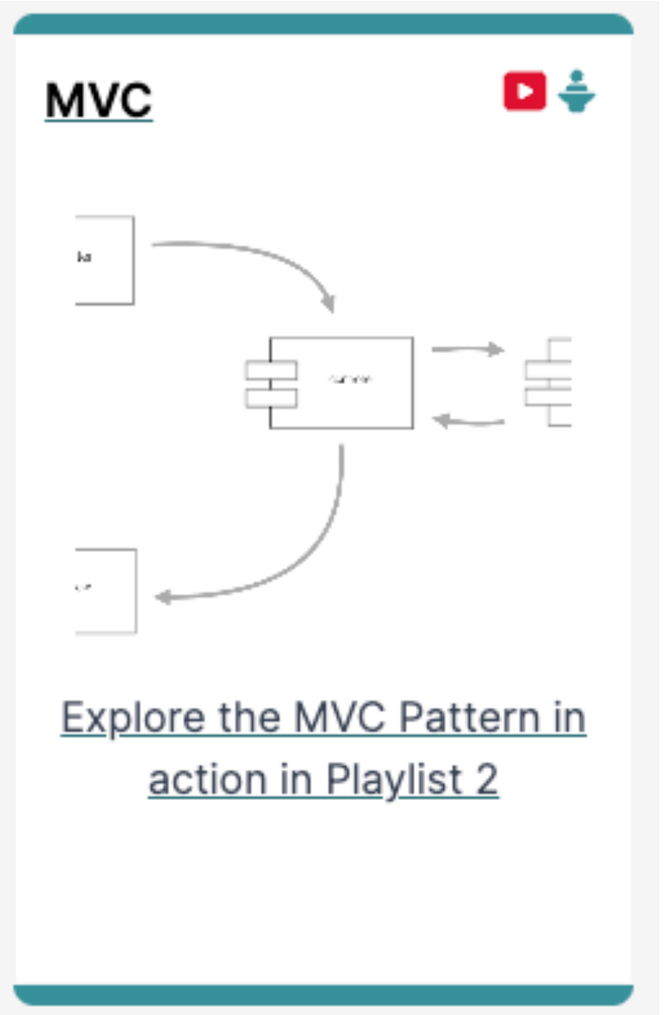
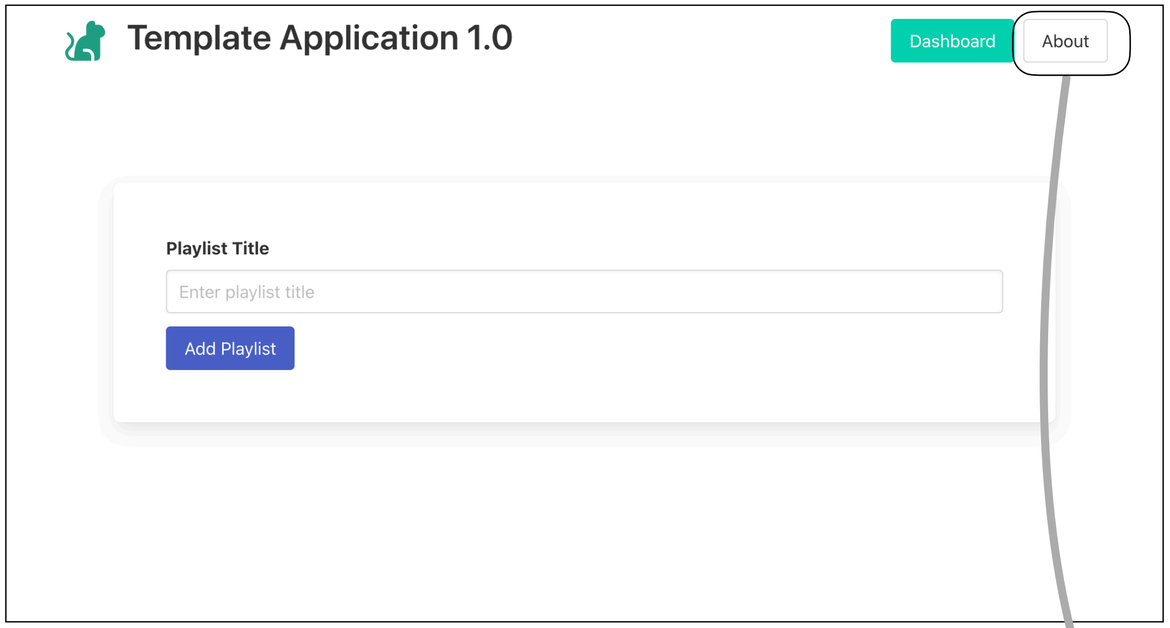
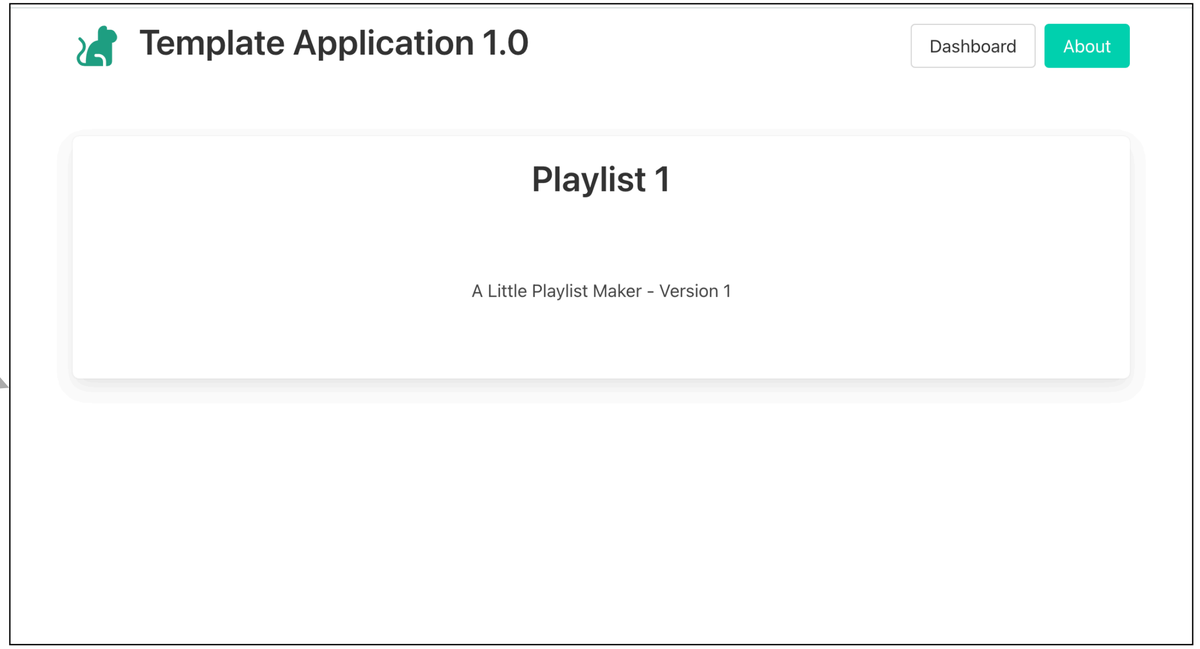
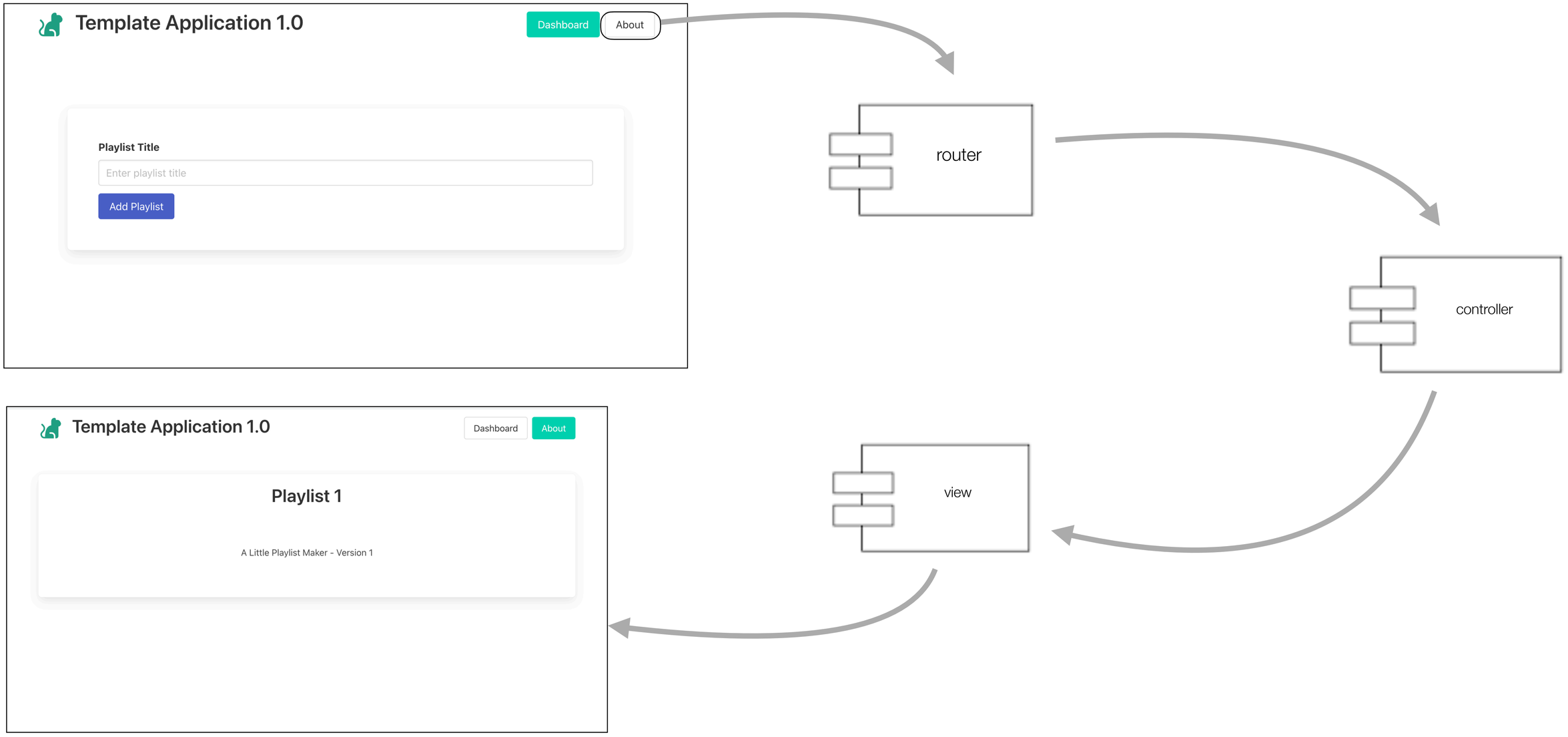
# MVC






# Router / Controller / View

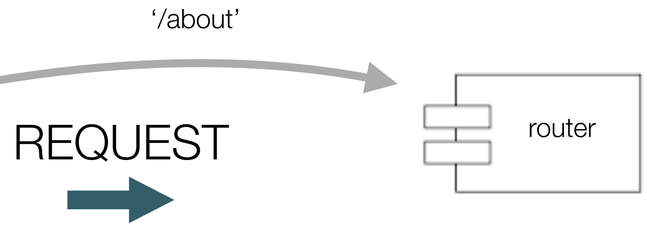



Template Application 1.0
Dashboard
About
Playlist Title
Enter playlist title
Add Playlist
router
controller
view
Template Application 1.0
Dashboard
About
Playlist 1
A Little Playlist Maker - Version 1

https://myapp.glitch.com/

```
<!DOCTYPE html>
<html>
  <head>
  </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>
```



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          <a href="/"> Playlist 1 </a>
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            Dashboard
          </a>
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            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>
```

Template Application 1.0

Dashboard About

'/about'

REQUEST

router

routes.js

```
router.get("/about", aboutController.index);
```

about.index(request, response)

controller

about.js

```
export const aboutController = {
  index(request, response) {
    const viewData = {
      title: "About Playlist",
    };
    console.log("about rendering");
    response.render("about-view", viewData);
  },
```

https://myapp.glitch.com/

```
<!DOCTYPE html>
<html>
  <head>
```

```
  </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

router

routes.js

```
router.get("/about", aboutController.index);
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controller

about.index(request, response)

about.js

```
export const aboutController = {
  index(request, response) {
    const viewData = {
      title: "About Playlist",
    };
    console.log("about rendering");
    response.render("about-view", viewData);
  },
```

response.render('about', viewData);

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

view

about-view.hbs

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

<section class="box m-3 has-text-centered">
  <h3 class="title">
    Playlist 1
  </h3>
  <div class="section">
    <p>
      A Little Playlist Maker - Version 1
    </p>
  </div>
</section>
```

menu.hbs

```
<nav class="navbar mb-6">
  <div class="navbar-brand">
    {{> brand}}
  </div>
  <div class="navbar-menu" id="navMenu">
    <div class="navbar-end">
      <div class="navbar-item">
        <div class="buttons">
          <a id="dashboard" class="button" href="/dashboard"> Dashboard </a>
          <a id="about" class="button" href="/about"> About </a>
        </div>
      </div>
    </div>
  </div>
</nav>

<script>
  document.getElementById("{{active}}").classList.add("is-primary");
</script>
```

https://myapp.glitch.com/

```
<!DOCTYPE html>
<html>
  <head>
  </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>
```

Template Application 1.0 — Dashboard | About

'/about'

REQUEST

router

routes.js

```
router.get("/about", aboutController.index);
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controller

about.index(request, response)

about.js

```
export const aboutController = {
  index(request, response) {
    const viewData = {
      title: "About Playlist",
    };
    console.log("about rendering");
    response.render("about-view", viewData);
  },
```

response.render('about', viewData);

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

view

about-view.hbs

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

<section class="box m-3 has-text-centered">
  <h3 class="title">
    Playlist 1
  </h3>
  <div class="section">
    <p>
      A Little Playlist Maker - Version 1
    </p>
  </div>
</section>
```

main.hbs

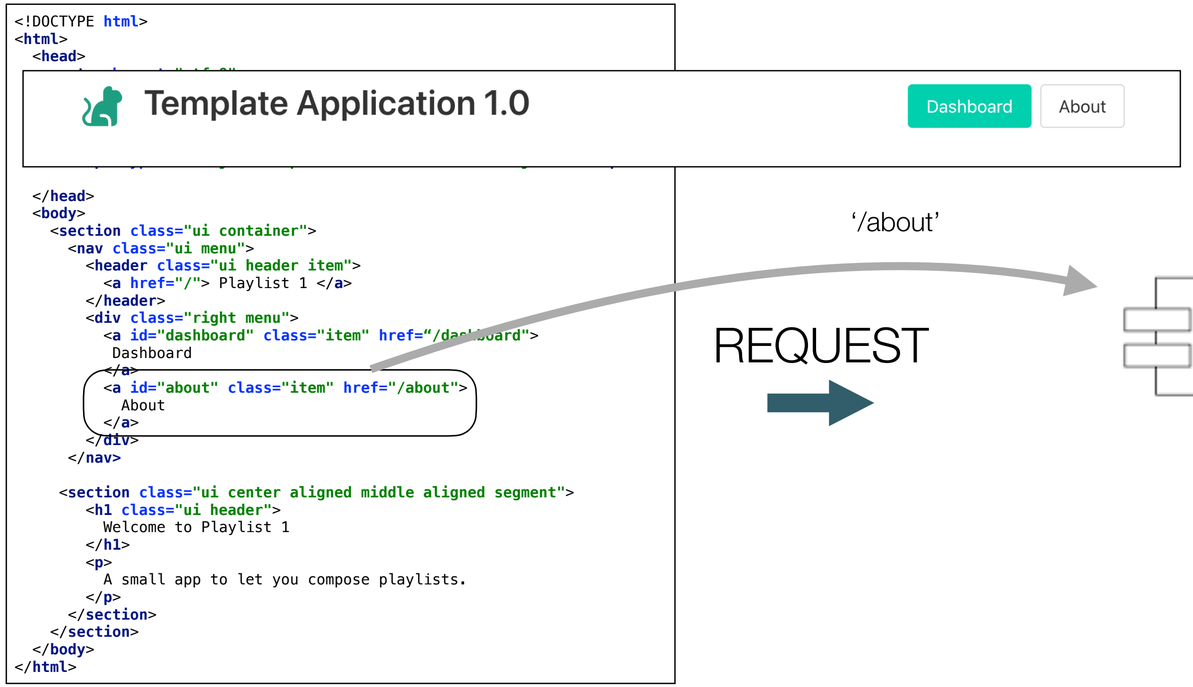
```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8">
    <title> {{title}} </title>
    <meta charset="UTF-8">
    <script type="text/javascript" src="...jquery.min.js"></script>
    <link rel="stylesheet" href="...semantic.min.css" type="text/css">
    <script type="text/javascript" src="h...semantic.min.js">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

menu.hbs

```
<nav class="navbar mb-6">
  <div class="navbar-brand">
    {{> brand}}
  </div>
  <div class="navbar-menu" id="navMenu">
    <div class="navbar-end">
      <div class="navbar-item">
        <div class="buttons">
          <a id="dashboard" class="button" href="/dashboard"> Dashboard </a>
          <a id="about" class="button" href="/about"> About </a>
        </div>
      </div>
    </div>
  </div>
</nav>

<script>
  document.getElementById("{{active}}").classList.add("is-primary");
</script>
```

https://myapp.glitch.com/




```
<!DOCTYPE html>
<html>
  <head>
  </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">
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        </h1>
        <p>
          A small app to let you compose playlists.
        </p>
      </section>
    </section>
  </body>
</html>
```

‘/about’

REQUEST

router

routes.js

```
router.get("/about", aboutController.index);
```

controller

about.index(request, response)

about.js

```
export const aboutController = {
  index(request, response) {
    const viewData = {
      title: "About Playlist",
    };
    console.log("about rendering");
    response.render("about-view", viewData);
  },
```

response.render('about', viewData);

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

view

about-view.hbs

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

<section class="box ui-3 has-text-centered">
  <h3 class="title">
    Playlist 1
  </h3>
  <div class="section">
    <p>
      A Little Playlist Maker - Version 1
    </p>
  </div>
</section>
```

main.hbs

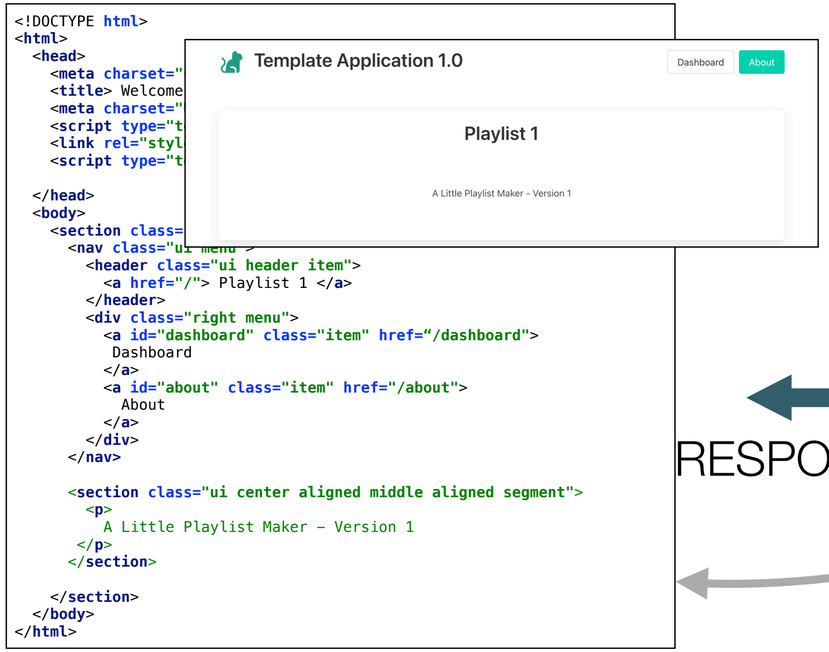
```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8">
    <title> {{title}} </title>
    <meta charset="UTF-8">
    <script type="text/javascript" src="...jquery.min.js"></script>
    <link rel="stylesheet" href="...semantic.min.css" type="text/css">
    <script type="text/javascript" src="h...semantic.min.js">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

menu.hbs

```
<nav class="navbar mb-6">
  <div class="navbar-brand">
    {{> brand}}
  </div>
  <div class="navbar-menu" id="navMenu">
    <div class="navbar-end">
      <div class="navbar-item">
        <div class="buttons">
          <a id="dashboard" class="button" href="/dashboard"> Dashboard </a>
          <a id="about" class="button" href="/about"> About </a>
        </div>
      </div>
    </div>
  </div>
</nav>

<script>
  document.getElementById("{{active}}").classList.add("is-primary");
</script>
```

RESPONSE



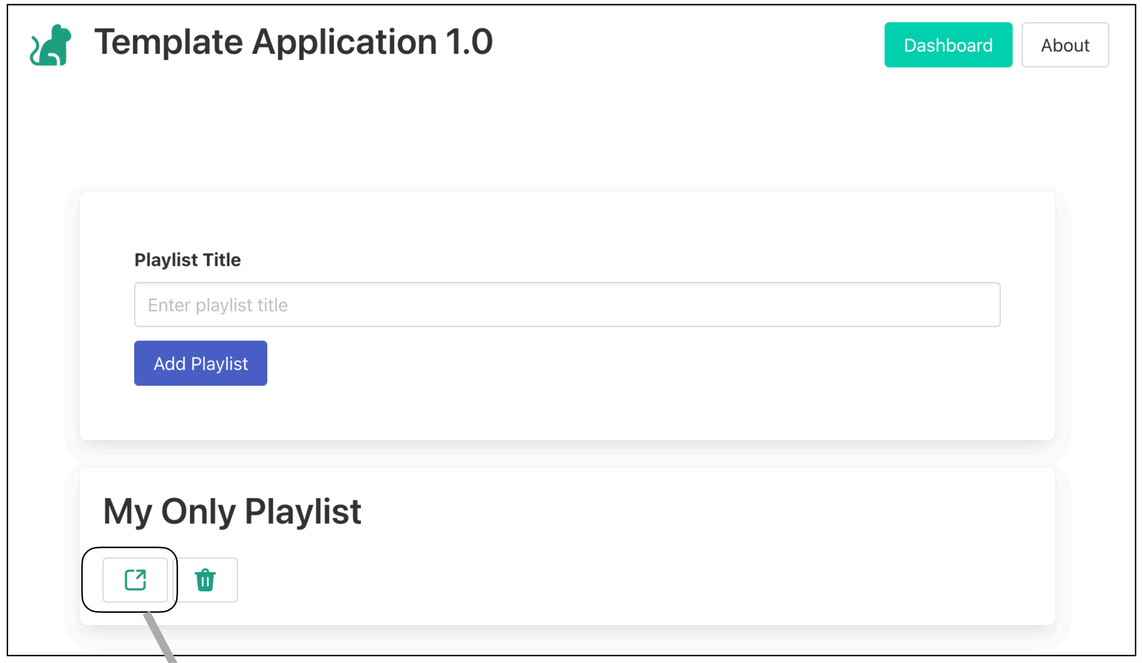

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="
    <title> Welcome
    <meta charset="
    <script type="t
    <link rel="styl
    <script type="t

  </head>
  <body>
    <section class=
      <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>

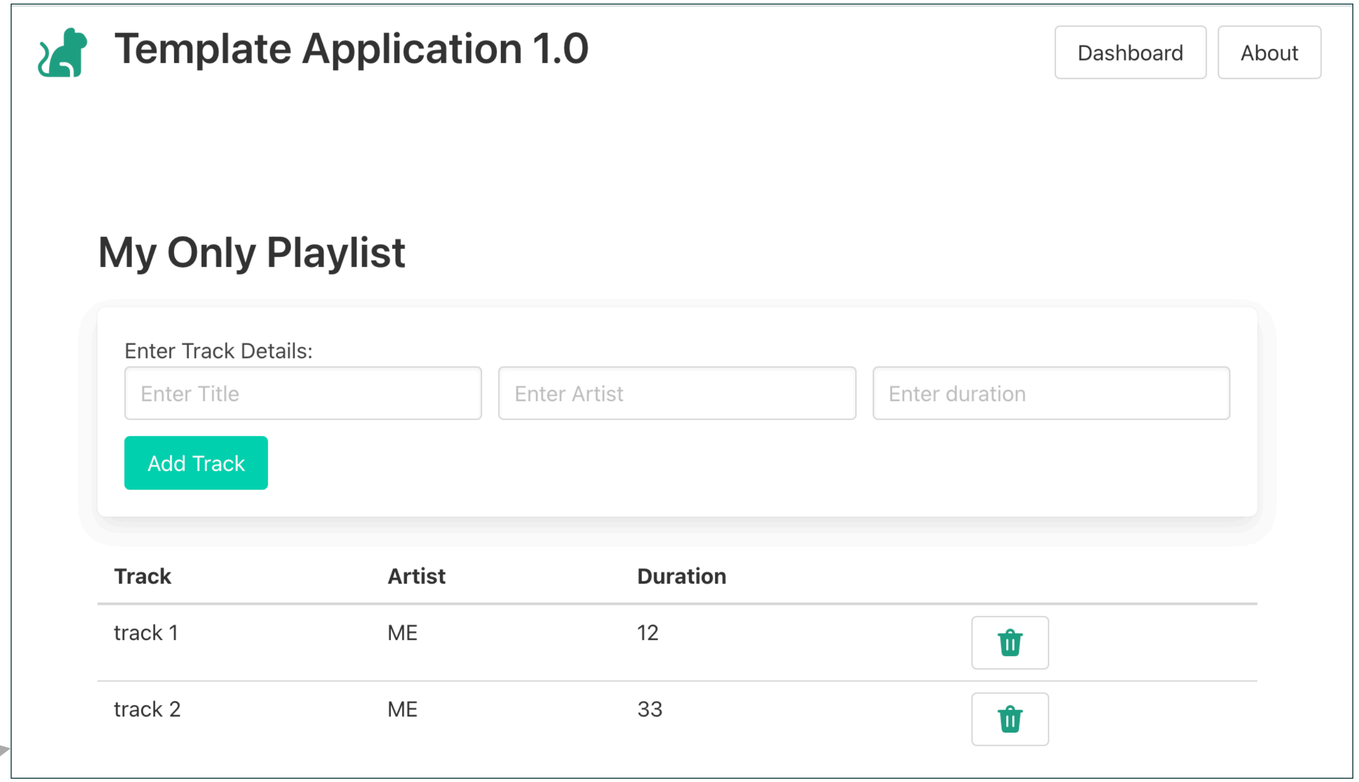
      <section class="ui center aligned middle aligned segment">
        <p>
          A Little Playlist Maker - Version 1
        </p>
      </section>

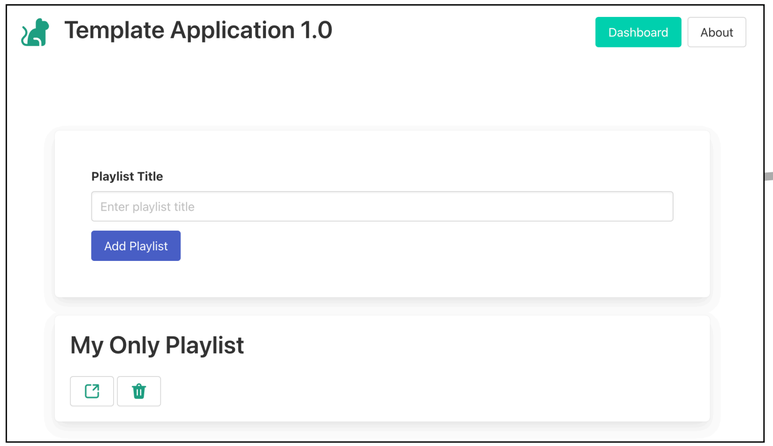
    </section>
  </body>
</html>
```

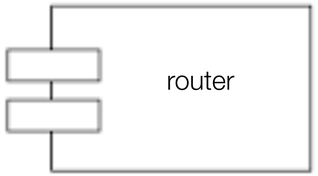
https://myapp.glitch.com/about

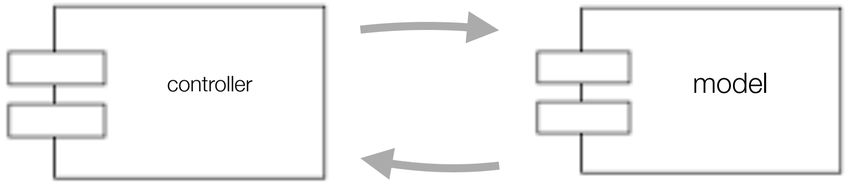


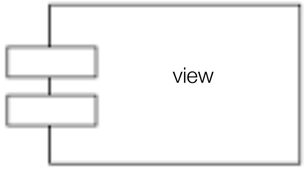

# Router / Controller / Model / View

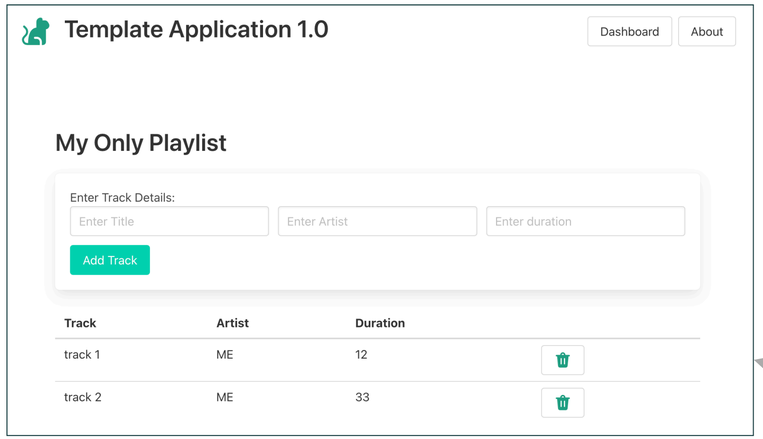



Template Application 1.0
Dashboard
About
Playlist Title
Enter playlist title
Add Playlist
My Only Playlist

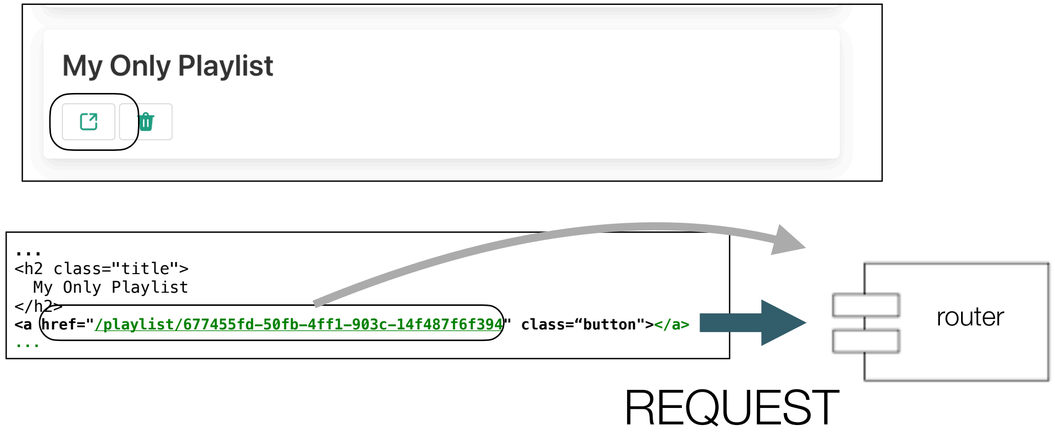

router


controller
model

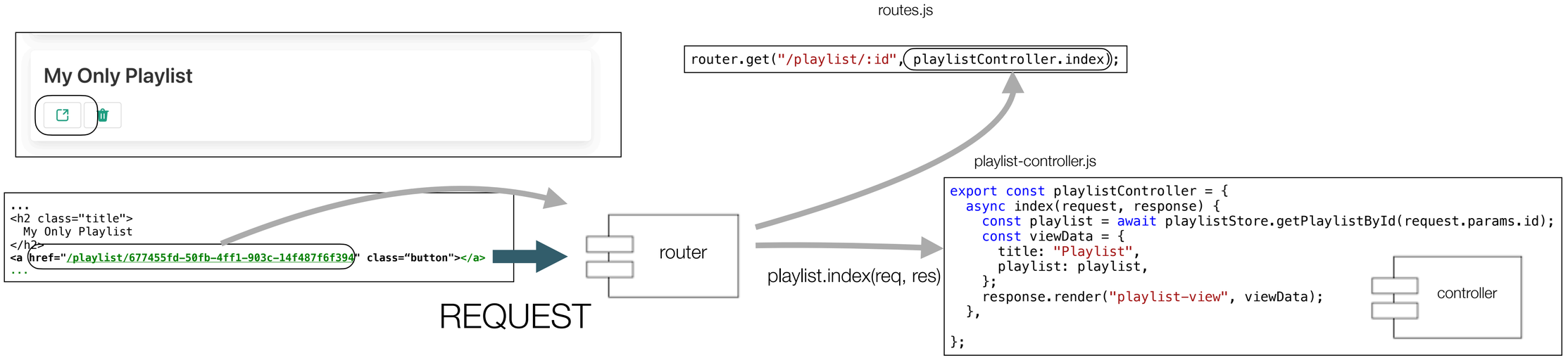

view


Template Application 1.0
Dashboard
About
My Only Playlist
Enter Track Details:
Enter Title
Enter Artist
Enter duration
Add Track
Track
Artist
Duration
track 1
ME
12
track 2
ME
33

https://myapp.glitch.com/dashboard



https://myapp.glitch.com/dashboard



https://myapp.glitch.com/dashboard

```
...
<h2 class="title">
  My Only Playlist
</h2>
<a href="/playlist/677455fd-50fb-4ff1-903c-14f487f6f394" class="button"></a>
...
```

REQUEST

router

routes.js

```
router.get("/playlist/:id", playlistController.index);
```

playlist.index(req, res)

playlist-controller.js

```
export const playlistController = {
  async index(request, response) {
    const playlist = await playlistStore.getPlaylistById(request.params.id);
    const viewData = {
      title: "Playlist",
      playlist: playlist,
    };
    response.render("playlist-view", viewData);
  },

};
```

controller

model

```
const playlistStore = {

...
  async getPlaylistById(id) {
    ...
  },

...
};
```

```
{
  "file": "./models/playlists.
  "playlists": [
    {
      "title": "My Only Playli
      "_id": "677455fd-50fb-4f
    }
  ]
}
```

```
{
  "file": "./models/tracks.jso
  "tracks": [
    {
      "title": "track 1",
      "artist": "ME",
      "duration": 12,
      "_id": "a572147e-a592-4e
      "playlistid": "677455fd-
    },
    {
      "title": "track 2",
      "artist": "ME",
      "duration": 32,
      "_id": "65229f82-9bc0-42
      "playlistid": "677455fd-
    }
  ]
}
```

https://myapp.glitch.com/dashboard

```
...
<h2 class="title">
  My Only Playlist
</h2>
<a href="/playlist/677455fd-50fb-4ff1-903c-14f487f6f394" class="button"></a>
...
```

REQUEST

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controller

model

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const playlistStore = {

...
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    ...
  },

...
};
```

```
{
  "file": "./models/playlists.
  "playlists": [
    {
      "title": "My Only Playli
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    }
  ]
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```

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  "file": "./models/tracks.jso
  "tracks": [
    {
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    },
    {
      "title": "track 2",
      "artist": "ME",
      "duration": 32,
      "_id": "65229f82-9bc0-42
      "playlistid": "677455fd-
    }
  ]
}
```

view

playlist-view.hbs

```
{{> menu}}

<section class="section">
  <div class="title">
    {{playlist.title}}
  </div>
  {{> add-track}}
  {{> list-tracks}}
</section>
```

list-tracks.hbs

```
<table class="table is-fullwidth">
  <thead>
    <tr>
      <th>Track</th>
      <th>Artist</th>
      <th>Duration</th>

    </tr>
  </thead>
  <tbody>
    {{#each playlist.tracks}}
    <tr>
      <td>
        {{title}}
      </td>
      <td>
        {{artist}}
      </td>
      <td>
        {{duration}}
      </td>
    </tr>
    {{/each}}
  </tbody>
</table>
</table>
```

```
viewData = {
  title: 'Playlist',
  playlist: {
    "_id": "677455fd-50fb-4ff1-903
    "title": "My Only Playlist",
    "tracks": [
      {
        "title": "track 1",
        "artist": "ME",
        "duration": 12,
        "_id": "a572147e-a592-4e9e
        "playlistid": "677455fd-50
      },
      {
        "title": "track 2",
        "artist": "ME",
        "duration": 32,
        "_id": "65229f82-9bc0-4292
        "playlistid": "677455fd-50
      }
  }
};
```

https://myapp.glitch.com/dashboard

```
...
<h2 class="title">
  My Only Playlist
</h2>
<a href="/playlist/677455fd-50fb-4ff1-903c-14f487f6f394" class="button"></a>
...
```

REQUEST

router

routes.js

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    };
    response.render("playlist-view", viewData);
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controller

model

```
const playlistStore = {

...
  async getPlaylistById(id) {
    ...
  },

...
};
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```
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  "file": "./models/playlists.
  "playlists": [
    {
      "title": "My Only Playli
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    }
  ]
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{
  "file": "./models/tracks.jso
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    {
      "title": "track 1",
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      "duration": 12,
      "_id": "a572147e-a592-4e
      "playlistid": "677455fd-
    },
    {
      "title": "track 2",
      "artist": "ME",
      "duration": 32,
      "_id": "65229f82-9bc0-42
      "playlistid": "677455fd-
    }
  ]
}
```

playlist-view.hbs

```
{{> menu}}

<section class="section">
  <div class="title">
    {{playlist.title}}
  </div>
  {{> add-track}}
  {{> list-tracks}}
</section>
```

view

list-tracks.hbs

```
<table class="table is-fullwidth">
  <thead>
    <tr>
      <th>Track</th>
      <th>Artist</th>
      <th>Duration</th>

    </tr>
  </thead>
  <tbody>
    {{#each playlist.tracks}}
    <tr>
      <td>
        {{title}}
      </td>
      <td>
        {{artist}}
      </td>
      <td>
        {{duration}}
      </td>
    </tr>
    {{/each}}
  </tbody>
</table>
</table>
```

```
viewData = {
  title: 'Playlist',
  playlist: {
    "_id": "677455fd-50fb-4ff1-903
    "title": "My Only Playlist",
    "tracks": [
      {
        "title": "track 1",
        "artist": "ME",
        "duration": 12,
        "_id": "a572147e-a592-4e9e
        "playlistid": "677455fd-50
      },
      {
        "title": "track 2",
        "artist": "ME",
        "duration": 32,
        "_id": "65229f82-9bc0-4292
        "playlistid": "677455fd-50
      }

  }
};
```

main.hbs

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

https://myapp.glitch.com/dashboard

```
...
<h2 class="title">
  My Only Playlist
</h2>
<a href="/playlist/677455fd-50fb-4ff1-903c-14f487f6f394" class="button"></a>
...
```

REQUEST

router

routes.js

```
router.get("/playlist/:id", playlistController.index);
```

playlist.index(req, res)

playlist-controller.js

```
export const playlistController = {
  async index(request, response) {
    const playlist = await playlistStore.getPlaylistById(request.params.id);
    const viewData = {
      title: "Playlist",
      playlist: playlist,
    };
    response.render("playlist-view", viewData);
  },

};
```

controller

model

```
const playlistStore = {

...
  async getPlaylistById(id) {
    ...
  },

...
};
```

```
{
  "file": "./models/playlists.
  "playlists": [
    {
      "title": "My Only Playli
      "_id": "677455fd-50fb-4f
    }
  ]
}
```

```
{
  "file": "./models/tracks.jso
  "tracks": [
    {
      "title": "track 1",
      "artist": "ME",
      "duration": 12,
      "_id": "a572147e-a592-4e
      "playlistid": "677455fd-
    },
    {
      "title": "track 2",
      "artist": "ME",
      "duration": 32,
      "_id": "65229f82-9bc0-42
      "playlistid": "677455fd-
    }
  ]
}
```

list-tracks.hbs

```
<table class="table is-fullwidth">
  <thead>
    <tr>
      <th>Track</th>
      <th>Artist</th>
      <th>Duration</th>

    </tr>
  </thead>
  <tbody>
    {{#each playlist.tracks}}
    <tr>
      <td>
        {{title}}
      </td>
      <td>
        {{artist}}
      </td>
      <td>
        {{duration}}
      </td>
    </tr>
    {{/each}}
  </tbody>
</table>
</table>
```

```
viewData = {
  title: 'Playlist',
  playlist: {
    "_id": "677455fd-50fb-4ff1-903
    "title": "My Only Playlist",
    "tracks": [
      {
        "title": "track 1",
        "artist": "ME",
        "duration": 12,
        "_id": "a572147e-a592-4e9e
        "playlistid": "677455fd-50
      },
      {
        "title": "track 2",
        "artist": "ME",
        "duration": 32,
        "_id": "65229f82-9bc0-4292
        "playlistid": "677455fd-50
      }

  }
};
```

playlist-view.hbs

```
{{> menu}}

<section class="section">
  <div class="title">
    {{playlist.title}}
  </div>
  {{> add-track}}
  {{> list-tracks}}
</section>
```

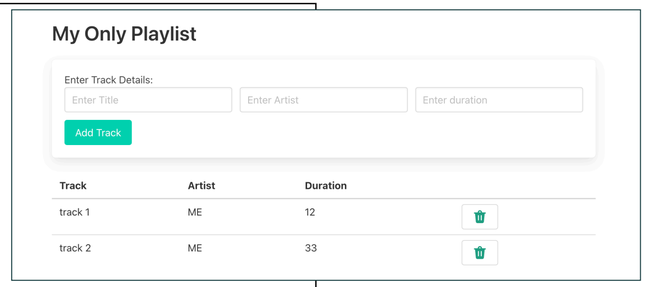
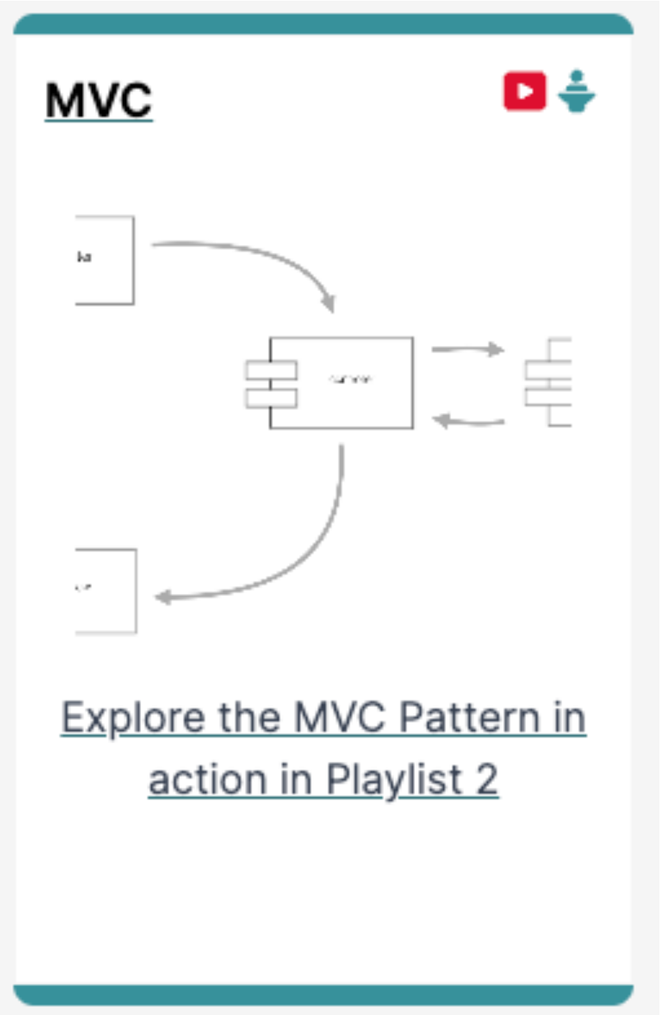
view

main.hbs

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

RESPONSE

```
<section class="…t">
  <h2 class="ui header">
   My Only Playlist
  </h2>
  <table class="ui table">
    <thead>
    <tr>
      <th>Track</th>
      <th>Artist</th>
      <th>Duration</th>
    </tr>
    </thead>
    <tbody>
    <tr>
      <td>
        Track 1
      </td>
      <td>
        ME
      </td>
    </tr>
    <tr>
      <td>
       Track 2
      </td>
      <td>
        ME
      </td>
    </tr>
    </tbody>
  </table>
</section>
```



# MVC