dumps(response)

# host all static files at paths equal to their filenames
@bottle.route('/<file>')
def static(file):
    return bottle.static_file("front_end/" + file, root="")
```

**server.py on hosting server**

Starting with the initial request to the web server, and ending before any user action is taken, list the files/data that are requested by the client, in the order that the files/data requested (order independently for each server):

From `cdn.jsdelivr.net`

1) `forge.min.js`

2)

3)

From hosting server

1) `index.html`

2) `security.js`

3) server's public key