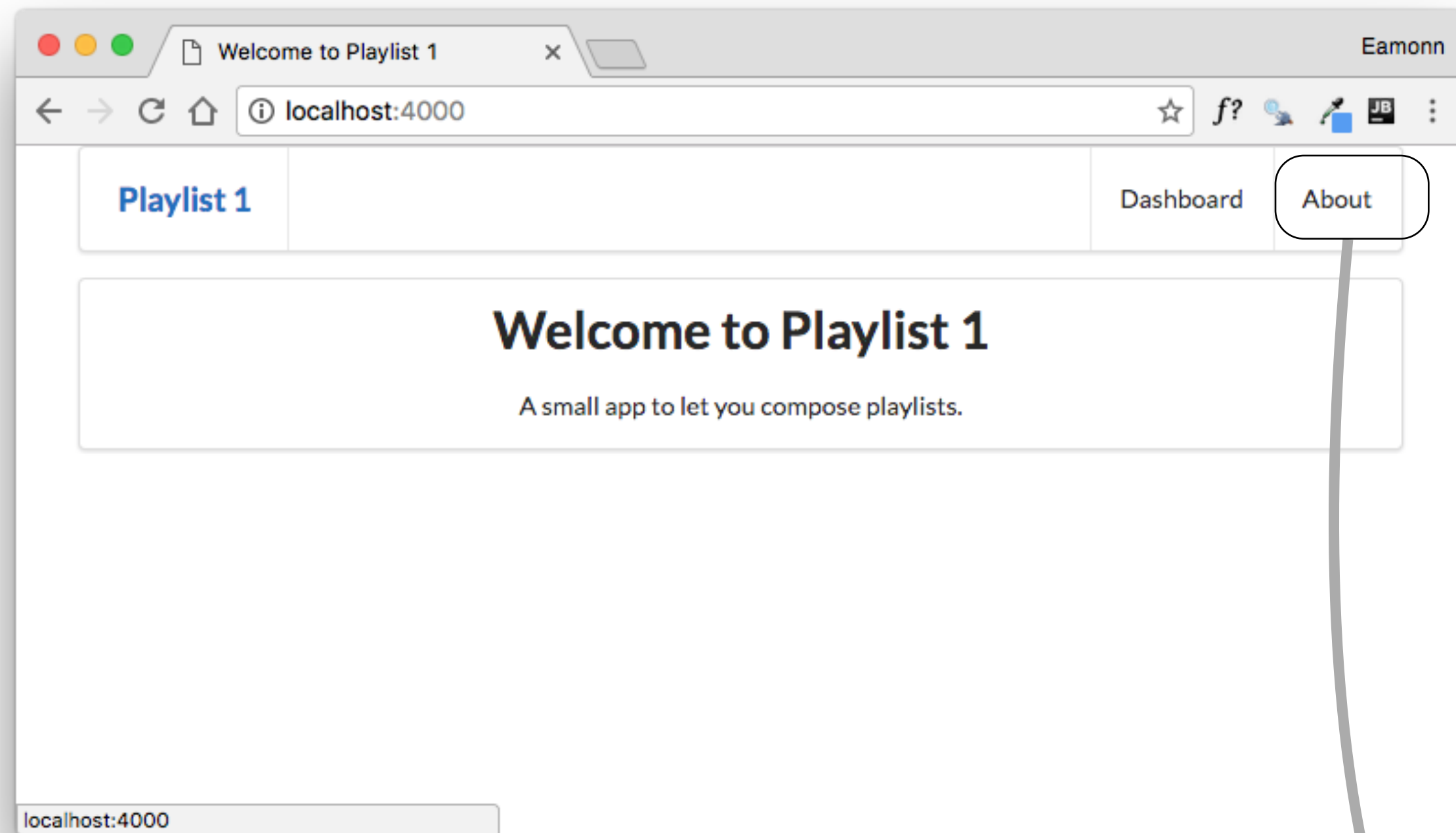
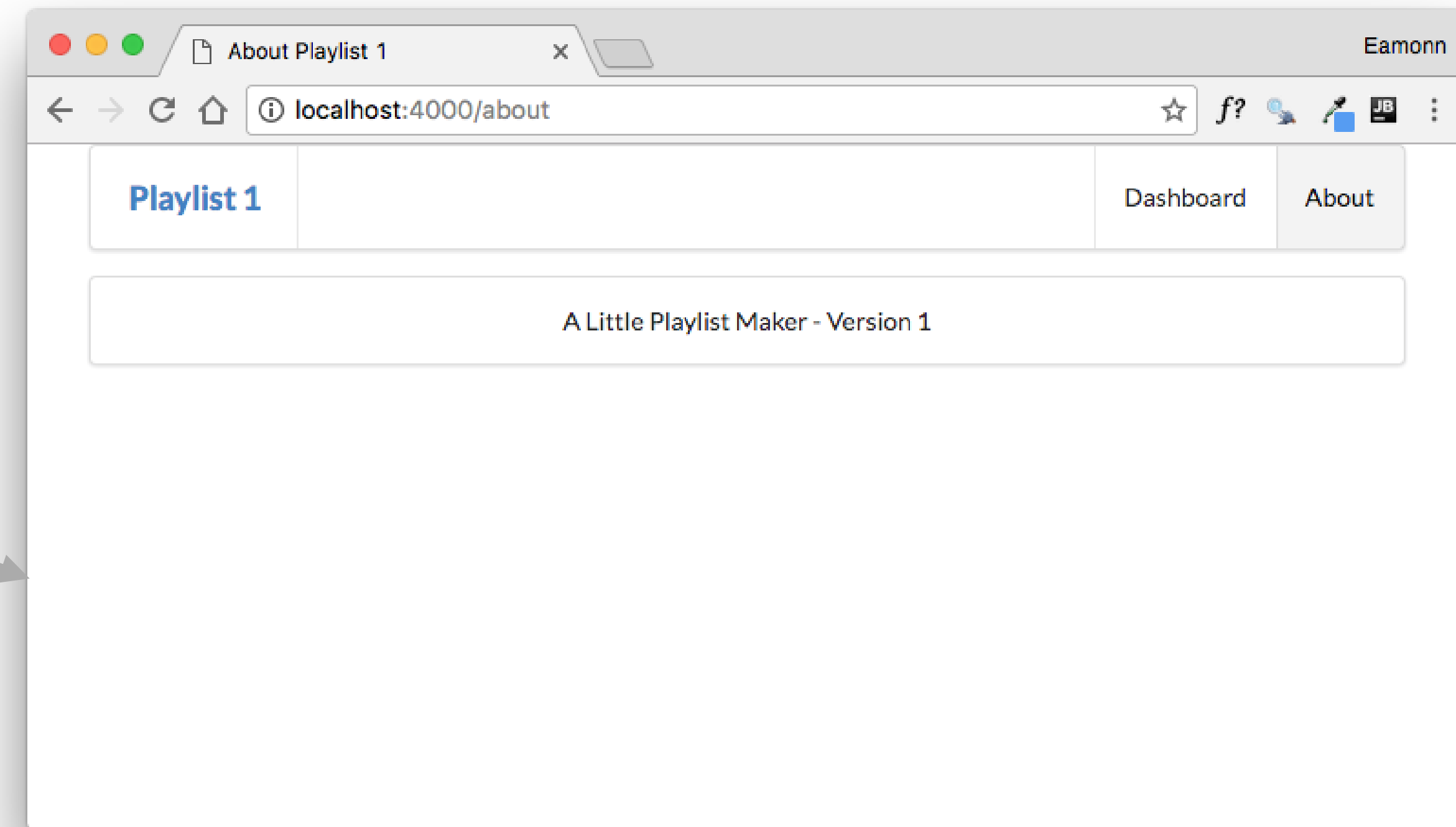
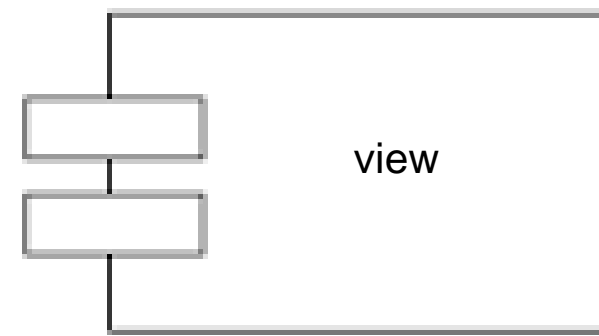
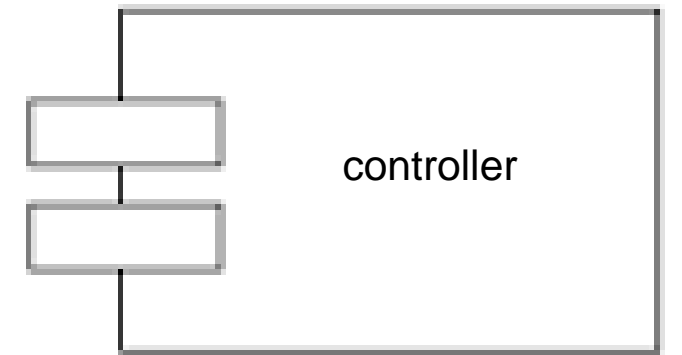
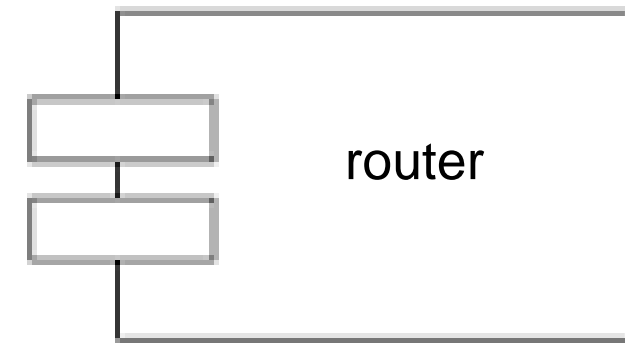
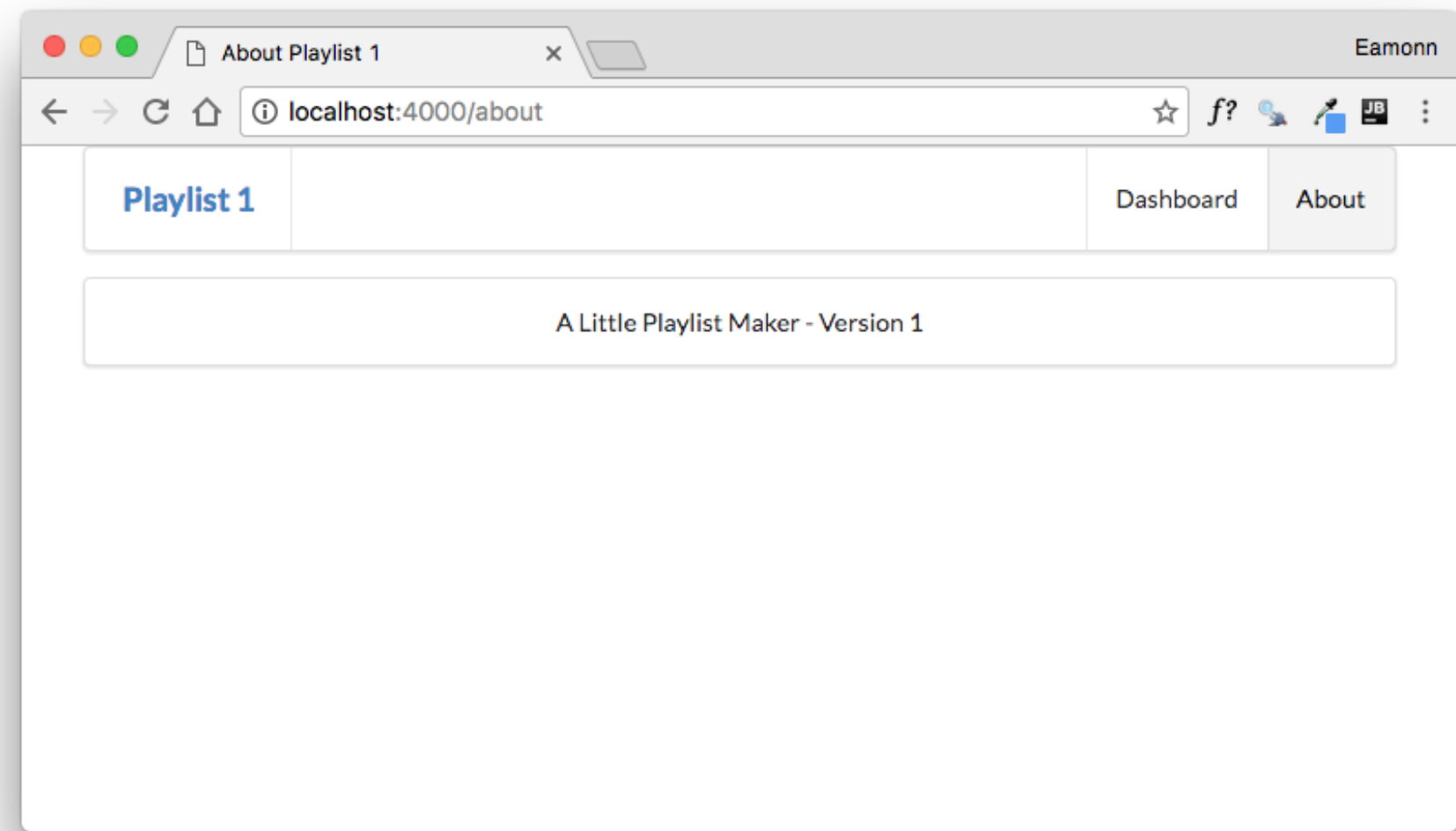
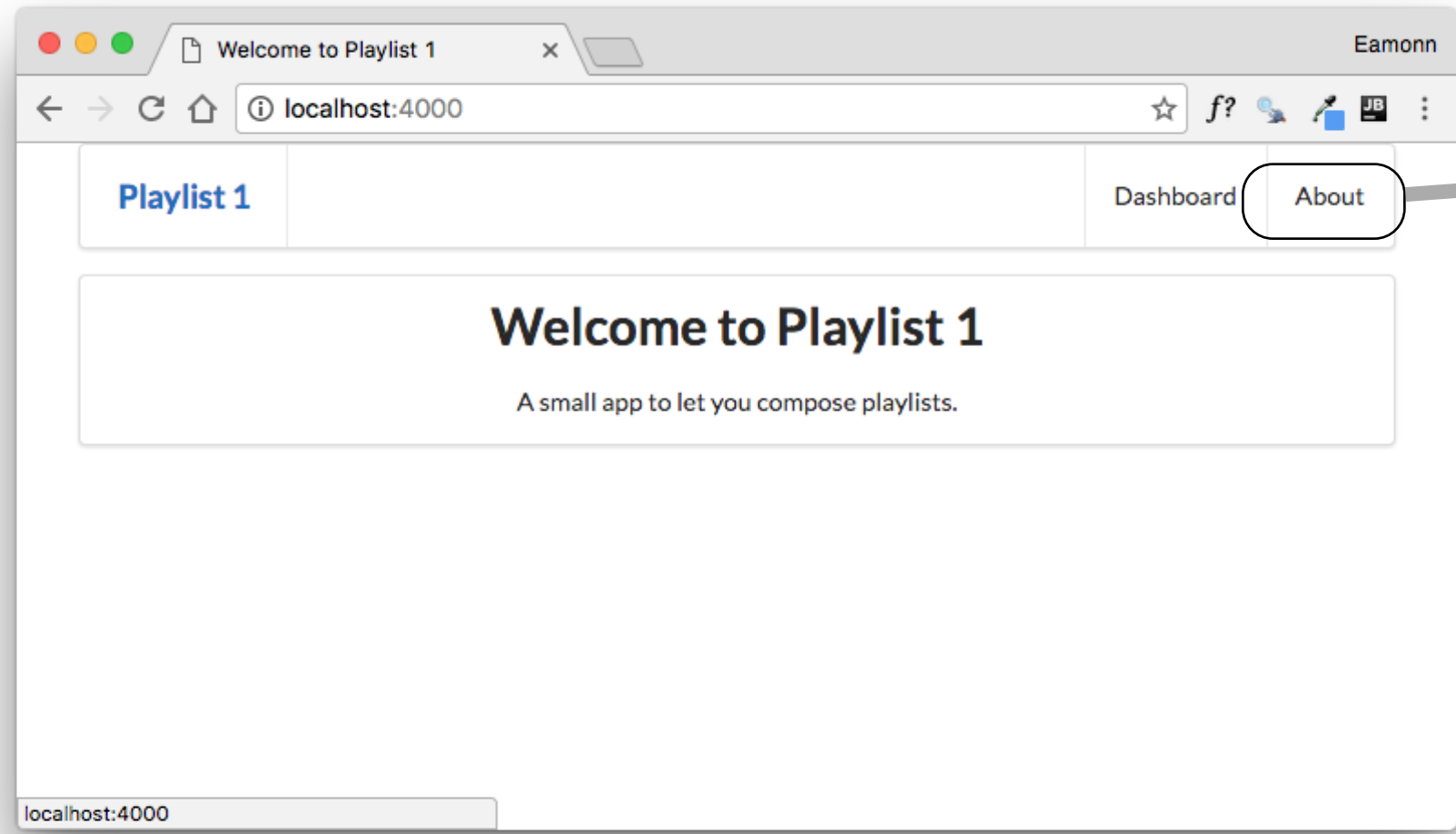


Model View Controller (MVC)



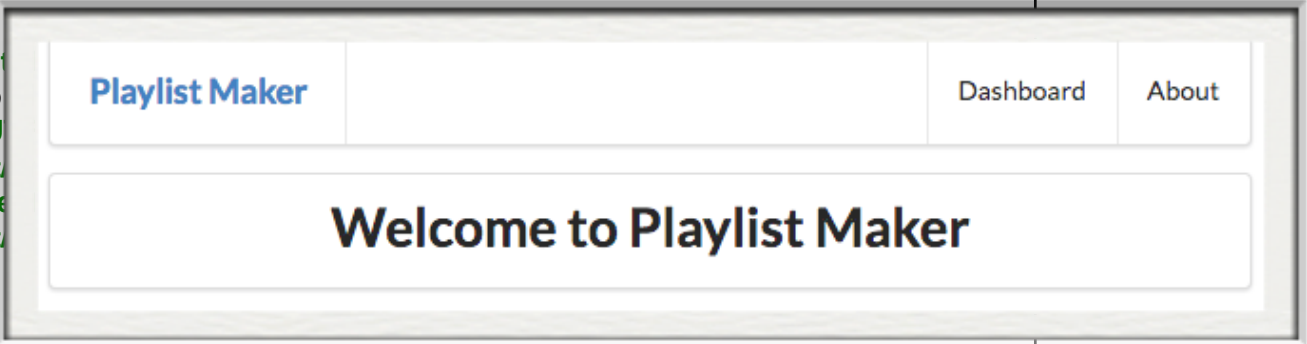
Router / Controller / View





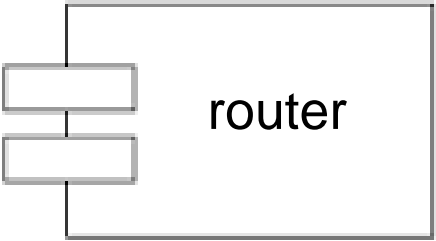
```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <title> Welcome to Playlist Maker
  <meta charset="utf-8">
  <script type="text/javascript">
  <link rel="stylesheet" href="style.css">
  <script type="text/javascript">
</head>
<body>
  <section class="ui container">
    <nav class="ui menu">
      <header class="ui header item">
        <a href="/"> Playlist 1 </a>
      </header>
      <div class="right menu">
        <a id="dashboard" class="item" href="/dashboard">
          Dashboard
        </a>
        <a id="about" class="item" href="/about">
          About
        </a>
      </div>
    </nav>

    <section class="ui center aligned middle aligned segment">
      <h1 class="ui header">
        Welcome to Playlist 1
      </h1>
      <p>
        A small app to let you compose playlists.
      </p>
    </section>
  </section>
</body>
</html>
```



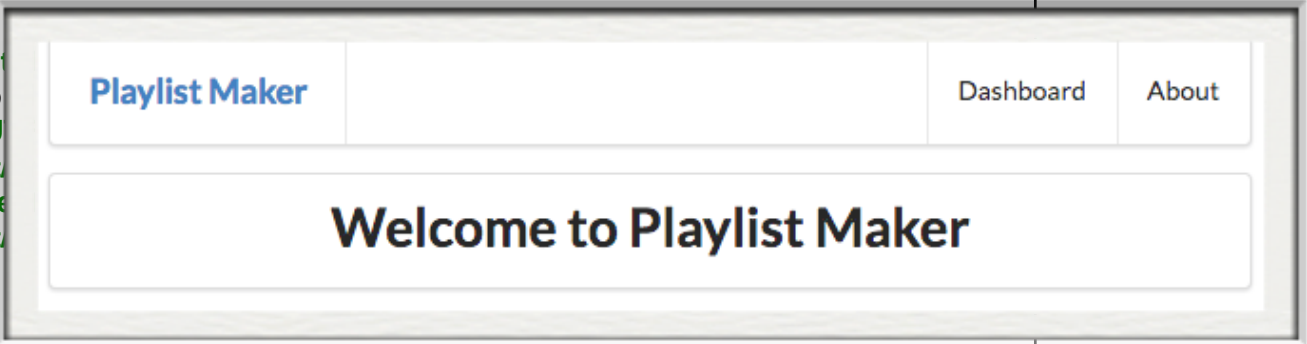
‘/about’

REQUEST



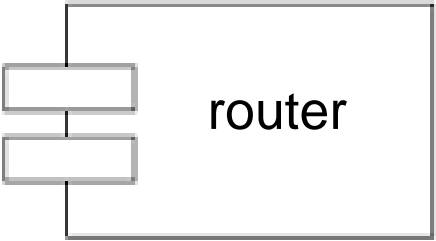
```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <title> Welcome to Playlist 1
  <meta charset="utf-8">
  <script type="text/javascript">
  <link rel="stylesheet" href="style.css" />
  <script type="text/javascript">
</head>
<body>
  <section class="ui container">
    <nav class="ui menu">
      <header class="ui header item">
        <a href="/"> Playlist 1 </a>
      </header>
      <div class="right menu">
        <a id="dashboard" class="item" href="/dashboard">
          Dashboard
        </a>
        <a id="about" class="item" href="/about">
          About
        </a>
      </div>
    </nav>

    <section class="ui center aligned middle aligned segment">
      <h1 class="ui header">
        Welcome to Playlist 1
      </h1>
      <p>
        A small app to let you compose playlists.
      </p>
    </section>
  </section>
</body>
</html>
```

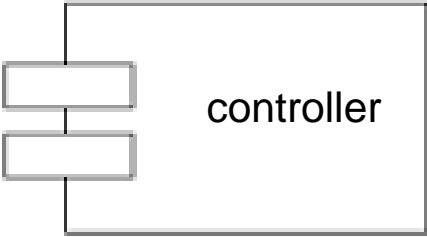


REQUEST
→

‘/about’



```
router.get('/', start.index);
router.get('/dashboard', dashboard.index);
router.get('/playlist/:id', playlist.index);
router.get('/about', about.index);
```



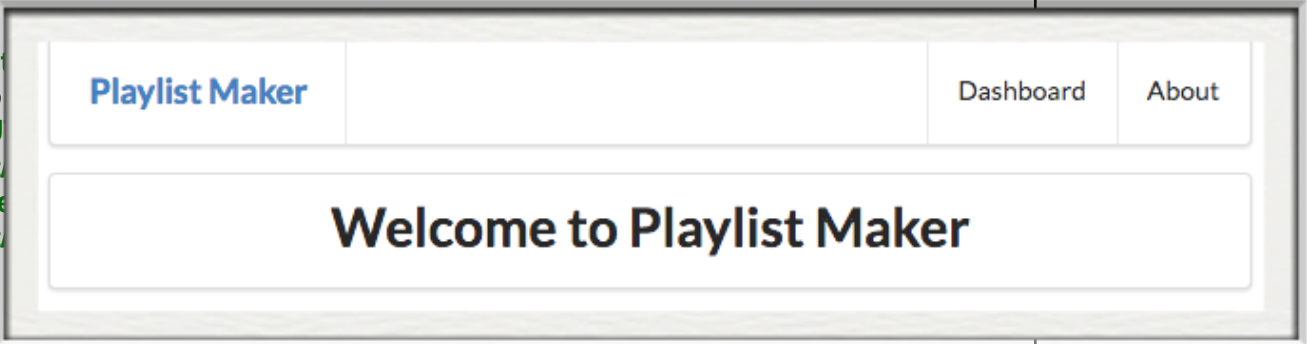
about.js

```
const about = {
  index(request, response) {
    logger.info('about rendering');
    const viewData = {
      title: 'About Playlist 1',
    };
    response.render('about', viewData);
  },
};
```

about.index(req, res)

```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<title> Welcome to Playlist Maker
<meta charset="utf-8">
<script type="text/javascript">
<link rel="stylesheet" href="css/style.css">
<script type="text/javascript">
</script>
</head>
<body>
<section class="ui container">
<nav class="ui menu">
<header class="ui header item">
<a href="/"> Playlist 1 </a>
</header>
<div class="right menu">
<a id="dashboard" class="item" href="/dashboard">
Dashboard
</a>
<a id="about" class="item" href="/about">
About
</a>
</div>
</nav>

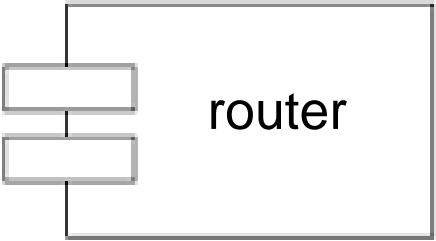
<section class="ui center aligned middle aligned segment">
<h1 class="ui header">
Welcome to Playlist 1
</h1>
<p>
A small app to let you compose playlists.
</p>
</section>
</section>
</body>
</html>
```



REQUEST



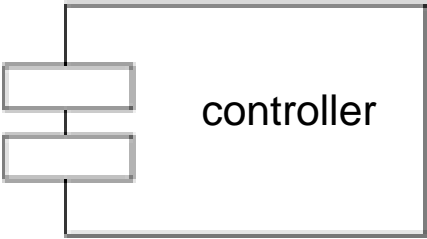
'/about'



router

```
routes.js

router.get('/', start.index);
router.get('/dashboard', dashboard.index);
router.get('/playlist/:id', playlist.index);
router.get('/about', about.index);
```



controller

about.js

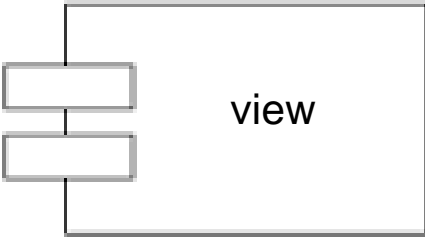
```
const about = {

  index(request, response) {
    logger.info('about rendering');
    const viewData = {
      title: 'About Playlist 1',
    };
    response.render('about', viewData);
  },
};
```

about.index(req, res)

response.render('about', viewData);

```
viewData = {
  title: 'About Playlist 1',
};
```



view

about.hbs

```
about.hbs

{{> menu id="about"}}

<section class="ui segment">
<p>
About this app
</p>
</section>
```

{{> menu id="about"}}

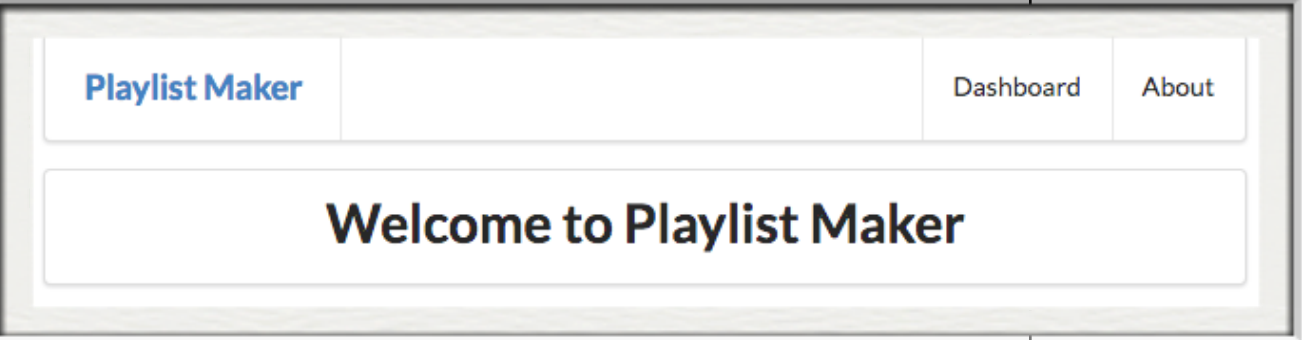
menu.hbs

```
menu.hbs

<nav class="ui menu">
<header class="ui header item"> <a href="/"> Template 1 </a></header>
<div class="right menu">
  <a id="dashboard" class="item" href="/dashboard"> Dashboard </a>
  <a id="about" class="item" href="/about"> About </a>
</div>
</nav>
```

```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<title> Welcome to Playlist 1
<meta charset="UTF-8">
<script type="text/javascript" src="...jquery.min.js"></script>
<link rel="stylesheet" href="...semantic.min.css" type="text/css">
<script type="text/javascript" src="h...semantic.min.js"></script>
</head>
<body>
<section class="ui container">
<nav class="ui menu">
<header class="ui header item">
<a href="/"> Playlist 1 </a>
</header>
<div class="right menu">
<a id="dashboard" class="item" href="/dashboard">
Dashboard
</a>
<a id="about" class="item" href="/about">
About
</a>
</div>
</nav>

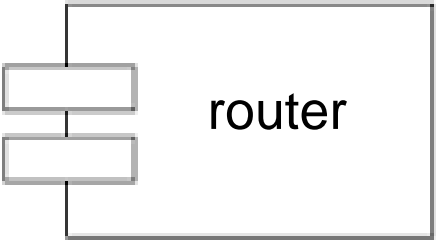
<section class="ui center aligned middle aligned segment">
<h1 class="ui header">
Welcome to Playlist 1
</h1>
<p>
A small app to let you compose playlists.
</p>
</section>
</section>
</body>
</html>
```



REQUEST



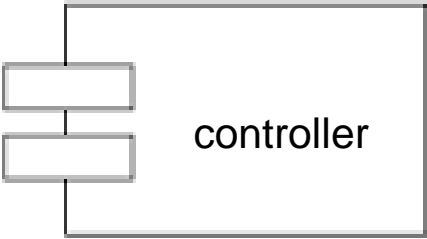
'/about'



router

```
routes.js

router.get('/', start.index);
router.get('/dashboard', dashboard.index);
router.get('/playlist/:id', playlist.index);
router.get('/about', about.index);
```



controller

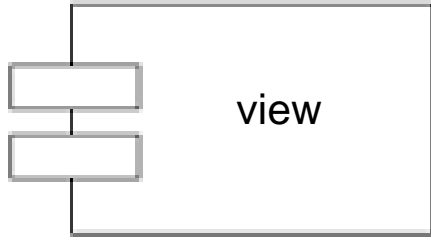
about.js

```
const about = {

index(request, response) {
  logger.info('about rendering');
  const viewData = {
    title: 'About Playlist 1',
  };
  response.render('about', viewData);
},
};
```

about.index(req, res)

response.render('about', viewData);



view

about.hbs

```
about.hbs

{{> menu id="about"}}

<section class="ui segment">
<p>
About this app
</p>
</section>
```

{{> menu id="about"}}

menu.hbs

```
<nav class="ui menu">
<header class="ui header item"> <a href="/"> Template 1 </a></header>
<div class="right menu">
<a id="dashboard" class="item" href="/dashboard"> Dashboard </a>
<a id="about" class="item" href="/about"> About </a>
</div>
</nav>
```

```
viewData = {
  title: 'About Playlist 1',
};
```

{{{body}}}

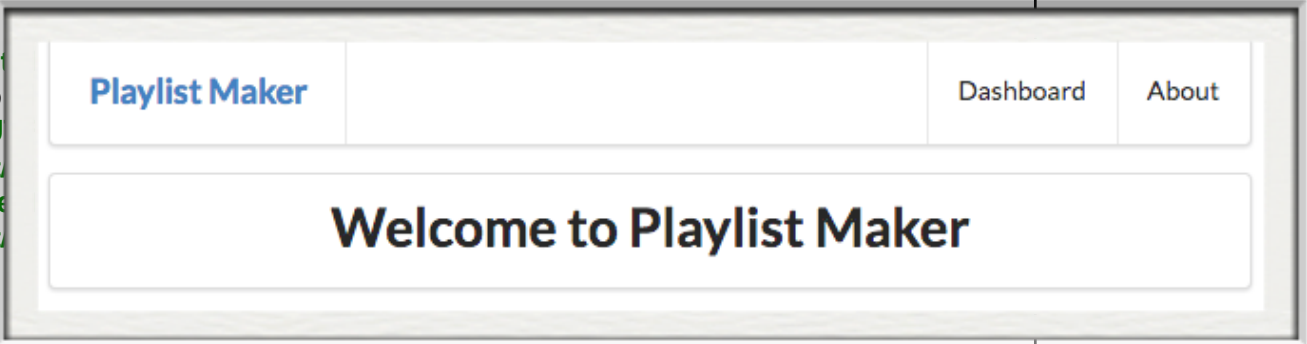
main.hbs

```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<title> {{{title}} </title>
<meta charset="UTF-8">
<script type="text/javascript" src="...jquery.min.js"></script>
<link rel="stylesheet" href="...semantic.min.css" type="text/css">
<script type="text/javascript" src="h...semantic.min.js"></script>
</head>
<body>
<section class="ui container">
{{{body}}}
</section>
</body>
</html>
```


https://playlist-2.glitch.me

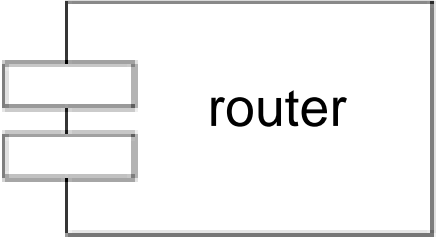
```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<title> Welcome to Playlist Maker
<meta charset="utf-8">
<script type="text/javascript" src="https://code.jquery.com/jquery-3.5.1.min.js"></script>
<link rel="stylesheet" href="https://unpkg.com/semantic-ui-css@2.8.3/dist/semantic.min.css">
<script type="text/javascript" src="https://unpkg.com/semantic-ui-css@2.8.3/dist/semantic.min.js"></script>
</head>
<body>
<section class="ui container">
<nav class="ui menu">
<header class="ui header item">
<a href="/"> Playlist 1 </a>
</header>
<div class="right menu">
<a id="dashboard" class="item" href="/dashboard">
Dashboard
</a>
<a id="about" class="item" href="/about">
About
</a>
</div>
</nav>

<section class="ui center aligned middle aligned segment">
<h1 class="ui header">
Welcome to Playlist 1
</h1>
<p>
A small app to let you compose playlists.
</p>
</section>
</section>
</body>
</html>
```



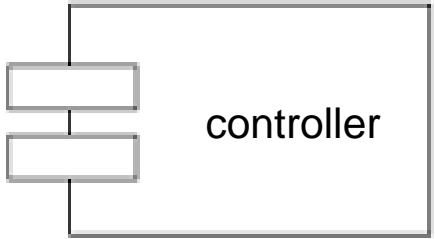
‘/about’

REQUEST



```
routes.js

router.get('/', start.index);
router.get('/dashboard', dashboard.index);
router.get('/playlist/:id', playlist.index);
router.get('/about', about.index);
```



about.js

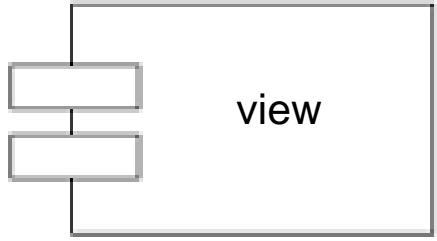
```
const about = {

  index(request, response) {
    logger.info('about rendering');
    const viewData = {
      title: 'About Playlist 1',
    };
    response.render('about', viewData);
  },
};
```

about.index(req, res)

response.render('about', viewData);

```
viewData = {
  title: 'About Playlist 1',
};
```



about.hbs

```
{{> menu id="about"}}

<section class="ui segment">
<p>
About this app
</p>
</section>
```

{{> menu id="about"}}

menu.hbs

```
<nav class="ui menu">
<header class="ui header item"> <a href="/"> Template 1 </a></header>
<div class="right menu">
<a id="dashboard" class="item" href="/dashboard"> Dashboard </a>
<a id="about" class="item" href="/about"> About </a>
</div>
</nav>
```

{{{body}}}

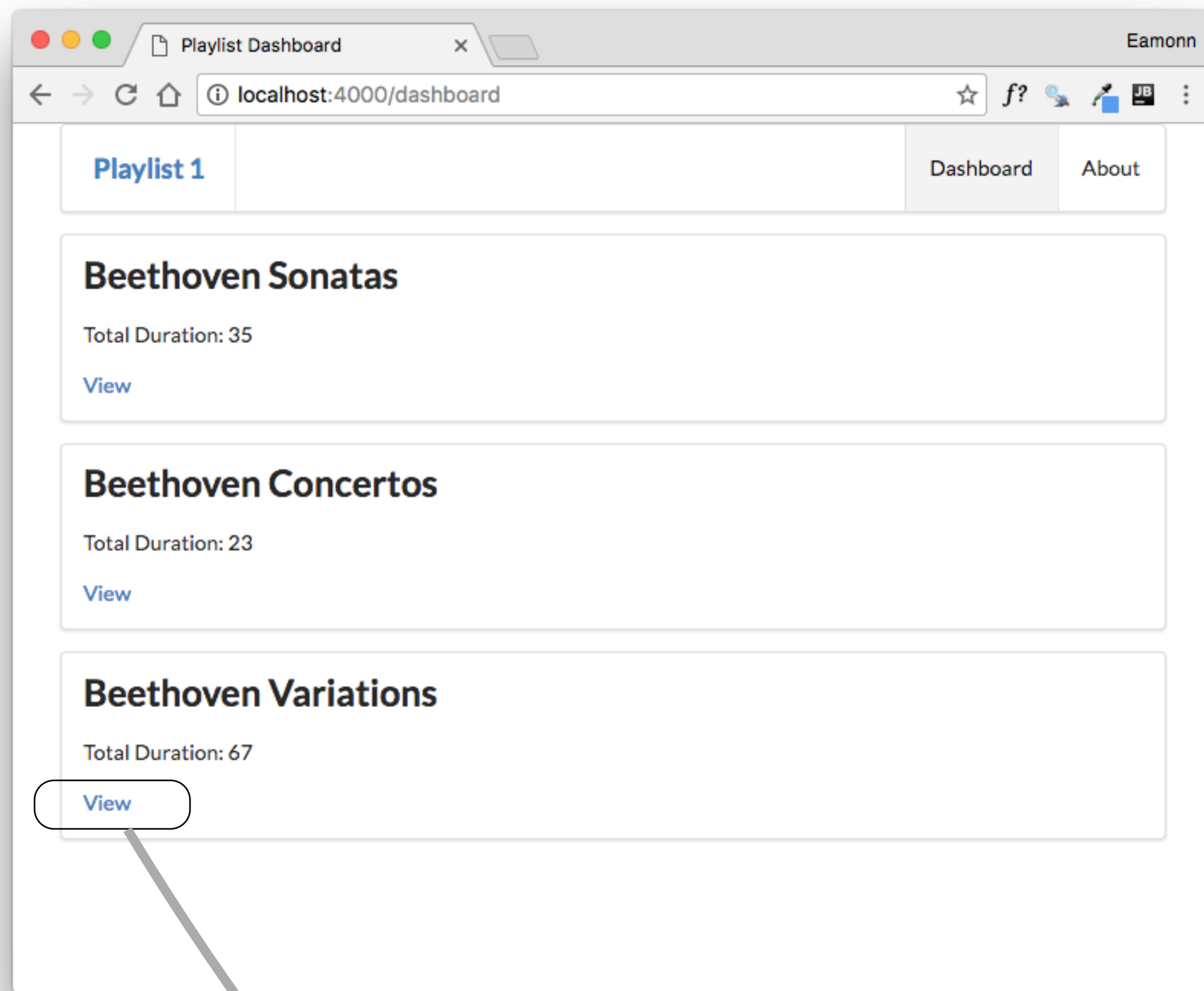
main.hbs

```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<title> {{{title}}} </title>
<meta charset="UTF-8">
<script type="text/javascript" src="...jquery.min.js"></script>
<link rel="stylesheet" href="...semantic.min.css" type="text/css">
<script type="text/javascript" src="h...semantic.min.js"></script>
</head>
<body>
<section class="ui container">
{{{body}}}
</section>
</body>
</html>
```

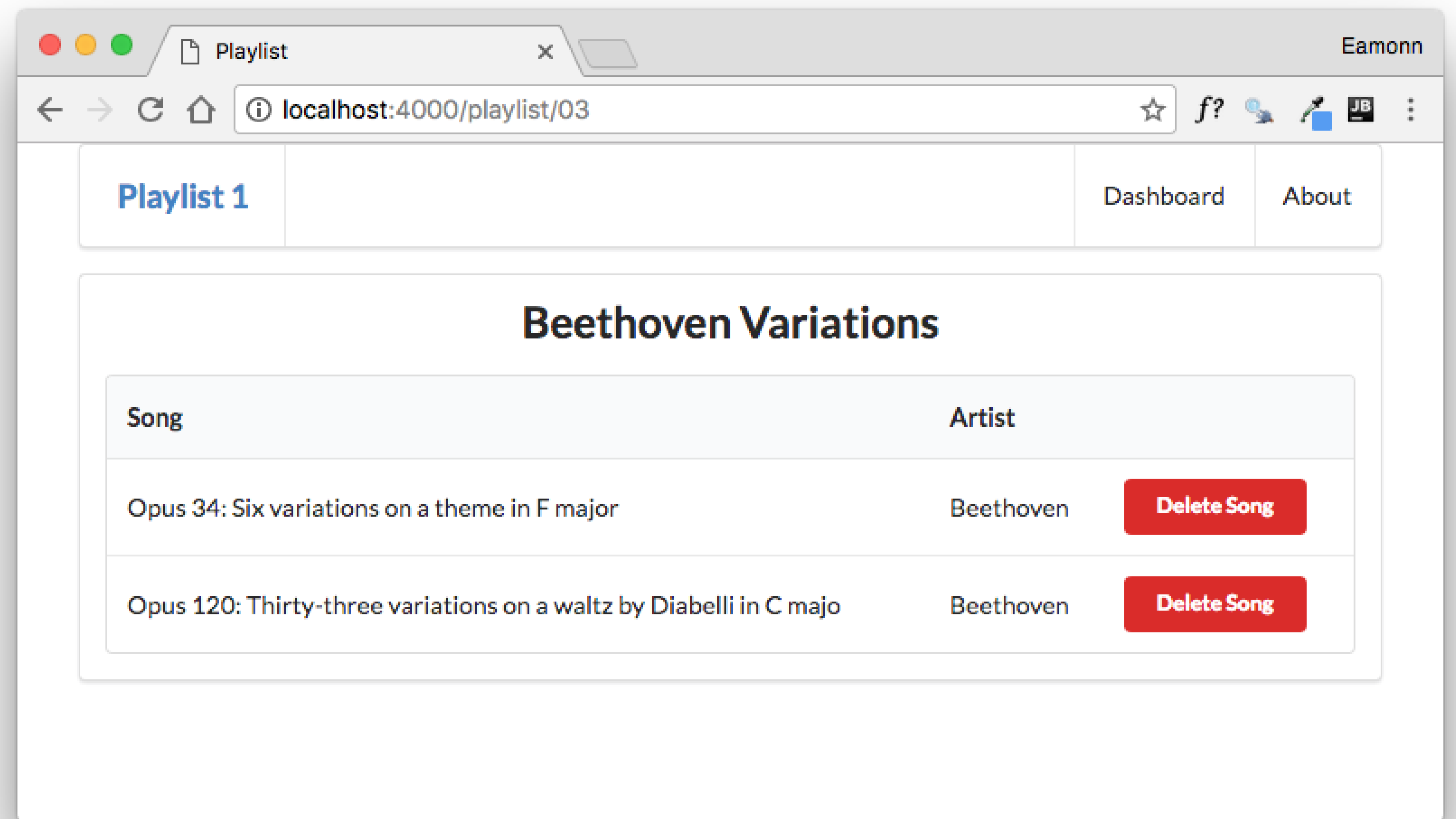
RESPONSE

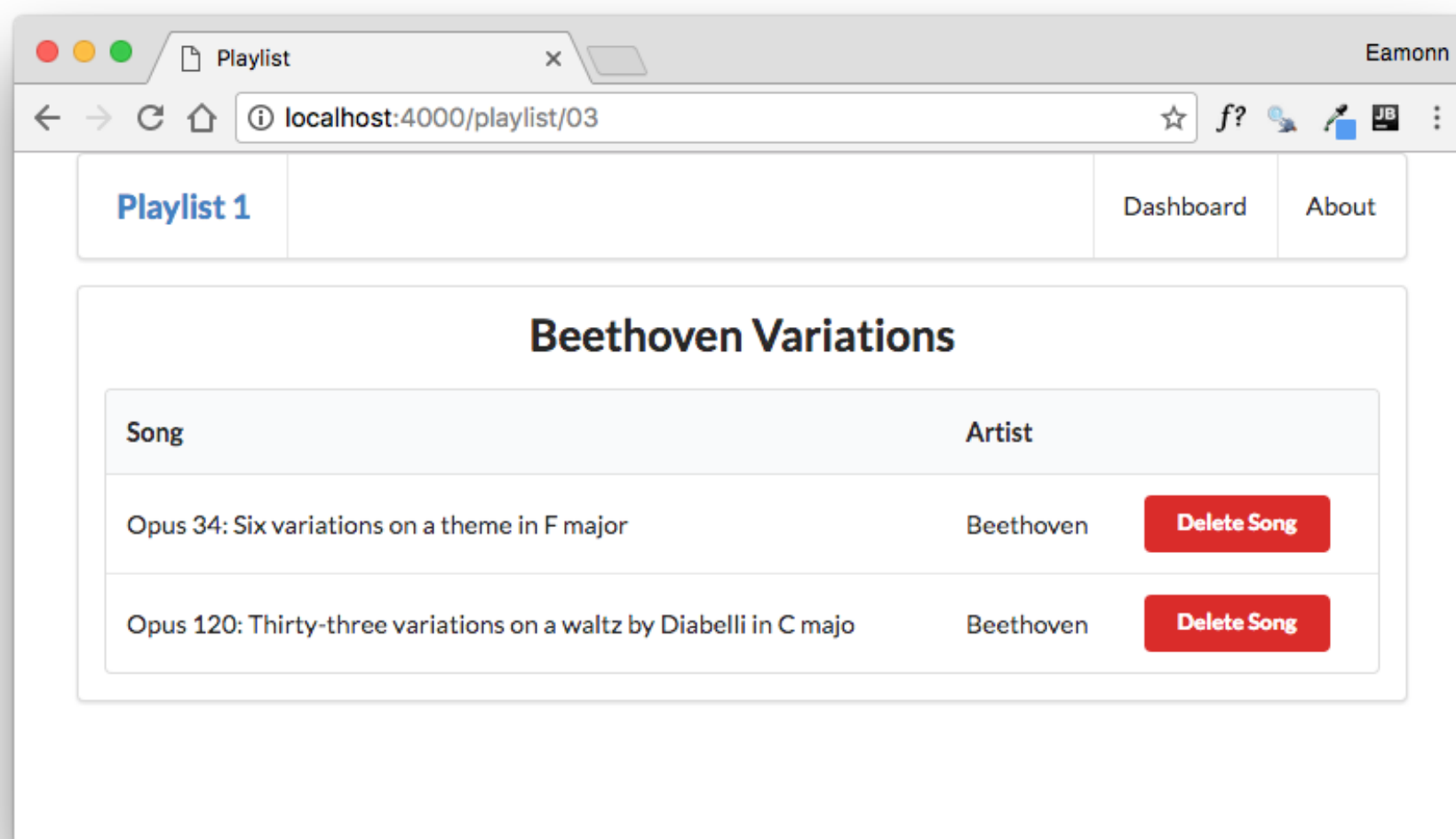
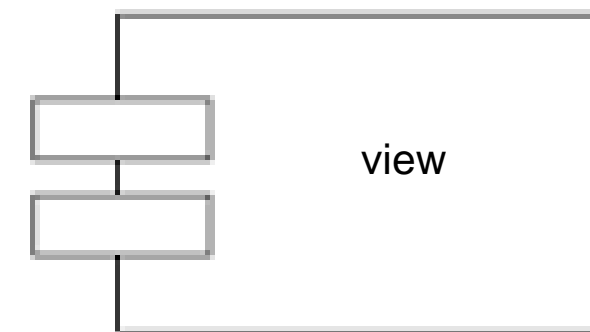
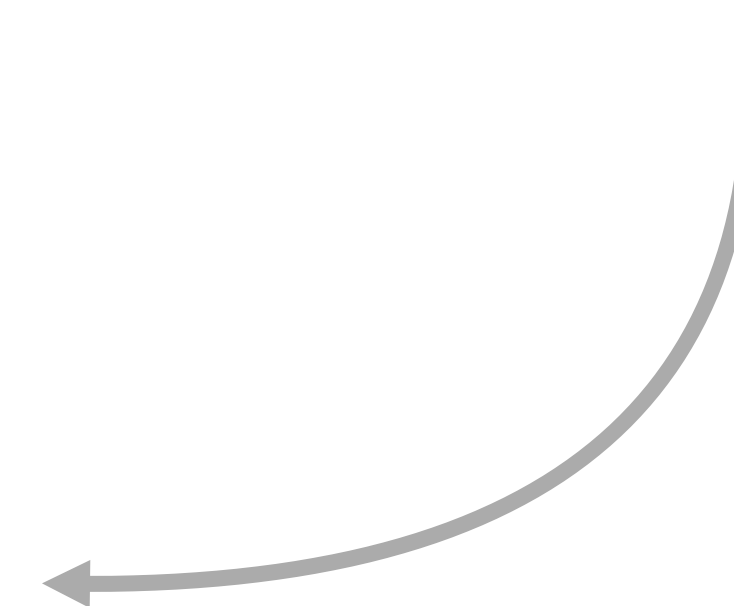
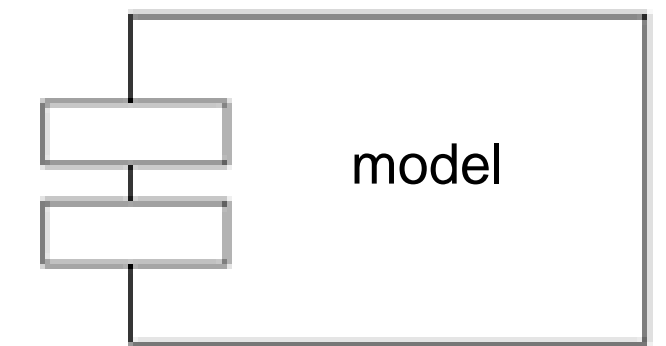
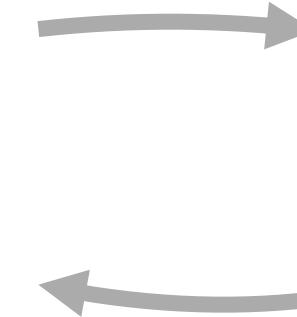
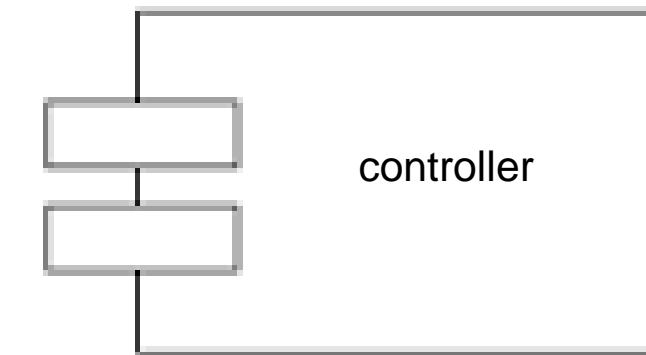
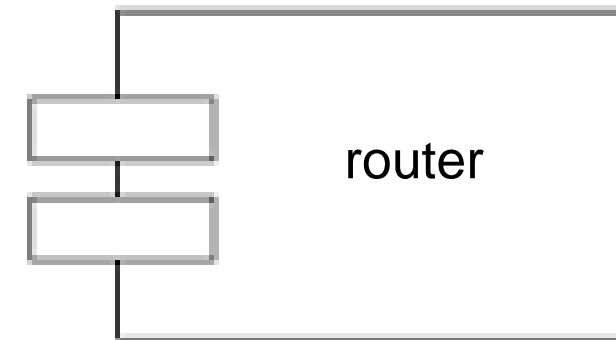
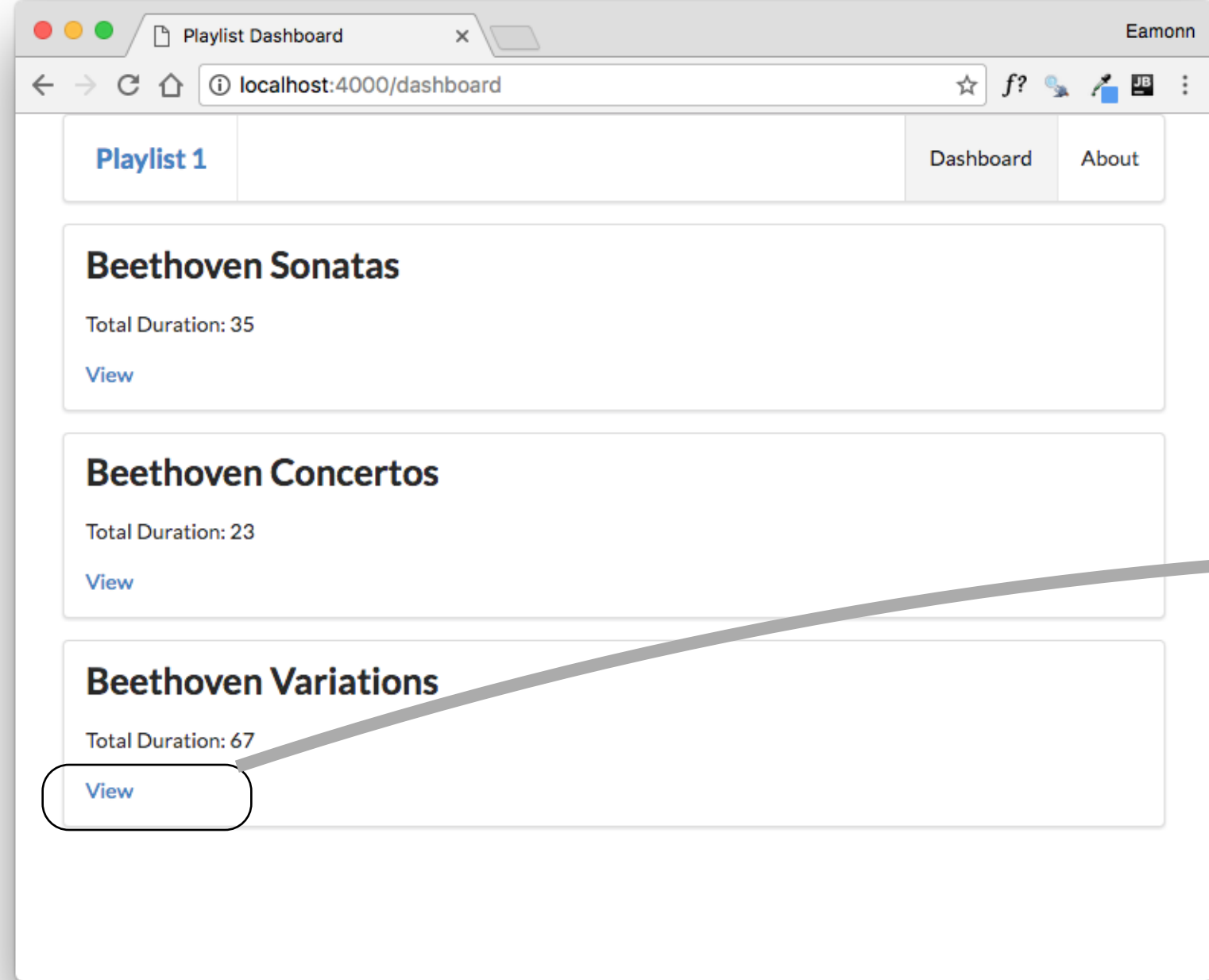


https://gomix-list.gomix.me/about



Router / Controller / Model / View



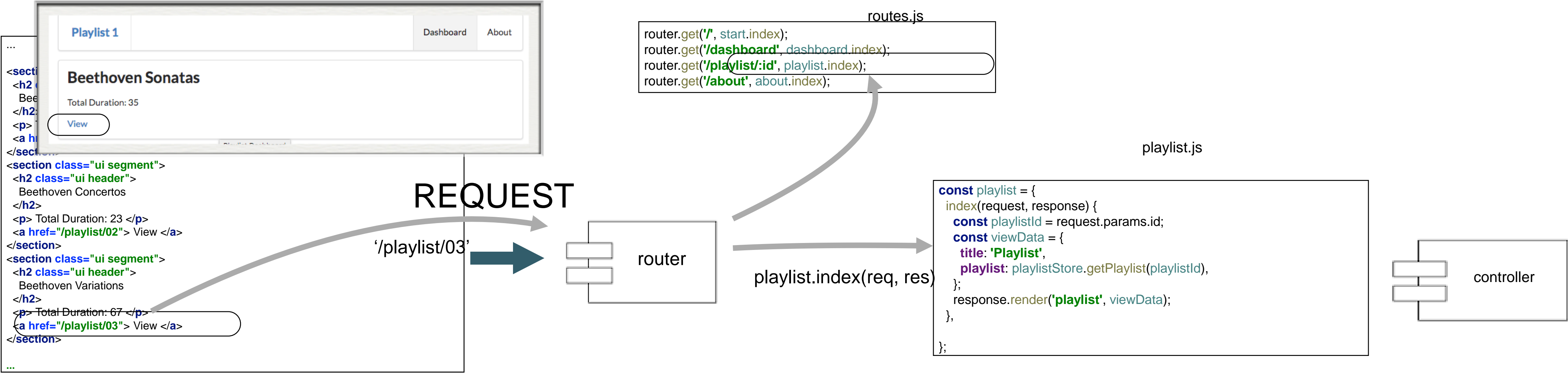


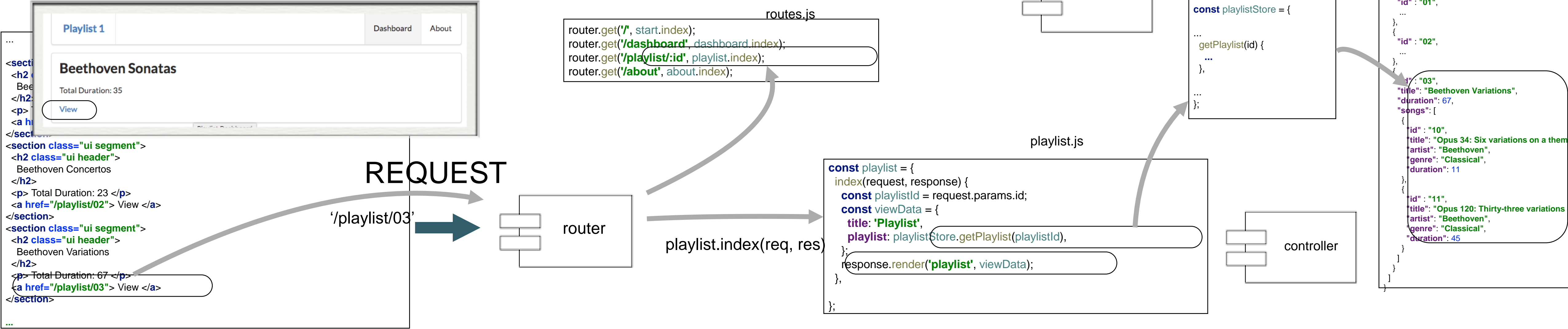
```
...  
  
<section class="ui segment">  
  <h2 class="ui header">  
    Beethoven Sonatas  
  </h2>  
  <p> Total Duration: 35 </p>  
  <a href="/playlist/01"> View </a>  
</section>  
  
<section class="ui segment">  
  <h2 class="ui header">  
    Beethoven Concertos  
  </h2>  
  <p> Total Duration: 23 </p>  
  <a href="/playlist/02"> View </a>  
</section>  
  
<section class="ui segment">  
  <h2 class="ui header">  
    Beethoven Variations  
  </h2>  
  <p> Total Duration: 67 </p>  
  <a href="/playlist/03"> View </a>  
</section>  
  
...
```

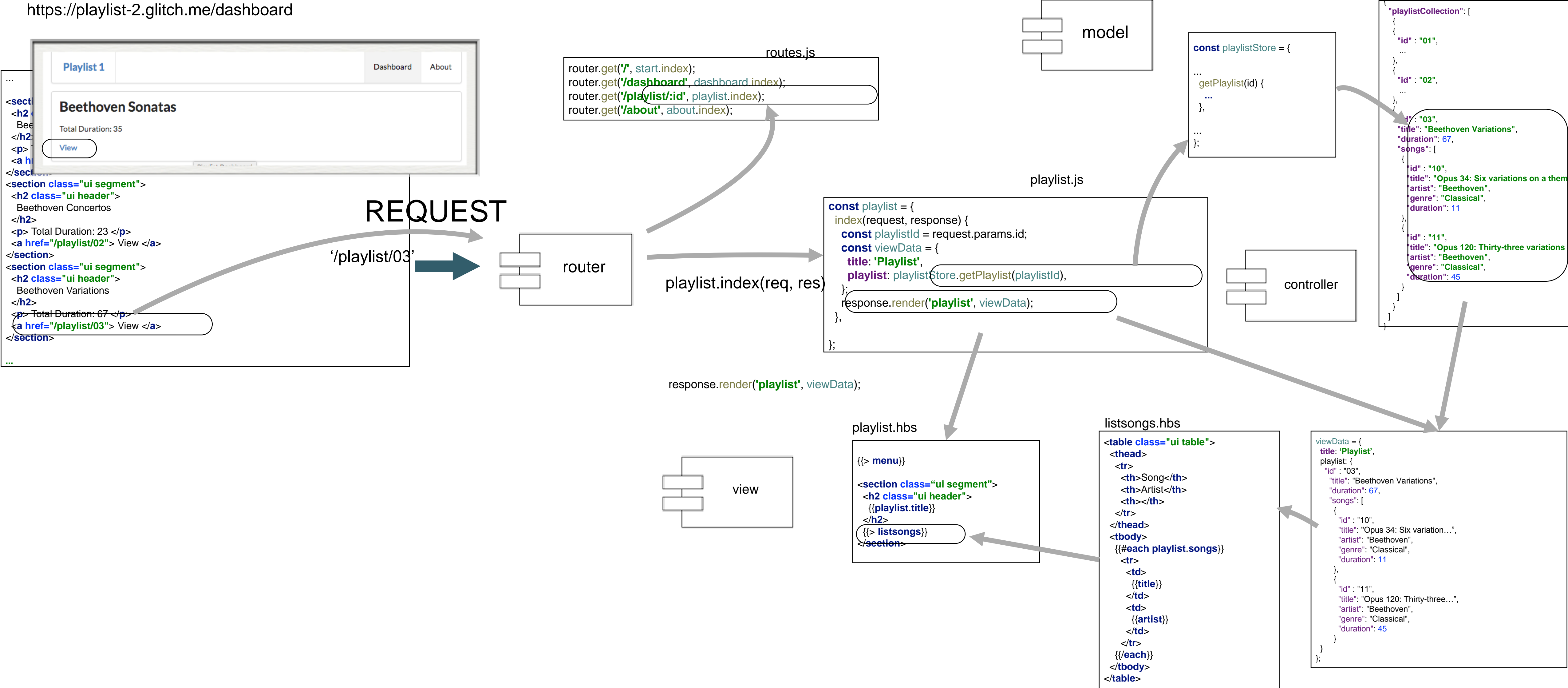
REQUEST

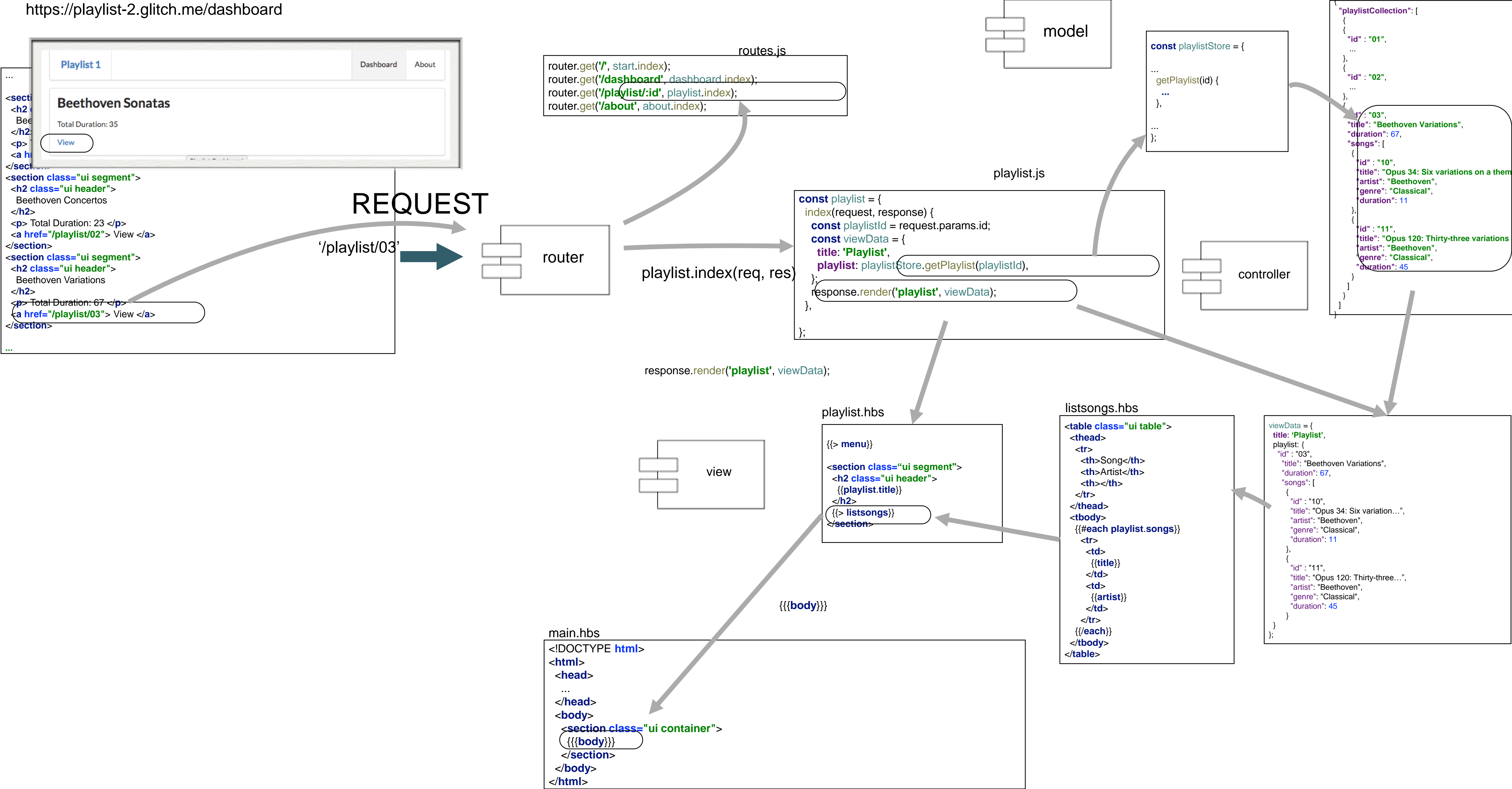
‘/playlist/03’











Playlist 1

DashboardAbout

Beethoven Sonatas

Total Duration: 35

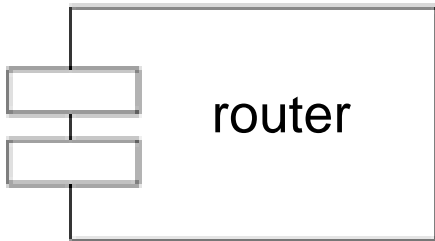
View

```
<section class="ui segment">
  <h2 class="ui header">
    Beethoven Concertos
  </h2>
  <p> Total Duration: 23 </p>
  <a href="/playlist/02"> View </a>
</section>
<section class="ui segment">
  <h2 class="ui header">
    Beethoven Variations
  </h2>
  <p> Total Duration: 67 </p>
  <a href="/playlist/03"> View </a>
</section>
...

```

REQUEST

/playlist/03



playlist.index(req, res)

```
routes.js
router.get('/', start.index);
router.get('/dashboard', dashboard.index);
router.get('/playlist/:id', playlist.index);
router.get('/about', about.index);

```

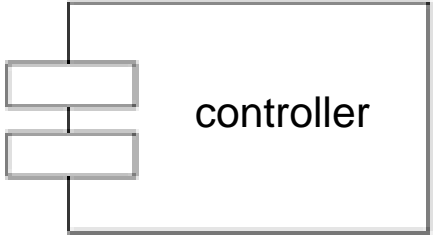
```
playlist.js
const playlist = {
  index(request, response) {
    const playlistId = request.params.id;
    const viewData = {
      title: 'Playlist',
      playlist: playlistStore.getPlaylist(playlistId),
    };
    response.render('playlist', viewData);
  },
};

```

playlist.js

```
const playlistStore = {
  ...
  getPlaylist(id) {
    ...
  },
};

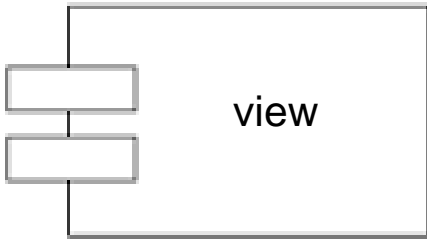
```



```
{
  "playlistCollection": [
    {
      "id": "01",
      ...
    },
    {
      "id": "02",
      ...
    },
    {
      "id": "03",
      "title": "Beethoven Variations",
      "duration": 67,
      "songs": [
        {
          "id": "10",
          "title": "Opus 34: Six variations on a theme in F major",
          "artist": "Beethoven",
          "genre": "Classical",
          "duration": 11
        },
        {
          "id": "11",
          "title": "Opus 120: Thirty-three variations on a waltz by Diabelli in C major",
          "artist": "Beethoven",
          "genre": "Classical",
          "duration": 45
        }
      ]
    }
  ]
}

```

response.render('playlist', viewData);



playlist.hbs

```
{> menu
<section class="ui segment">
  <h2 class="ui header">
    {{playlist.title}}
  </h2>
  <div>
    {{> listsongs}}
  </div>
</section>

```

listsongs.hbs

```
<table class="ui table">
  <thead>
    <tr>
      <th>Song</th>
      <th>Artist</th>
    </tr>
  </thead>
  <tbody>
    {{#each playlist.songs}}
      <tr>
        <td>
          {{title}}
        </td>
        <td>
          {{artist}}
        </td>
      </tr>
    {{/each}}
  </tbody>
</table>

```

```
viewData = {
  title: 'Playlist',
  playlist: {
    "id": "03",
    "title": "Beethoven Variations",
    "duration": 67,
    "songs": [
      {
        "id": "10",
        "title": "Opus 34: Six variation...",
        "artist": "Beethoven",
        "genre": "Classical",
        "duration": 11
      },
      {
        "id": "11",
        "title": "Opus 120: Thirty-three...",
        "artist": "Beethoven",
        "genre": "Classical",
        "duration": 45
      }
    ]
  }
};

```

{{{body}}}

```
main.hbs
<!DOCTYPE html>
<html>
  <head>
    ...
  </head>
  <body>
    <section class="ui container">
      {{{body}}}
    </section>
  </body>
</html>

```

RESPONSE

Beethoven Variations

Song	Artist
Opus 34: Six variations on a theme in F major	Beethoven
Opus 120: Thirty-three variations on a waltz by Diabelli in C major	Beethoven

```
<section class="ui center aligned m...
  <h2 class="ui header">
    Beethoven Variations
  </h2>
  <table class="ui table">
    <thead>
      <tr>
        <th>Song</th>
        <th>Artist</th>
      </tr>
    </thead>
    <tbody>
      <tr>
        <td>
          Opus 34: Six variations on a theme in F major
        </td>
        <td>
          Beethoven
        </td>
      </tr>
      <tr>
        <td>
          Opus 120: Thirty-three variations on a w... C major
        </td>
        <td>
          Beethoven
        </td>
      </tr>
    </tbody>
  </table>
</section>

```