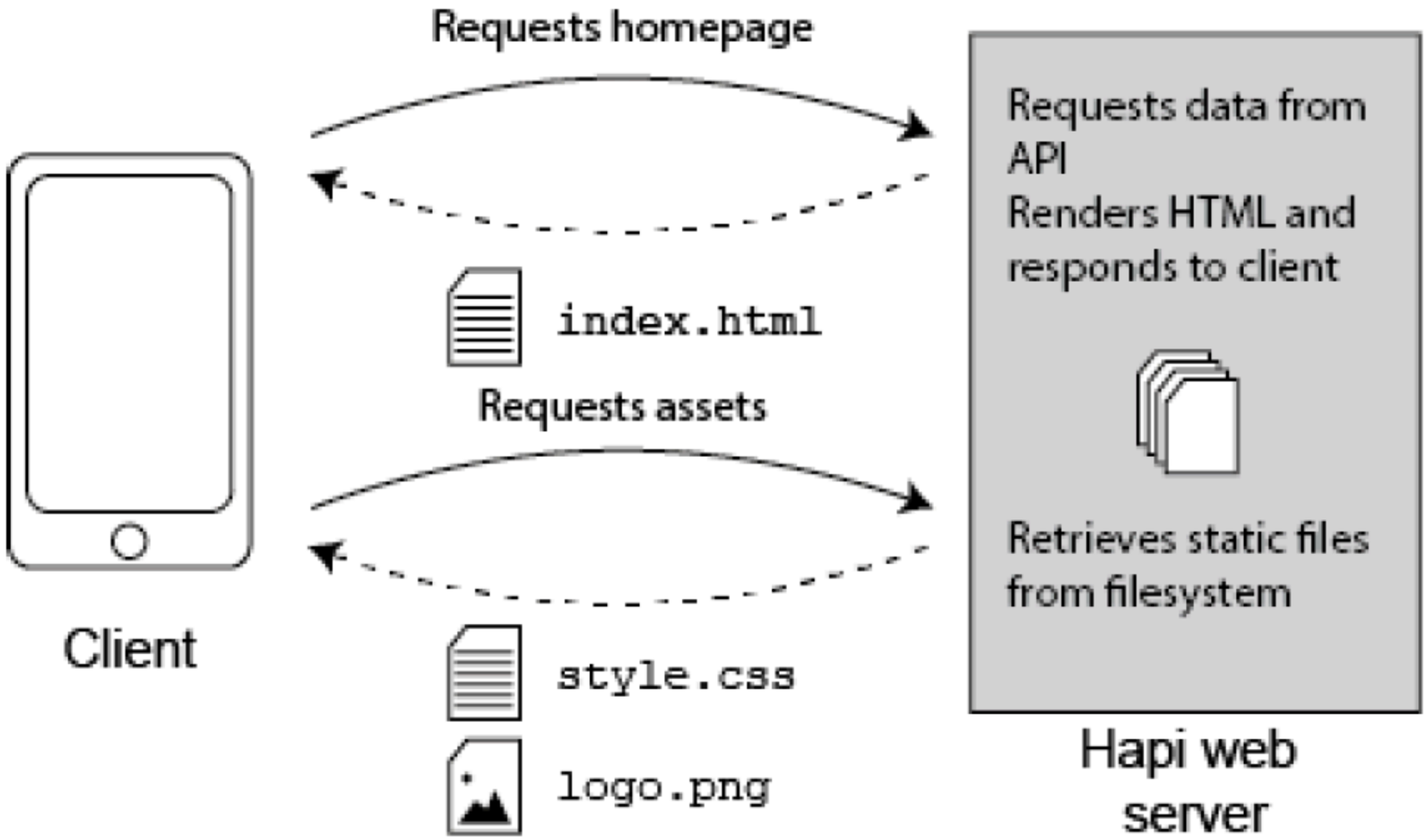
# Views

# Application Structure

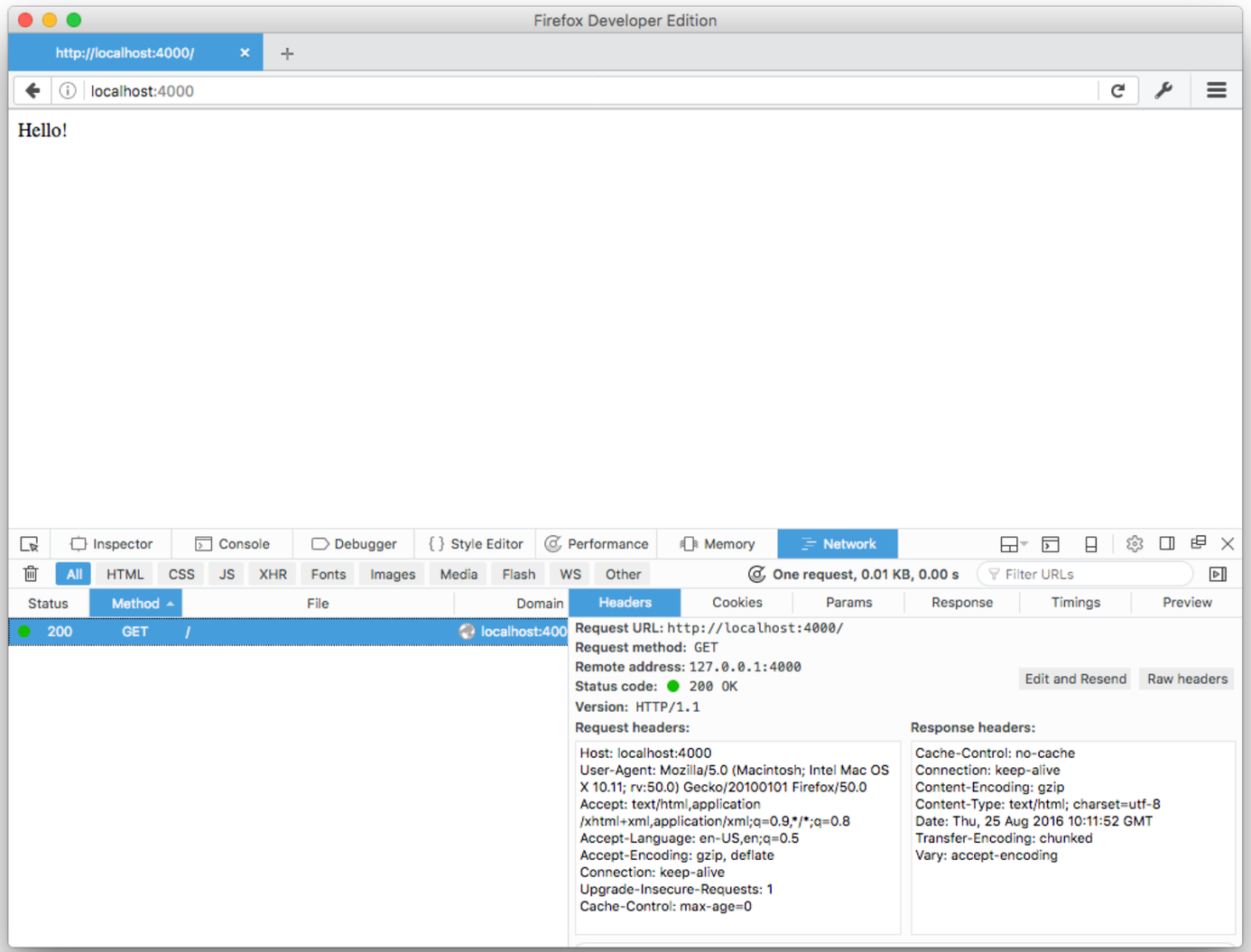


# reply

- reply responds to the browser with a simple string.

*controller.js*

```
exports.index = {

  handler: function (request, reply) {
    reply('Hello!');
  }

};
```



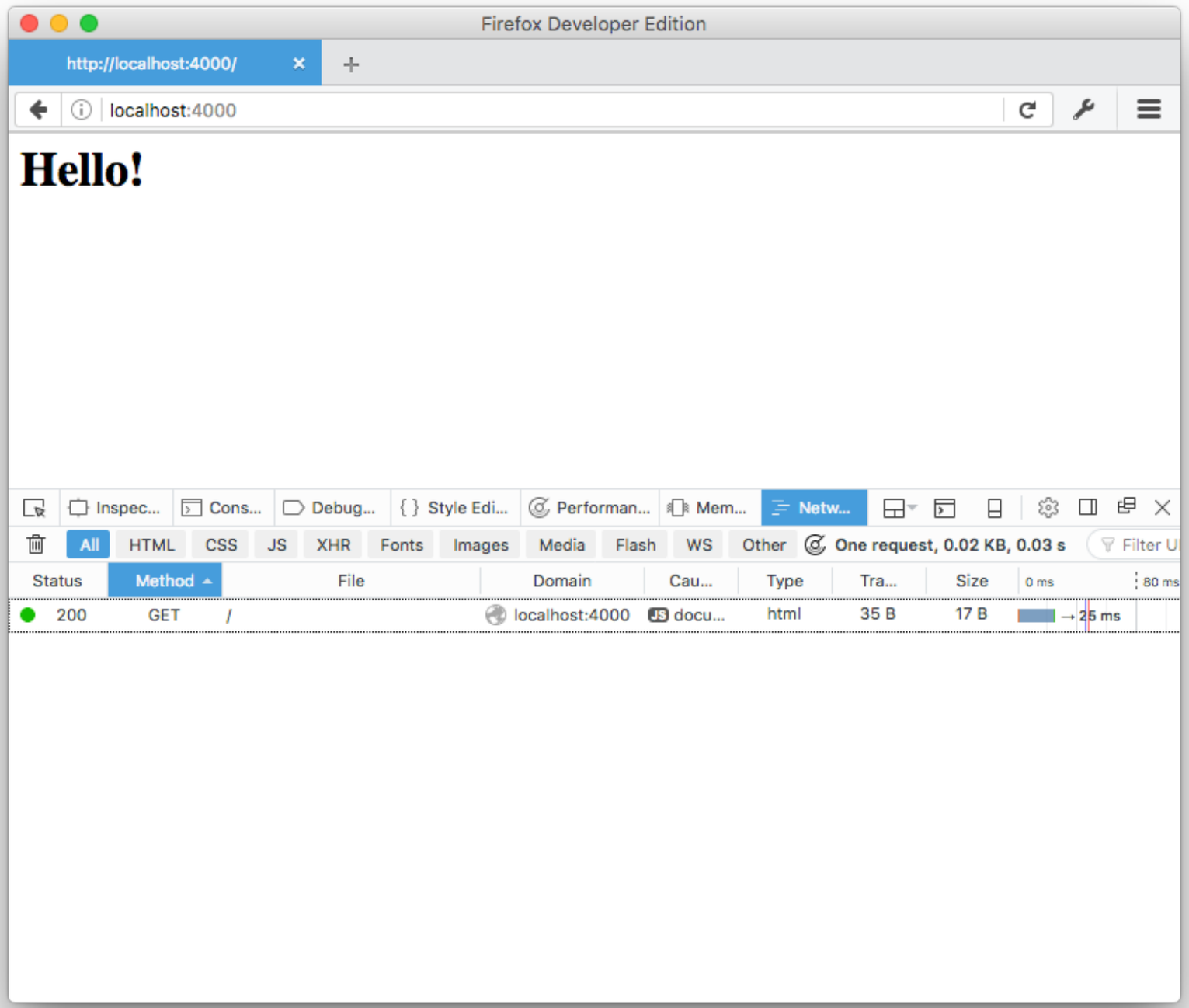
# reply

- In order to render web pages we could pass html content

- This would become very unwieldy and unmaintainable

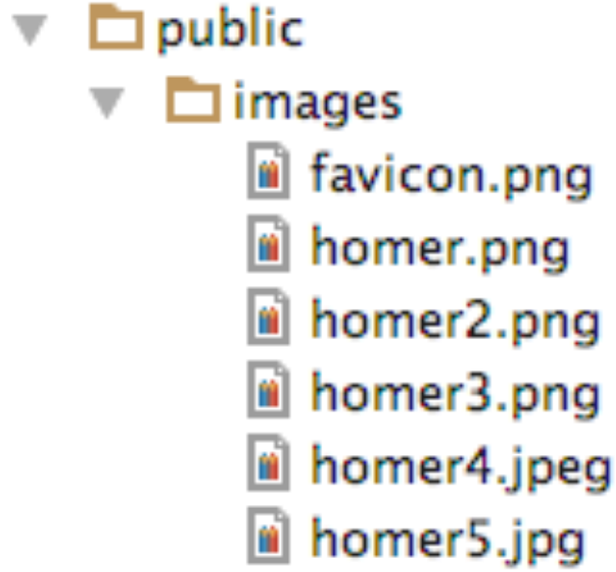
*controller.js*

```
exports.index = {

  handler: function (request, reply) {
    reply('<h1> Hello! </h1>');
  }

};
```



# Static Assets

- Additionally, serving folders of static content (images, css etc..) might require an extensive range or routes + handlers



# inert plugin: https://github.com/hapijs/inert

- This plugin provides simple file serving features for hapi

## inert

Static file and directory handlers plugin for hapi.js.

build passing

Lead Maintainer - Gil Pedersen

**inert** provides new handler methods for serving static files and directories, as well as decorating the reply interface with a `file` method for serving file based resources.

**Features**

- Files are served with cache friendly `last-modified` and `etag` headers.
- Generated file listings and custom indexes.
- Precompressed file support for `content-encoding: gzip` responses.
- File attachment support using `content-disposition` header.

### Index



https://github.com/hapijs/inert

# Restructure the Application Project Structure

- As we are about to grow a more substantial projects, we take care to lay out a sustainable folder structure.

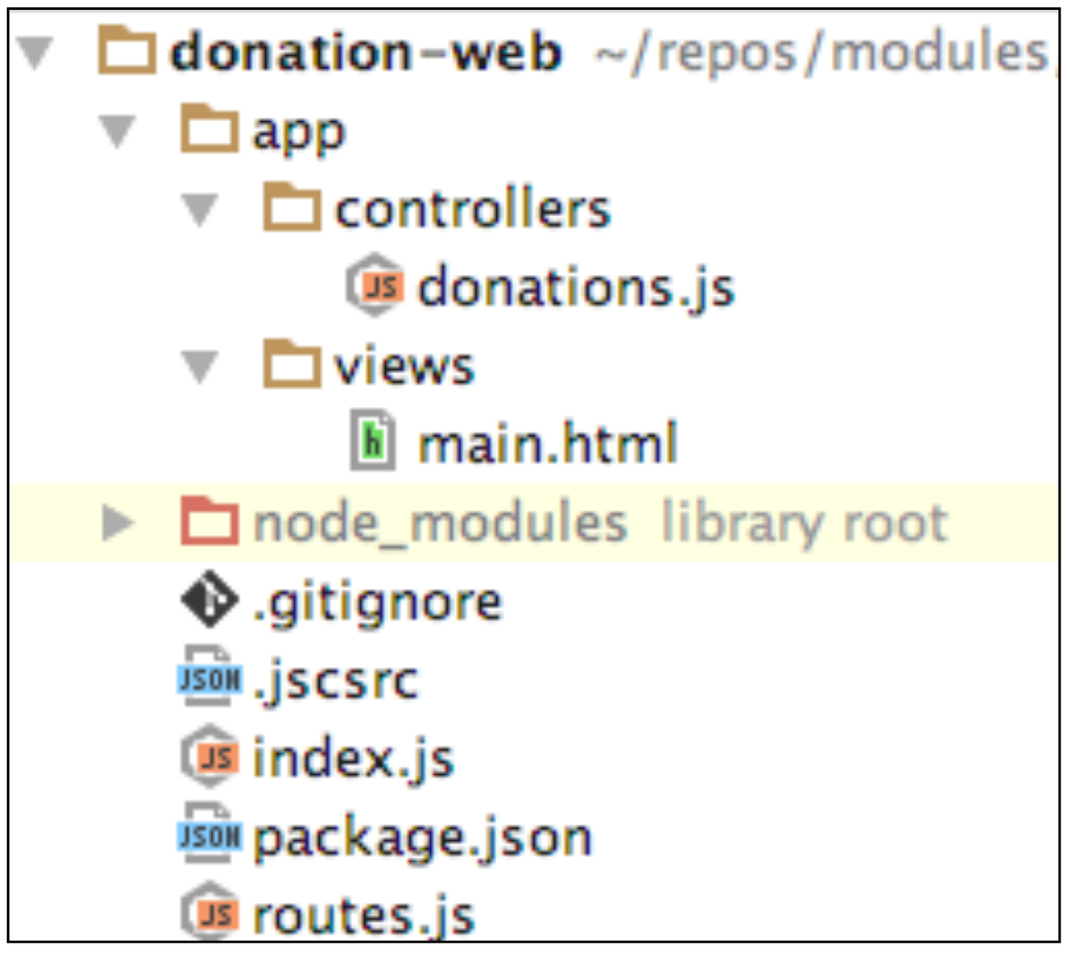
**app** contents bulk of application sources

**controllers** will contain handlers

**views** will contain html templates

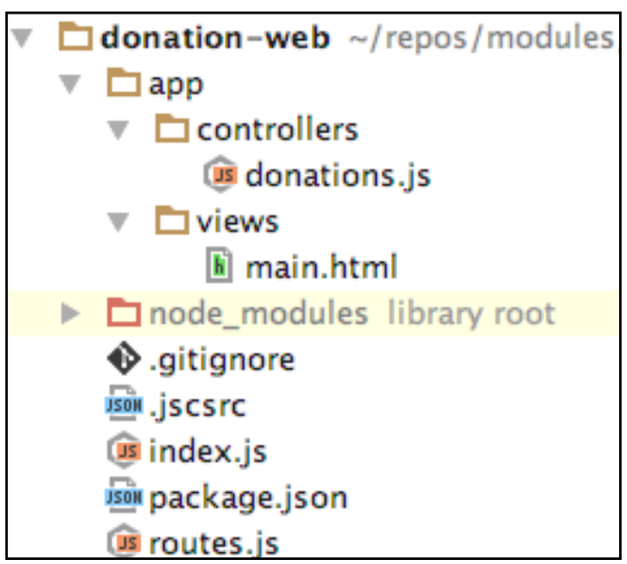
**index.js** is the application entry point

**routes.js** define all application routes



# Main Application Entrypoint

- Plugin must be registered, then if successful:
  - Routes included
  - Server started




*index.js*

```
'use strict';

const Hapi = require('hapi');

var server = new Hapi.Server();
server.connection({ port: process.env.PORT || 4000 });

server.register(require('inert'), err => {

  if (err) {
    throw err;
  }

  server.route(require('./routes'));
  server.start((err) => {
    if (err) {
      throw err;
    }

    console.log('Server listening at:', server.info.uri);
  });
});
```

```
$ npm install inert -save
```

# Routes + Controller

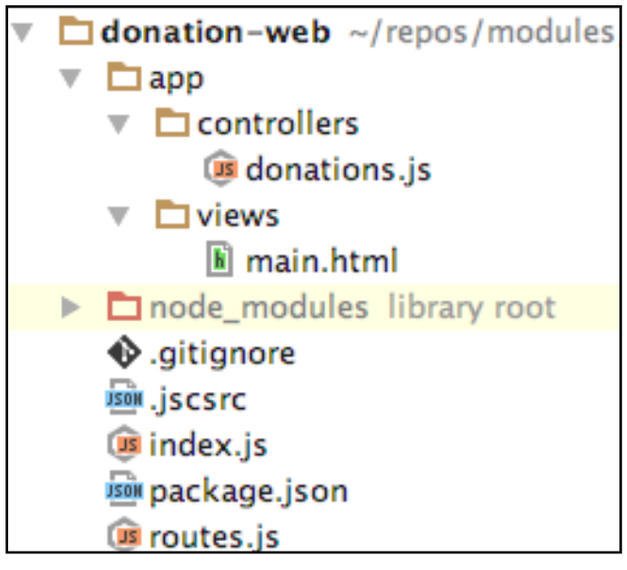
- Route recognises a single pattern: '/'.
- The handler replies will a single file - which will be rendered in the client browser

routes.js

```
const Donations = require('./app/controllers/donations');

module.exports = [

  { method: 'GET', path: '/', config: Donations.home },

];
```

app/controllers/donation.js

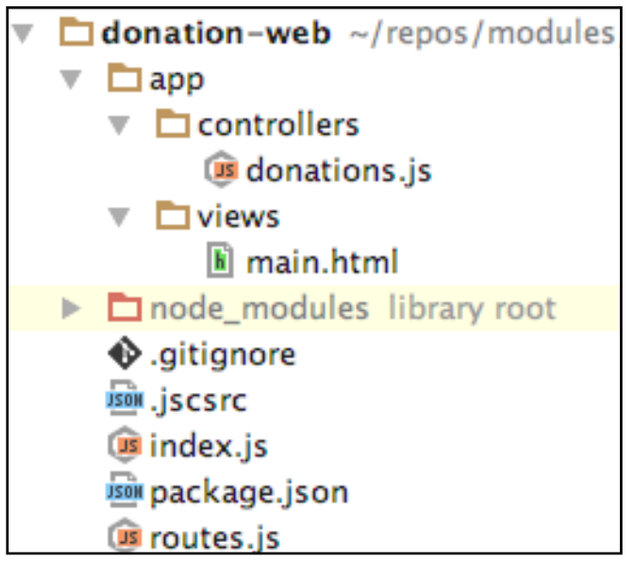
```
'use strict';

exports.home = {

  handler: (request, reply) => {
    reply.file('./app/views/main.html');
  },

};
```



app/views/main.html

# view

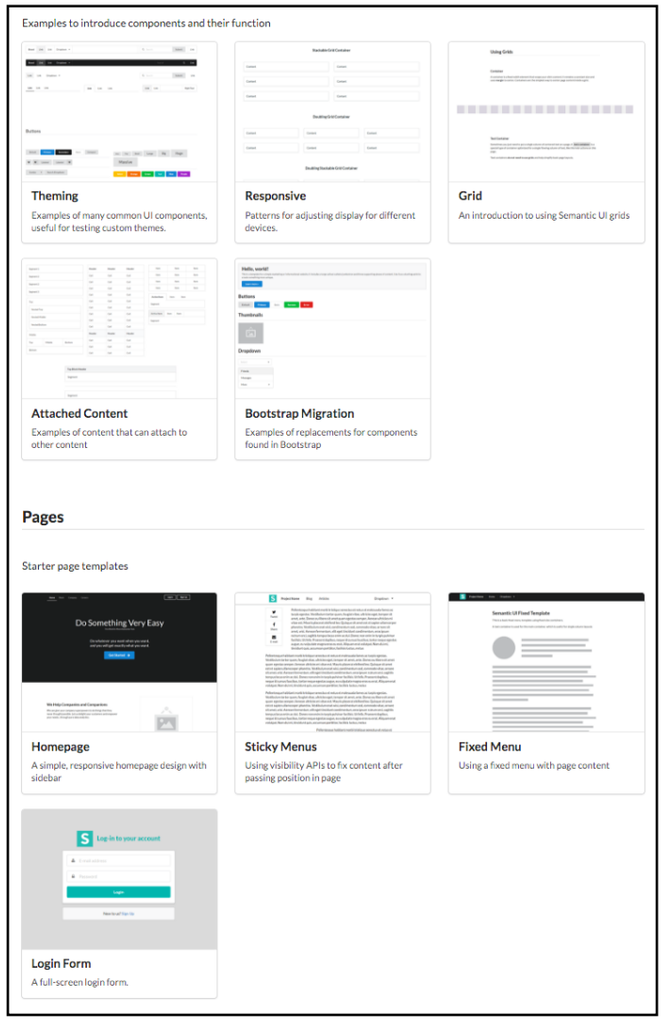
```
<!DOCTYPE html>
<html>
  <head>
    <title>Donations</title>
    <meta charset="UTF-8">
    <script type="text/javascript" src="//cdnjs.cloudflare.com/ajax/libs/jquery/2.1.1/jquery.min.js"></script>
    <script type="text/javascript" src="//cdnjs.cloudflare.com/ajax/libs/semantic-ui/2.1.6/semantic.min.js"></script>
    <link rel="stylesheet" media="screen" href="//cdnjs.cloudflare.com/ajax/libs/semantic-ui/2.1.6/semantic.min.css">
  </head>
  <body>
    <section class="ui container">
      <section class="ui stacked segment">
        <div class="ui grid">
          <aside class="six wide column">
            <img src="images/homer.png" class="ui medium image">
          </aside>
          <article class="ten wide column">
            <header class="ui  header"> Help Me Run Springfield</header>
            <p> Donate what you can now - No Bitcoins accepted! </p>
          </article>
        </div>
      </section>
    </section>
  </body>
</html>
```

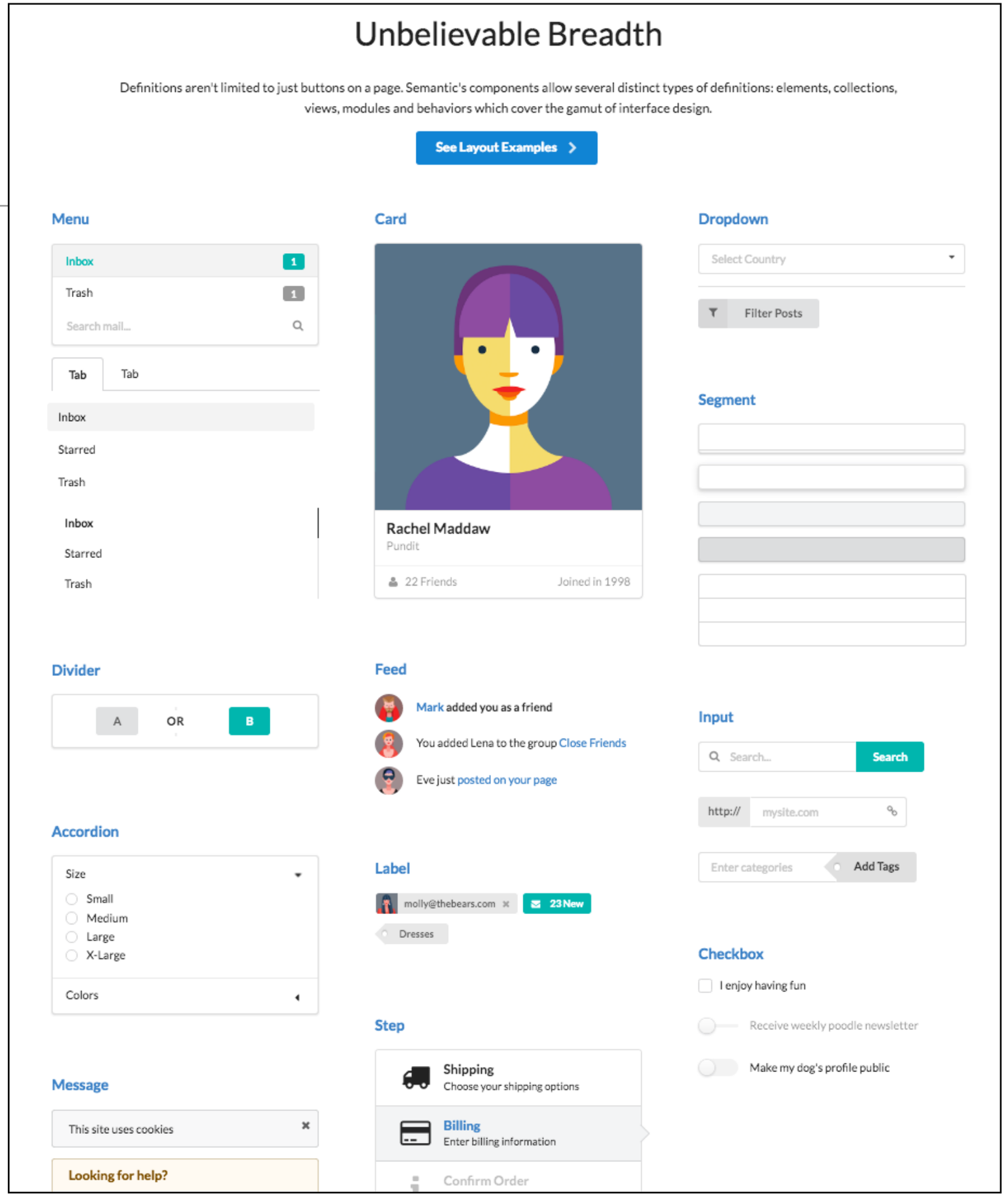


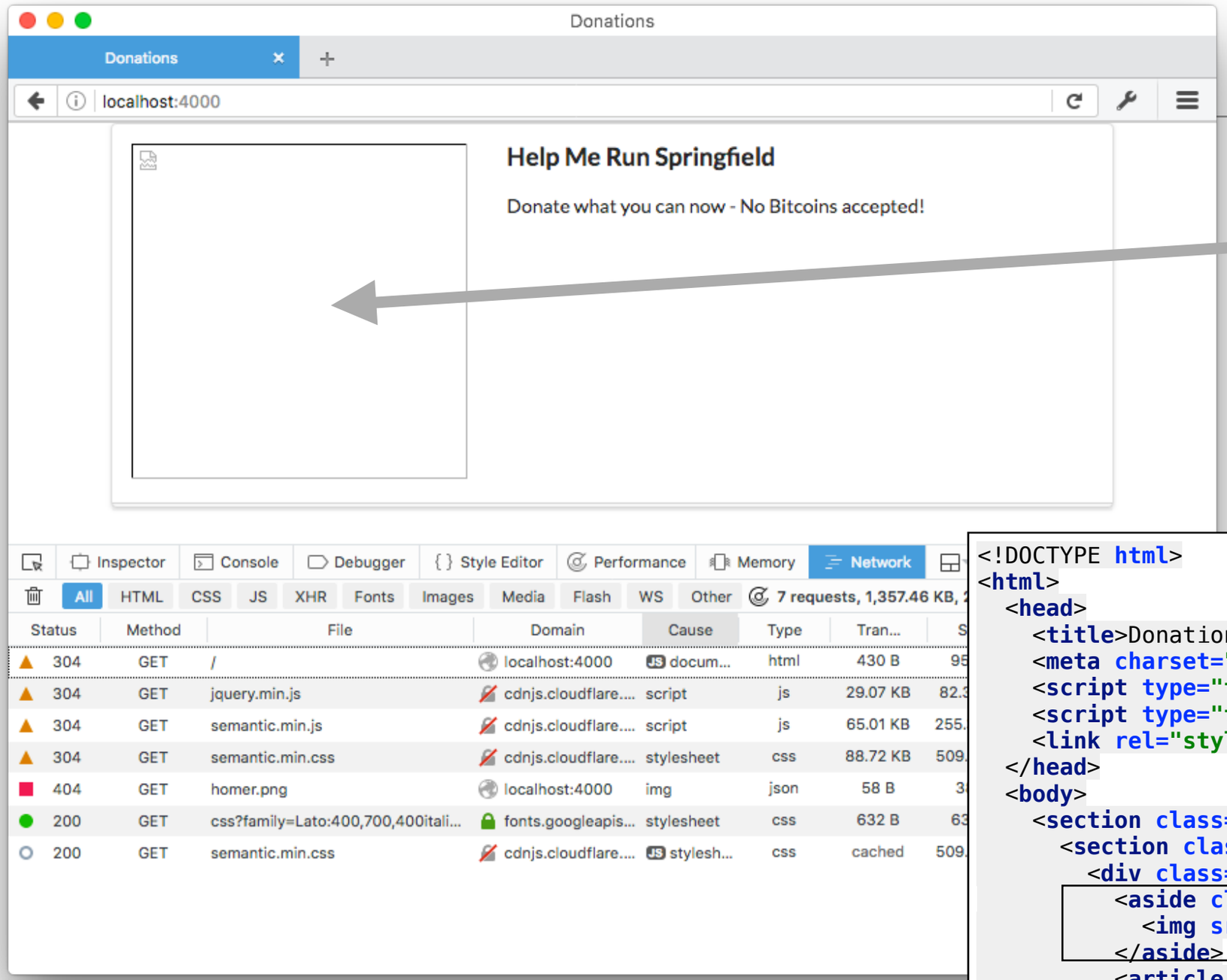

- Simple, static web page.
- Loads Semantic UI Stylesheet from CDN.

# Semantic UI

- Rich, themeable, attractive layouts & UI components






- Static resource not served

```
<!DOCTYPE html>
<html>
  <head>
    <title>Donations</title>
    <meta charset="UTF-8">
    <script type="text/javascript" src="//cdnjs.cloudflare.com/aja
    <script type="text/javascript" src="//cdnjs.cloudflare.com/aja
    <link rel="stylesheet" media="screen" href="//cdnjs.cloudflare
  </head>
  <body>
    <section class="ui container">
      <section class="ui stacked segment">
        <div class="ui grid">
          <aside class="six wide column">
            <img src="images/homer.png" class="ui medium image">
          </aside>
          <article class="ten wide column">
            <header class="ui  header"> Help Me Run Springfield</h
            <p> Donate what you can now - No Bitcoins accepted! </
          </article>
        </div>
      </section>
    </section>
  </body>
</html>
```

routes.js

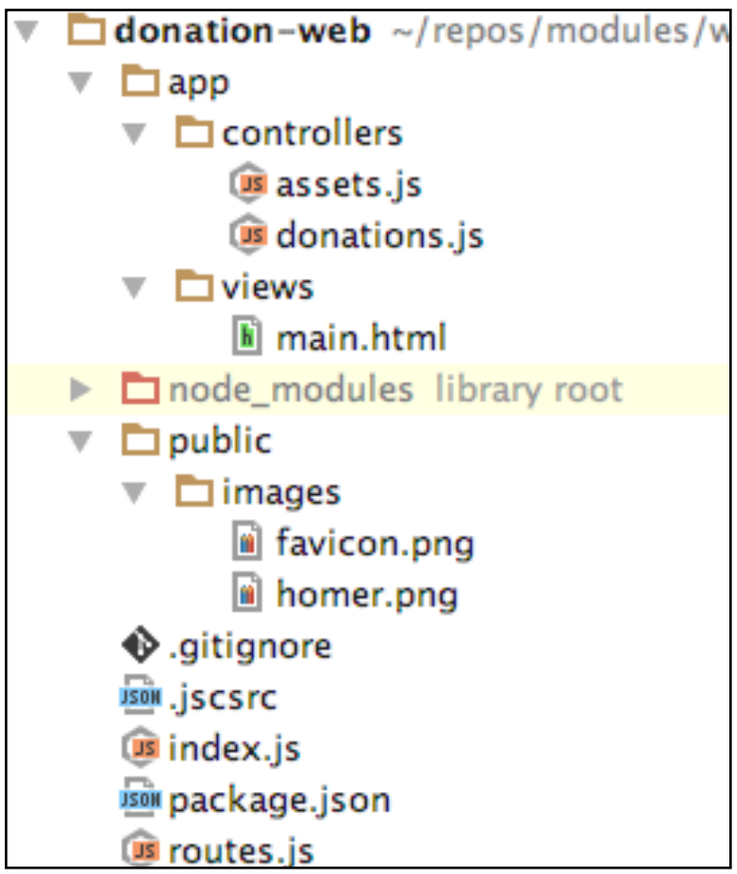
```
const Donations = require('./app/controllers/donations');
const Assets = require('./app/controllers/assets');

module.exports = [

  { method: 'GET', path: '/', config: Donations.home },

  {
    method: 'GET',
    path: '/{param*}',
    config: { auth: false },
    handler: Assets.servePublicDirectory,
  },

];
```

app/controllers/assets.js

```
'use strict';

exports.servePublicDirectory = {
  directory: {
    path: 'public',
  },

};
```

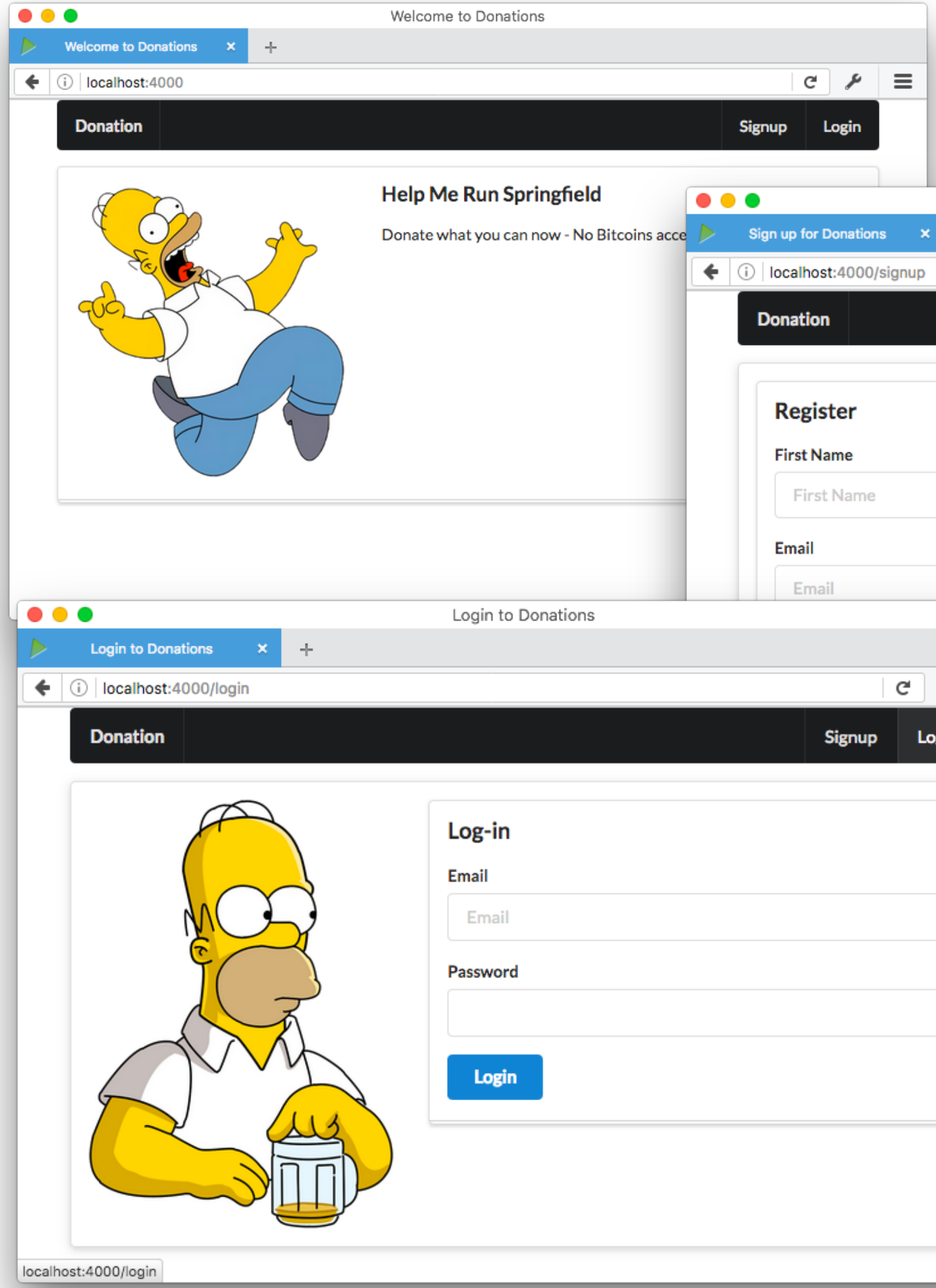
# Static Assets

- additional route + handler



GET /photo.png
HTTP 200 OK
Content-type: image/png
...
photo.png
Client
Route
server.route({
method: 'GET',
path: '/photo.png',
handler: function (request, reply) {
...
reply.file('photo.png');
}
});
Hapi looks in filesystem for a file named photo.png and responds with the file's contents
Hapi web server

# Skeleton App UI



# Project Structure

routes.js

```
const Donations = require('./app/controllers/donations');
const Assets = require('./app/controllers/assets');

module.exports = [

  { method: 'GET', path: '/', config: Donations.home },
  { method: 'GET', path: '/signup', config: Donations.signup },
  { method: 'GET', path: '/login', config: Donations.login },

  {
    method: 'GET',
    path: '/{param*}',
    config: { auth: false },
    handler: Assets.servePublicDirectory,
  },

];
```

app/controllers/donations.js

```
'use strict';

exports.home = {

  handler: (request, reply) => {
    reply.file('./app/views/main.html');
  },

};

exports.signup = {

  handler: (request, reply) => {
    reply.file('./app/views/signup.html');
  },

};

exports.login = {

  handler: (request, reply) => {
    reply.file('./app/views/login.html');
  },

};
```