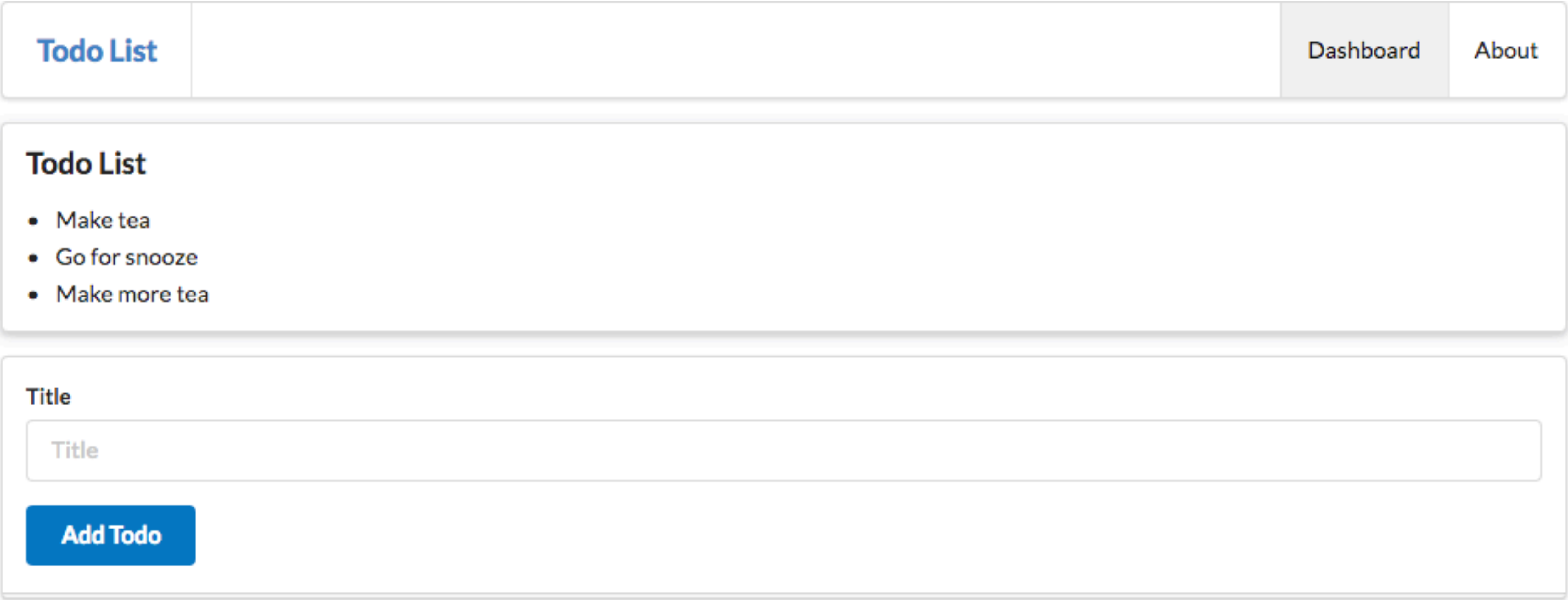
Forms

todolist application



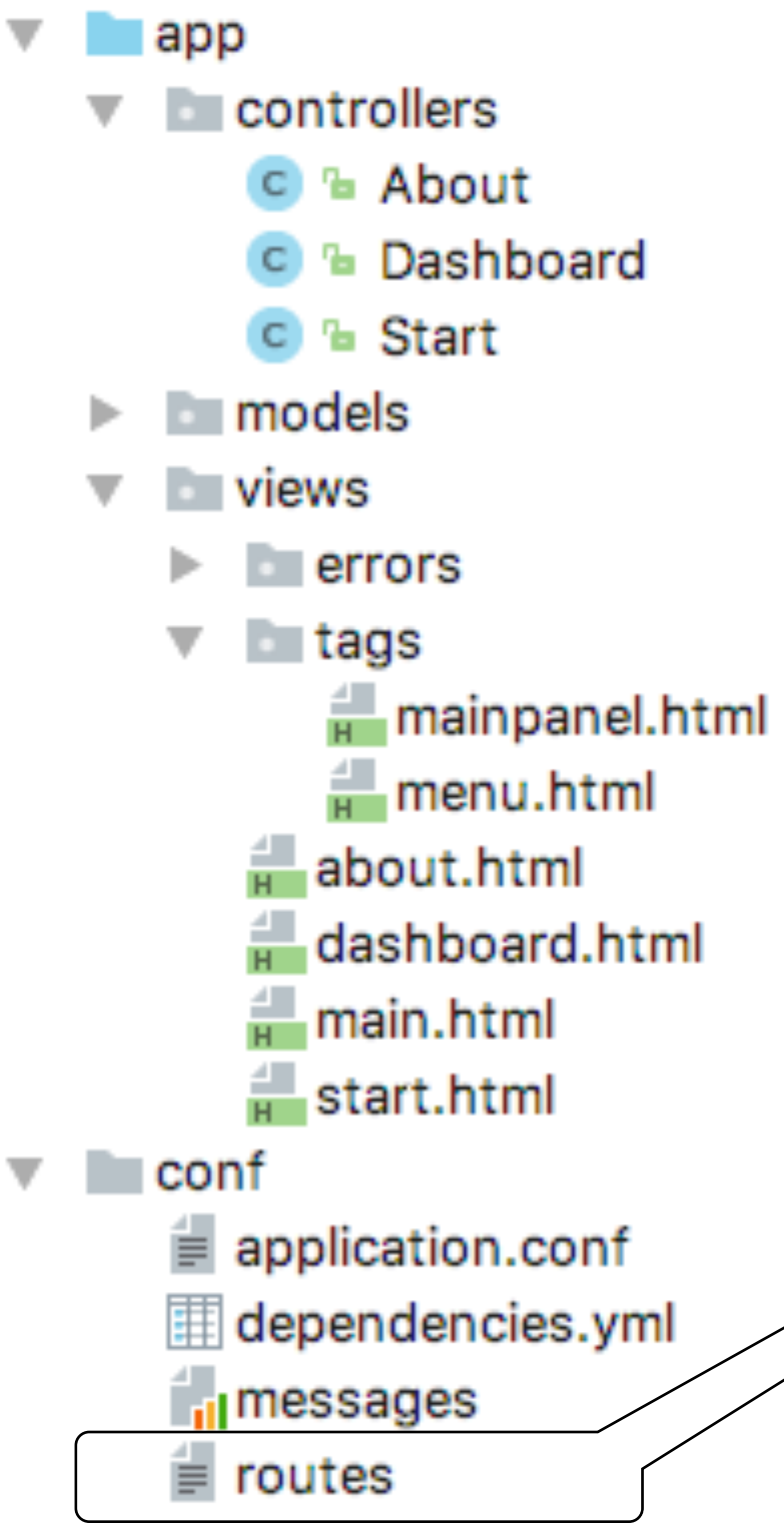
Todo List

- Make tea
- Go for snooze
- Make more tea

Title

Title

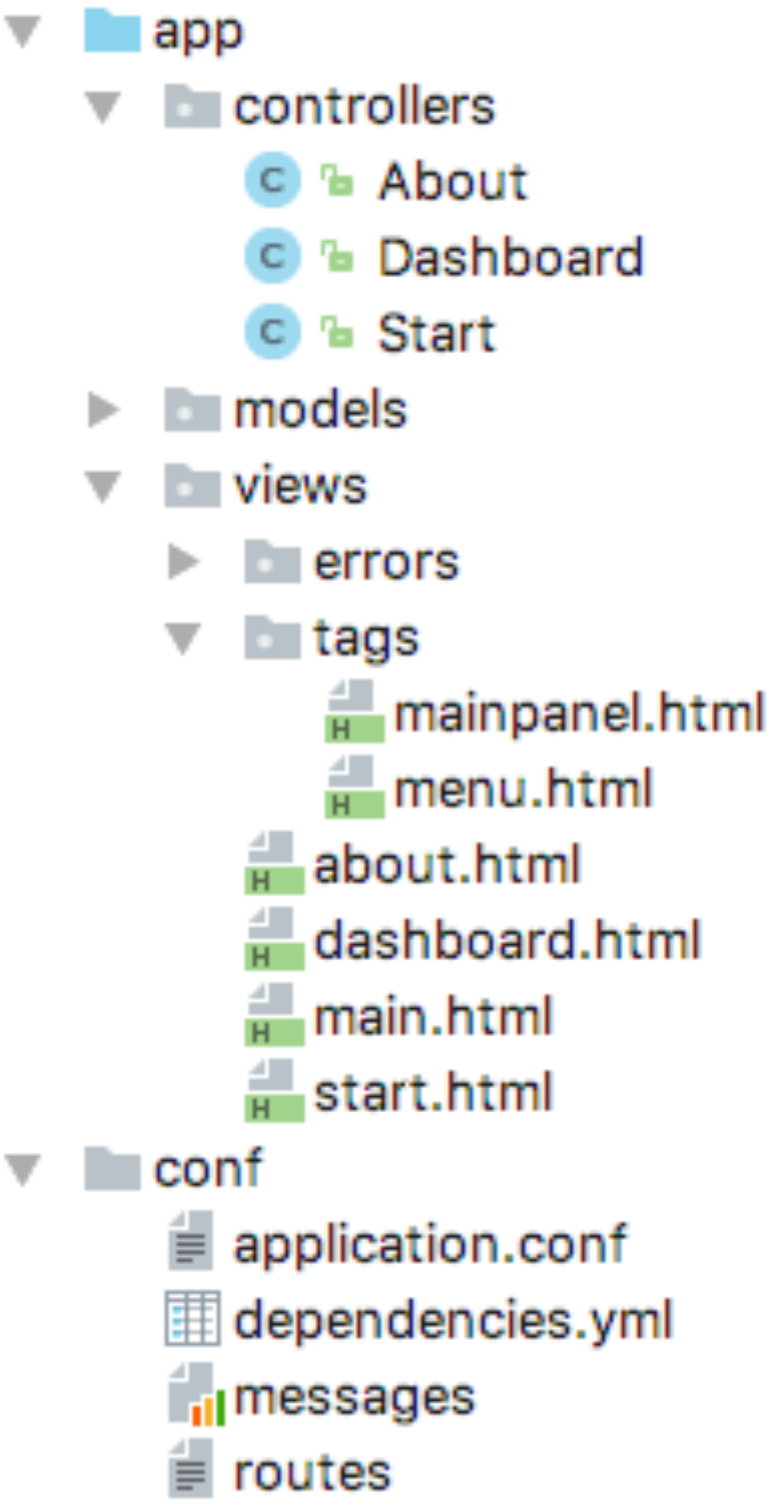
routes



```
app
  controllers
    About
    Dashboard
    Start
  models
  views
    errors
    tags
      mainpanel.html
      menu.html
    about.html
    dashboard.html
    main.html
    start.html
conf
  application.conf
  dependencies.yml
  messages
  routes
```

```
GET     /                              Start.index
GET     /dashboard                     Dashboard.index
GET     /about                         About.index
```

Dasbboad routes



```
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  controllers
    About
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      mainpanel.html
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conf
  application.conf
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  messages
  routes
```
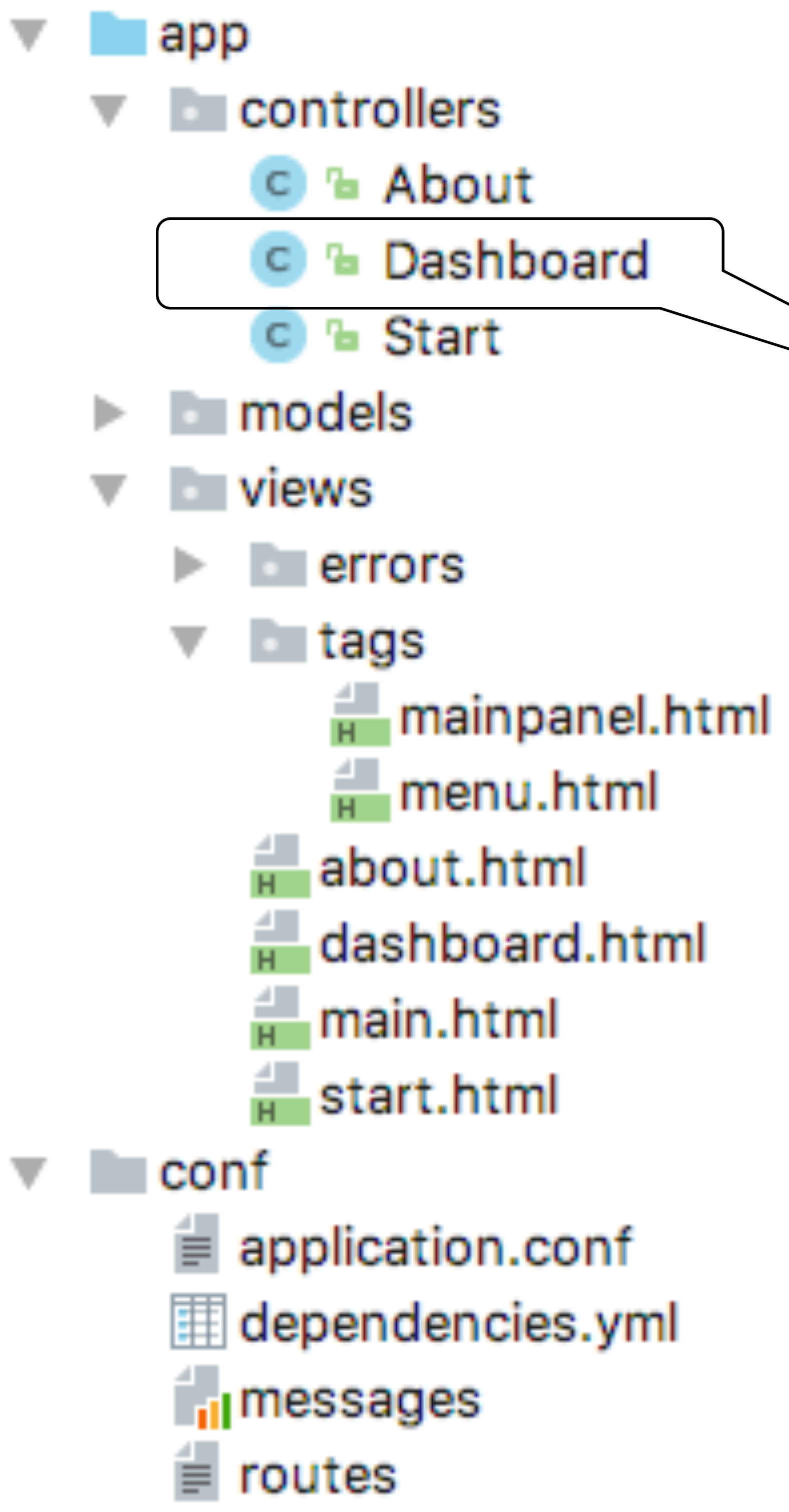

```
GET     /dashboard                    Dashboard.index
```

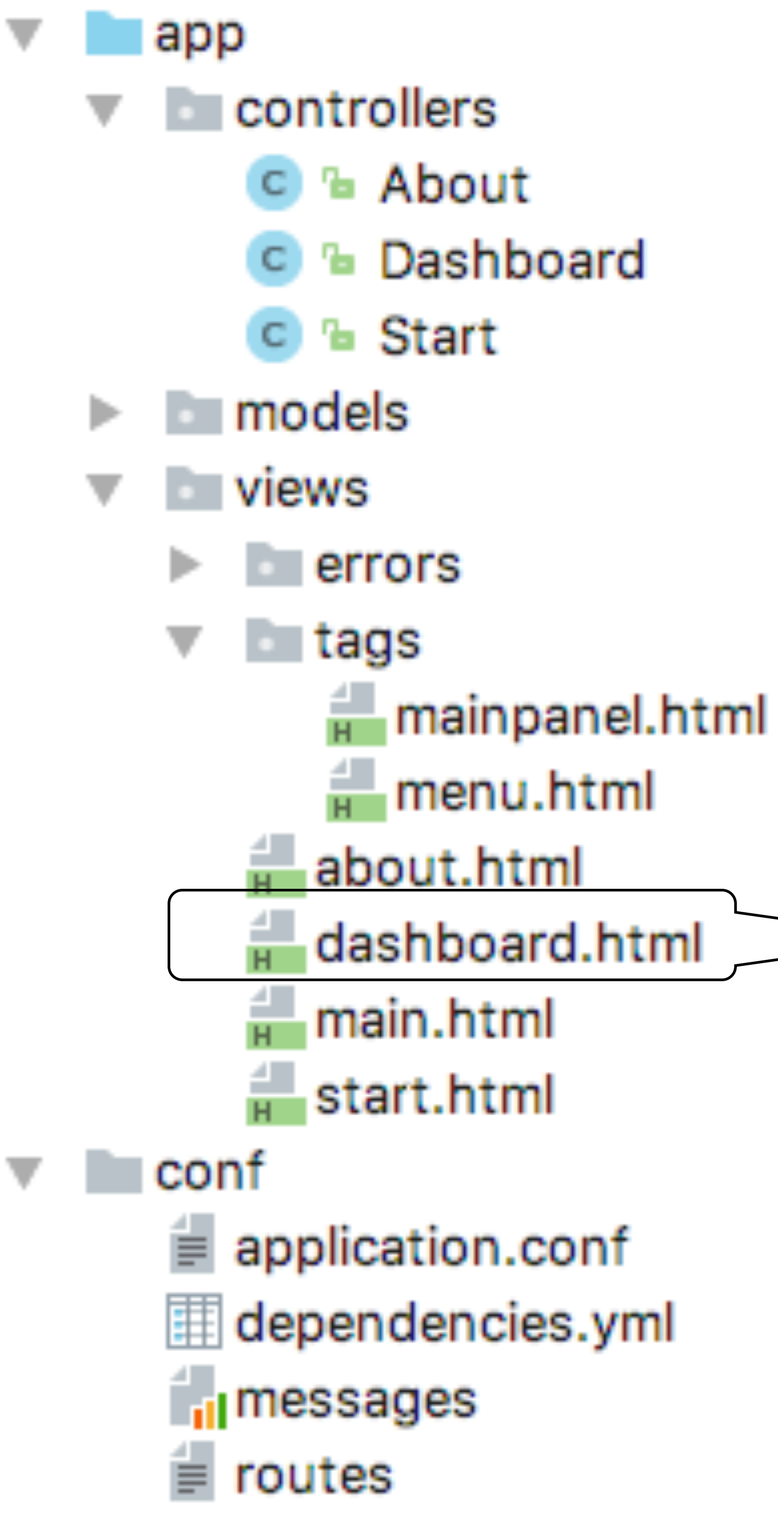
Dashboard Controller



```
GET     /dashboard                  Dashboard.index
```

```java
package controllers;

import play.Logger;
import play.mvc.Controller;

public class Dashboard extends Controller
{
  public static void index() {
    Logger.info("Rendering Dashboard");
    render ("dashboard.html");
  }
}
```

Dashboard View



```
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conf
  application.conf
  dependencies.yml
  messages
  routes
```
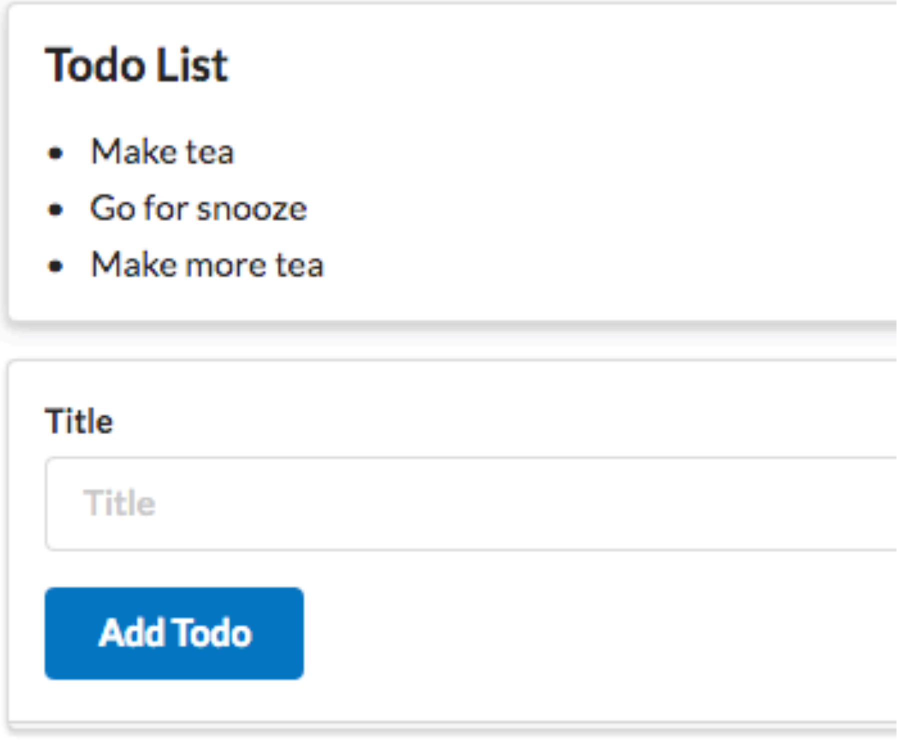

```
#{extends 'main.html' /}
#{set title:'Dashboard' /}

#{menu id:"dashboard"/}

<section class="ui raised segment">
  <header class="ui header">
    Todo List
  </header>
  <div class="ui bulleted list">
    <div class="ui item"> Make tea</div>
    <div class="ui item"> Go for snooze</div>
    <div class="ui item"> Make more tea</div>
  </div>
</section>

<form class="ui stacked segment form" action="/dashboard/addtodo" method="POST">
  <div class="field">
    <label>Title</label>
    <input placeholder="Title" type="text" name="title">
  </div>
  <button class="ui blue submit button">Add Todo</button>
</form>
```

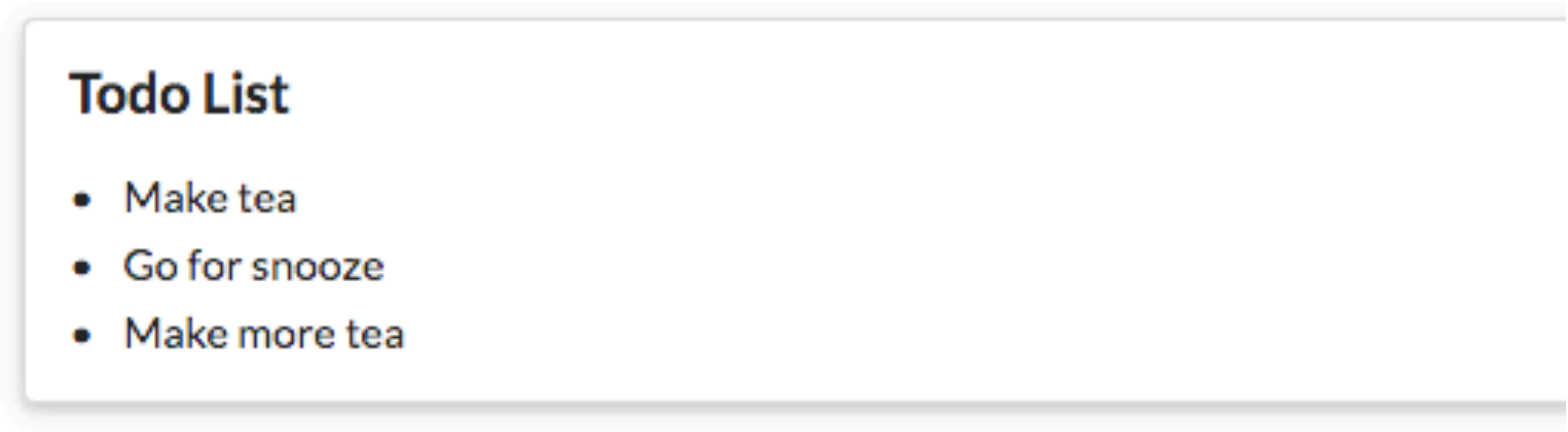


Todo List

- Make tea
- Go for snooze
- Make more tea

Title

“Static” Todo List Segment

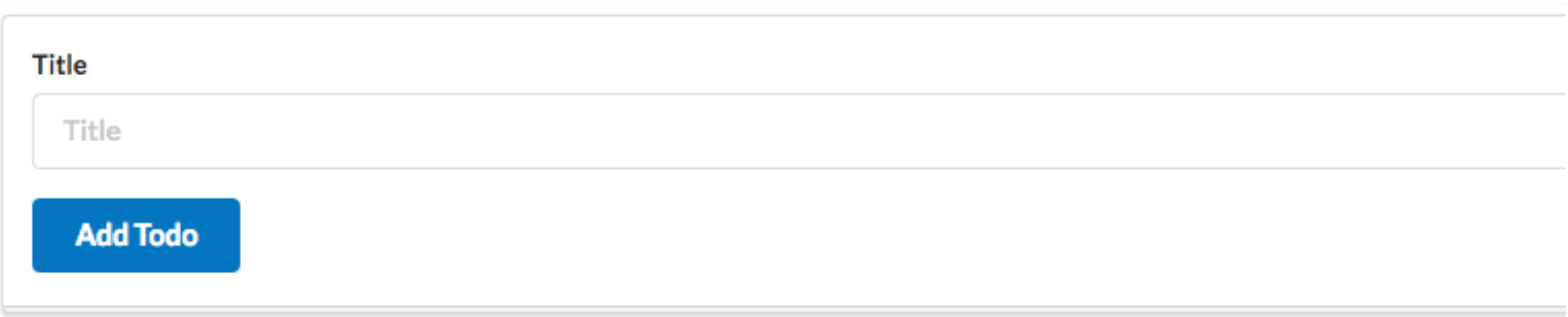


Todo List

- Make tea
- Go for snooze
- Make more tea

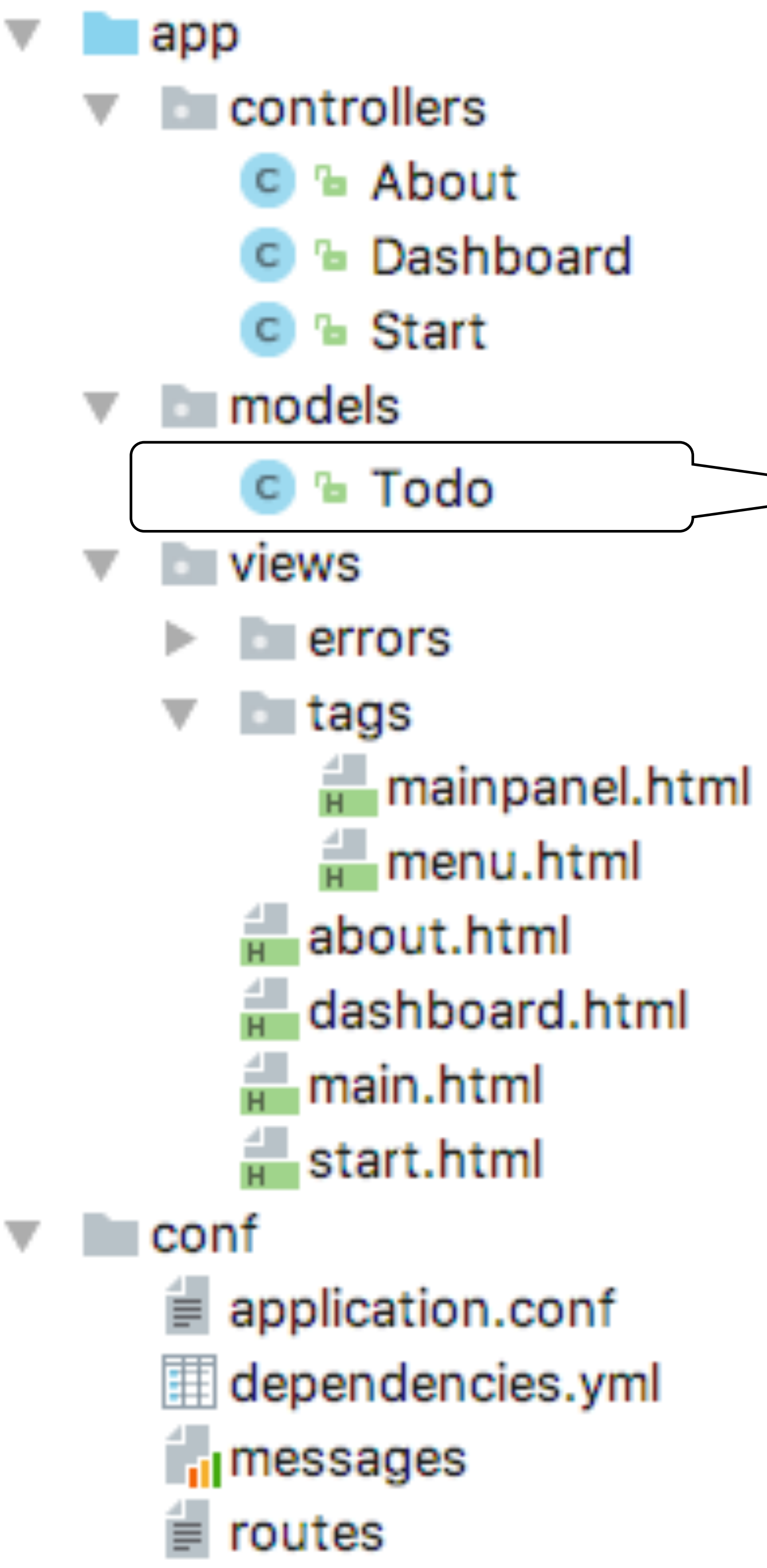
```
...
<section class="ui raised segment">
  <header class="ui header">
    Todo List
  </header>
  <div class="ui bulleted list">
    <div class="ui item"> Make tea</div>
    <div class="ui item"> Go for snooze</div>
    <div class="ui item"> Make more tea</div>
  </div>
</section>
...
```

Add Todo List Form



```
...
<form class="ui stacked segment form" action="/dashboard/addtodo" method="POST">
  <div class="field">
    <label>Title</label>
    <input placeholder="Title" type="text" name="title">
  </div>
  <button class="ui blue submit button">Add Todo</button>
</form>
```

Todo Model



```
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  controllers
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```
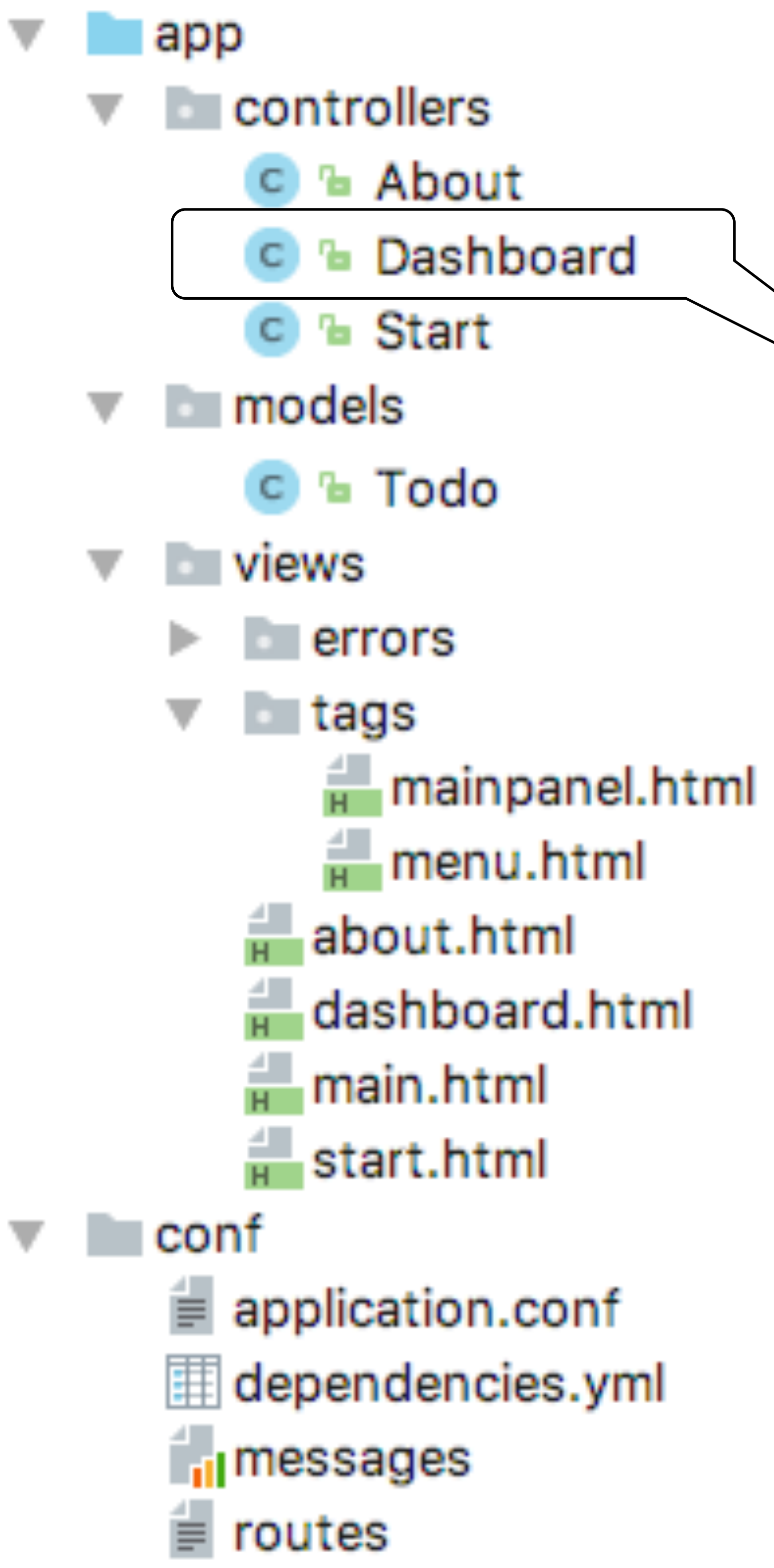

```java
package models;

import play.db.jpa.Model;

import javax.persistence.Entity;

@Entity
public class Todo extends Model
{
  public String title;

  public Todo(String title)
  {
    this.title = title;
  }
}
```

Revised Dashboard Controller



```
GET     /dashboard                Dashboard.index
POST    /dashboard/addtodo        Dashboard.addTodo
```

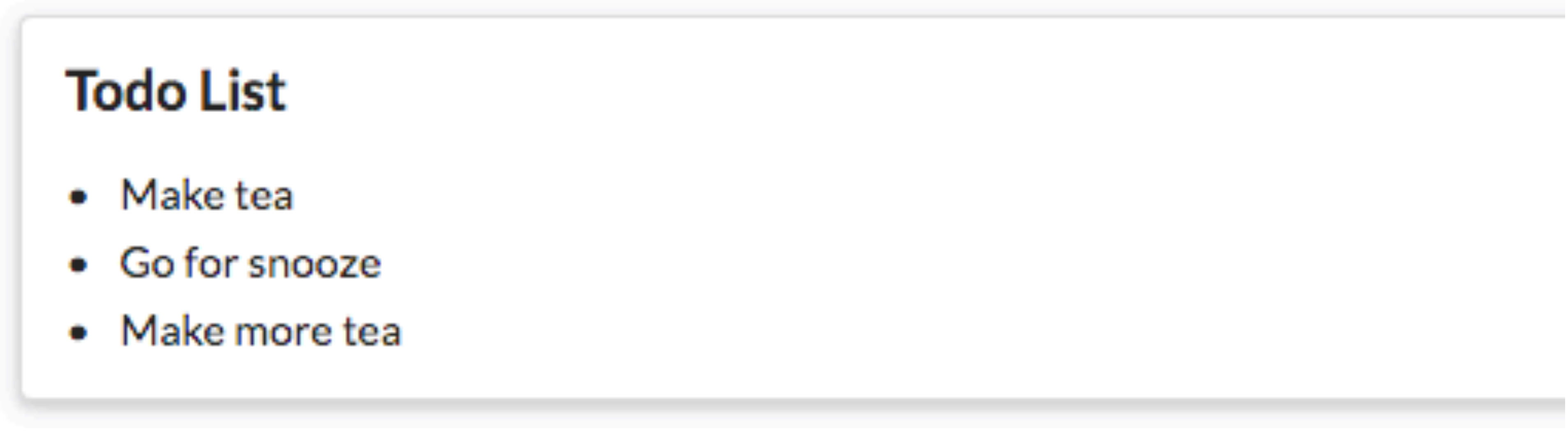
```java
public class Dashboard extends Controller
{
  public static void index()
  {
    Logger.info("Rendering Dashboard");
    List<Todo> todolist = Todo.findAll();
    render("dashboard.html", todolist);
  }

  public static void addTodo(String title)
  {
    Todo todo = new Todo(title);
    todo.save();
    Logger.info("Addint Todo" + title);
    redirect("/dashboard");
  }
}
```

Dashboard Controller - List Todos

```
GET      /dashboard                  Dashboard.index
```

```java
public class Dashboard extends Controller
{
  public static void index()
  {
    Logger.info("Rendering Dashboard");
    List<Todo> todolist = Todo.findAll();
    render("dashboard.html", todolist);
  }
  ...
}
```

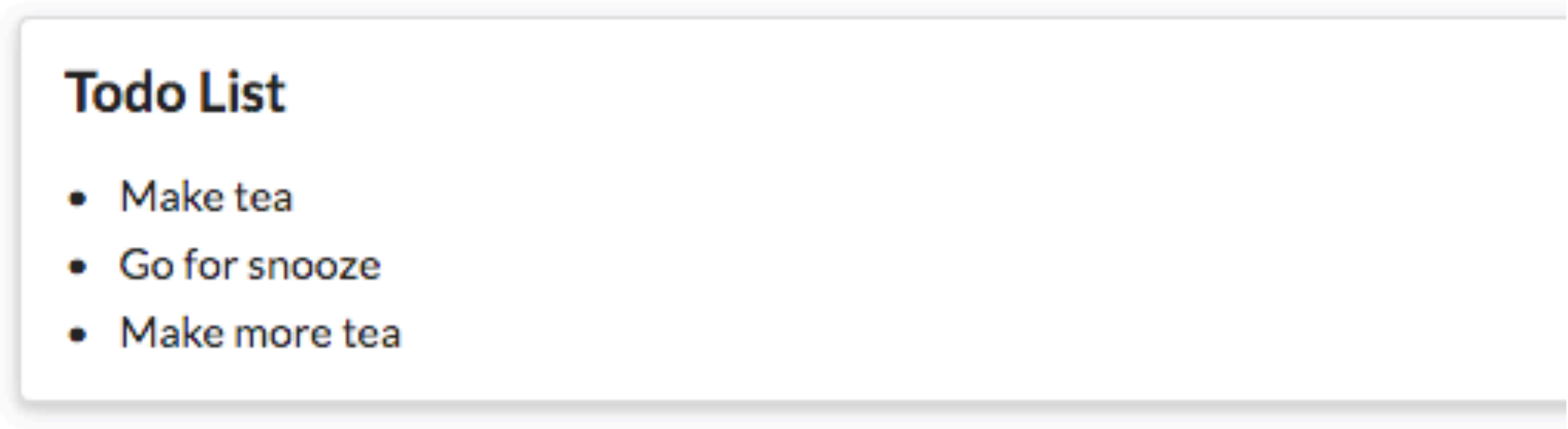
```html
...
<section class="ui raised segment">
  <header class="ui header">
    Todo List
  </header>
  <div class="ui bulleted list">
    #{list items:todolist, as:'todo'}
      <div class="ui item"> ${todo.title} </div>
    #{/list}
  </div>
</section>
...
```



Todo List

- Make tea
- Go for snooze
- Make more tea

“Dynamic” Todo List Segment



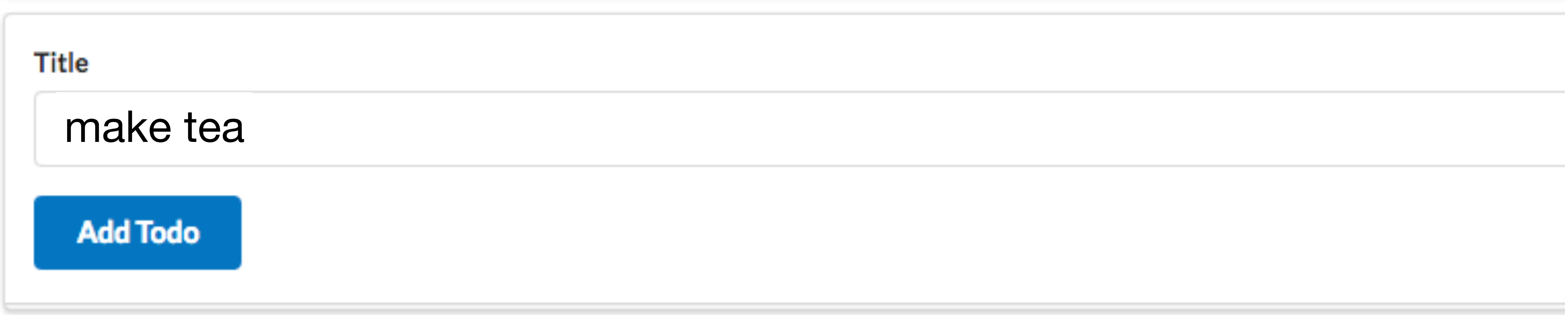
Todo List

- Make tea
- Go for snooze
- Make more tea

```
List<Todo> todolist = Todo.findAll();
render("dashboard.html", todolist);
```

```
...
<section class="ui raised segment">
  <header class="ui header">
    Todo List
  </header>
  <div class="ui bulleted list">
    #{list items:todolist, as:'todo'}
      <div class="ui item"> ${todo.title} </div>
    #{/list}
  </div>
</section>
...
```

Dashboard Controller - Add Todos



Title

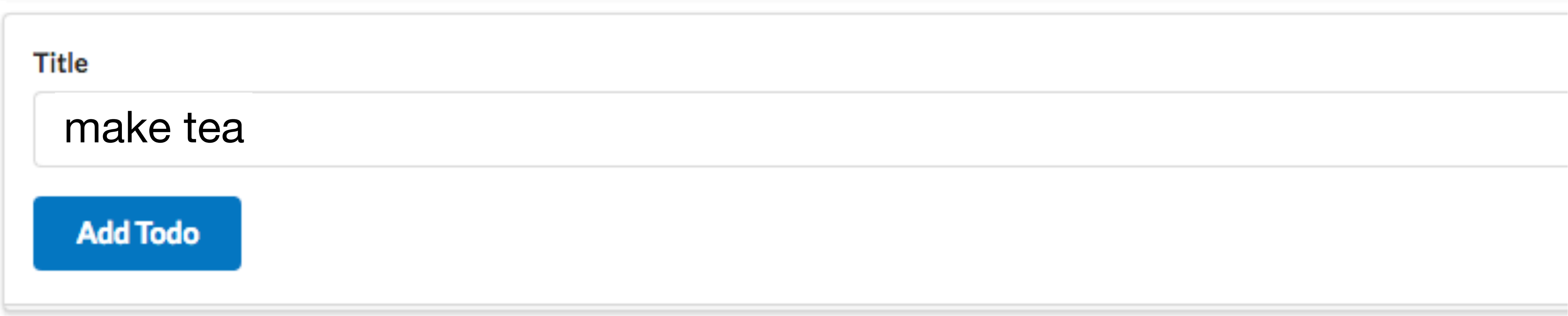
make tea

```
...
<form class="ui stacked segment form" action="/dashboard/addtodo" method="POST">
  <div class="field">
    <label>Title</label>
    <input placeholder="Title" type="text" name="title">
  </div>
  <button class="ui blue submit button">Add Todo</button>
</form>
```

```
POST     /dashboard/addtodo      Dashboard.addTodo
```

```
public class Dashboard extends Controller
{
  ...
  public static void addTodo(String title)
  {
    Todo todo = new Todo(title);
    todo.save();
    Logger.info("Addint Todo" + title);
    redirect("/dashboard");
  }
}
```

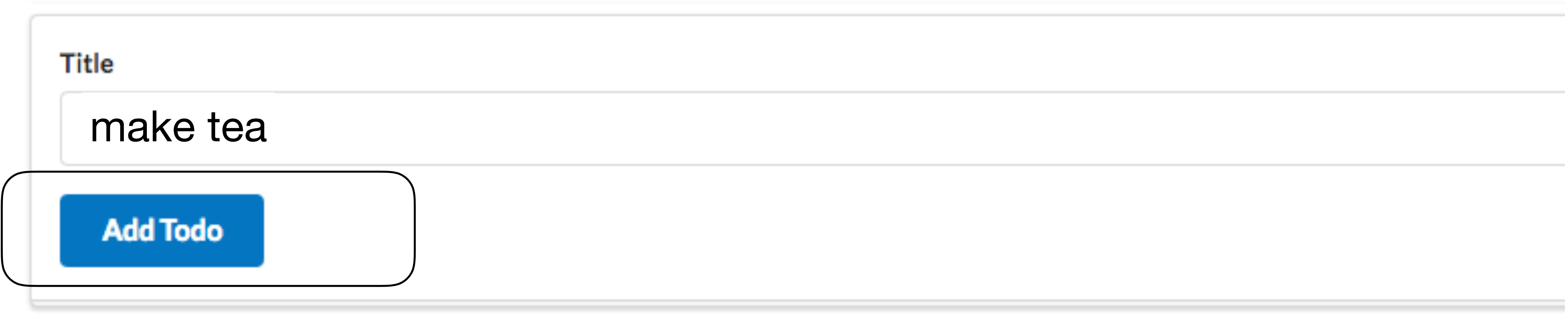
Dashboard Controller - Add Todos



Title

make tea

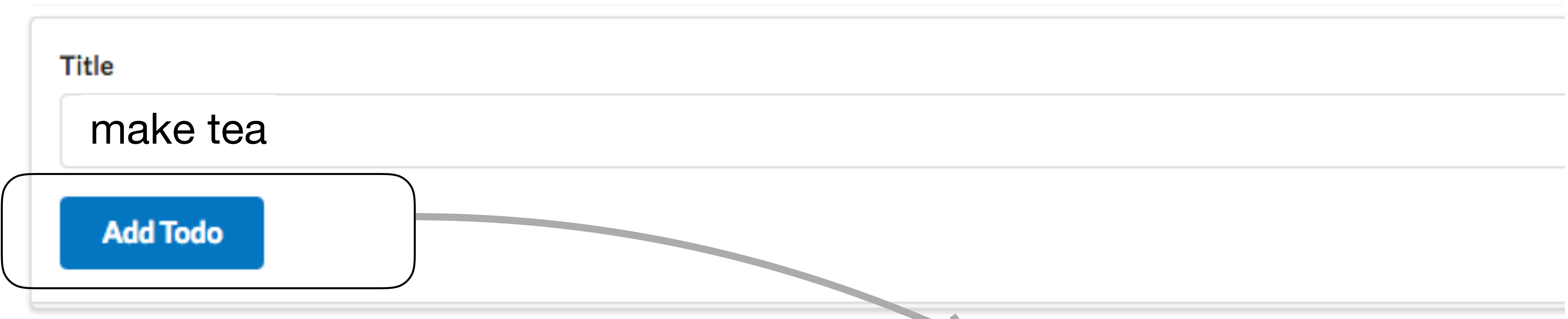
Dashboard Controller - Add Todos



Title

make tea

Dashboard Controller - Add Todos



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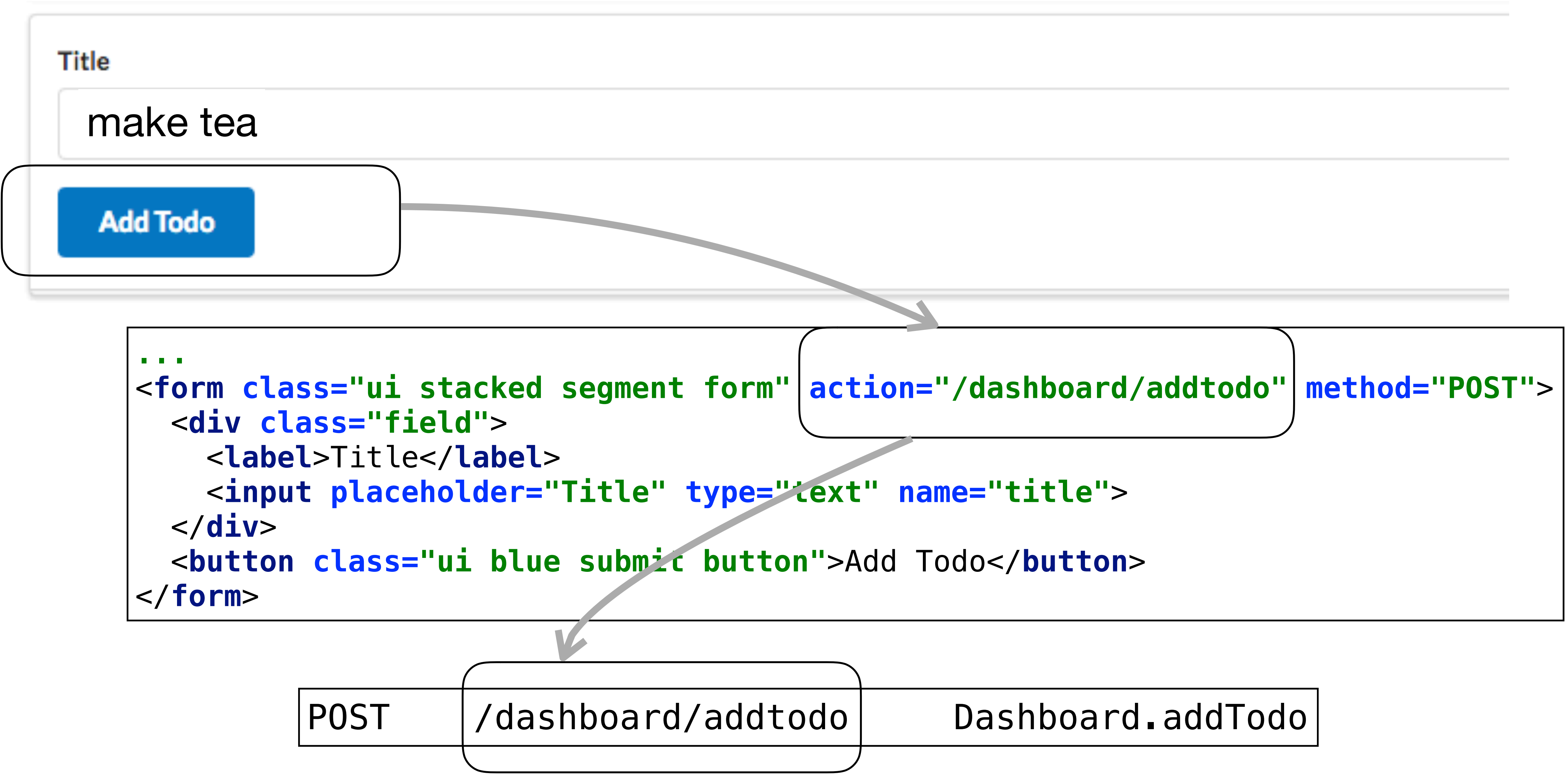
Dashboard Controller - Add Todos



Title

make tea

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POST     /dashboard/addtodo        Dashboard.addTodo
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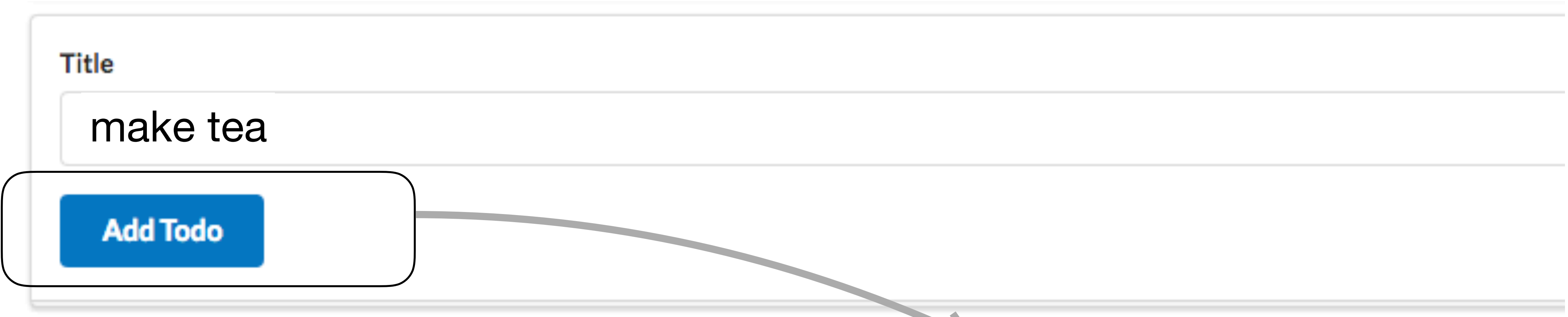
Dashboard Controller - Add Todos



Title

make tea

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POST     /dashboard/addtodo      Dashboard.addTodo
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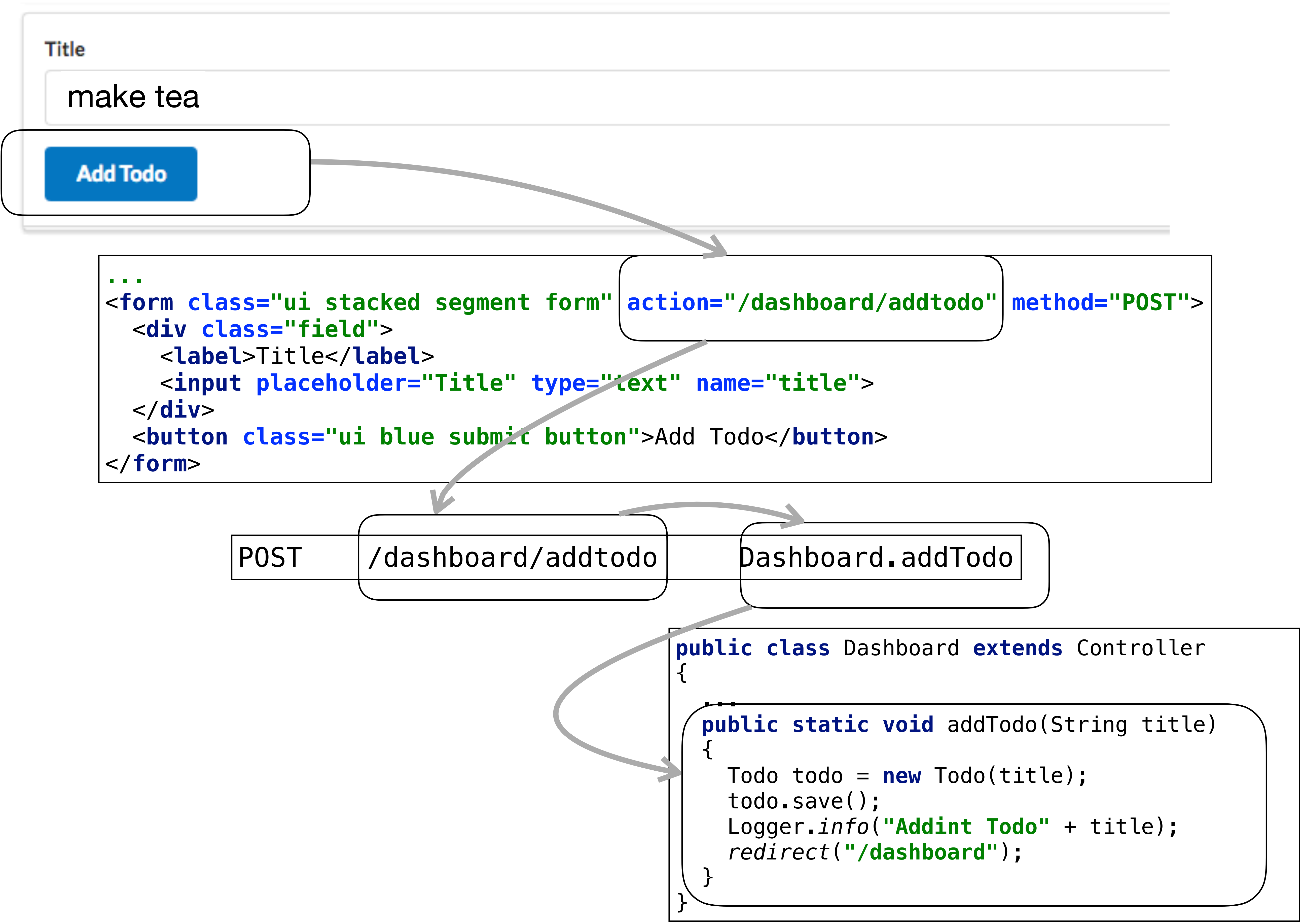
Dashboard Controller - Add Todos



Title

make tea

```
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  <div class="field">
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</form>
```
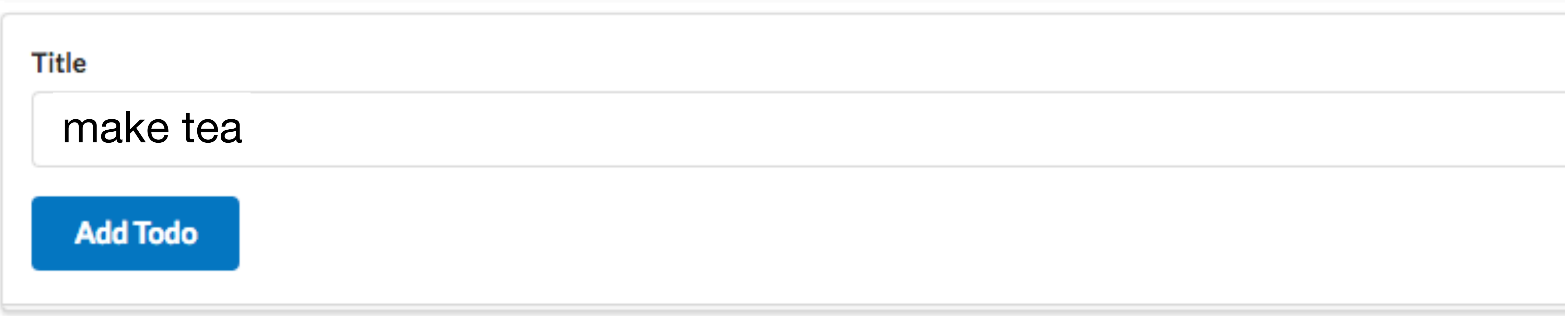

```
POST     /dashboard/addtodo        Dashboard.addTodo
```

```
public class Dashboard extends Controller
{
  ...
  public static void addTodo(String title)
  {
    Todo todo = new Todo(title);
    todo.save();
    Logger.info("Addint Todo" + title);
    redirect("/dashboard");
  }
}
```

Dashboard Controller - Add Todos



Title

make tea

```
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<form class="ui stacked segment form" action="/dashboard/addtodo" method="POST">
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```

```
POST     /dashboard/addtodo      Dashboard.addTodo
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```
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    Logger.info("Addint Todo" + title);
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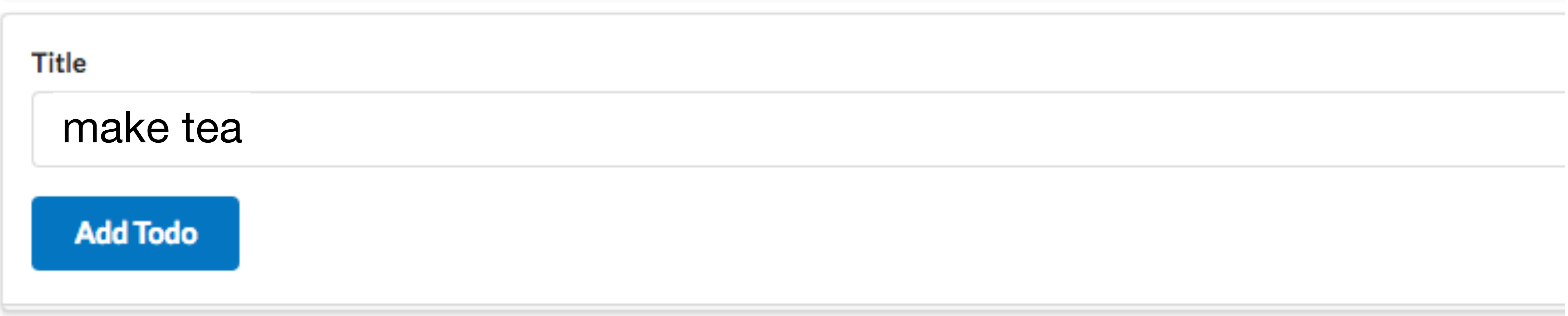
}
```

Dashboard Controller - Add Todos



Title

make tea

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```
POST    /dashboard/addtodo     Dashboard.addTodo
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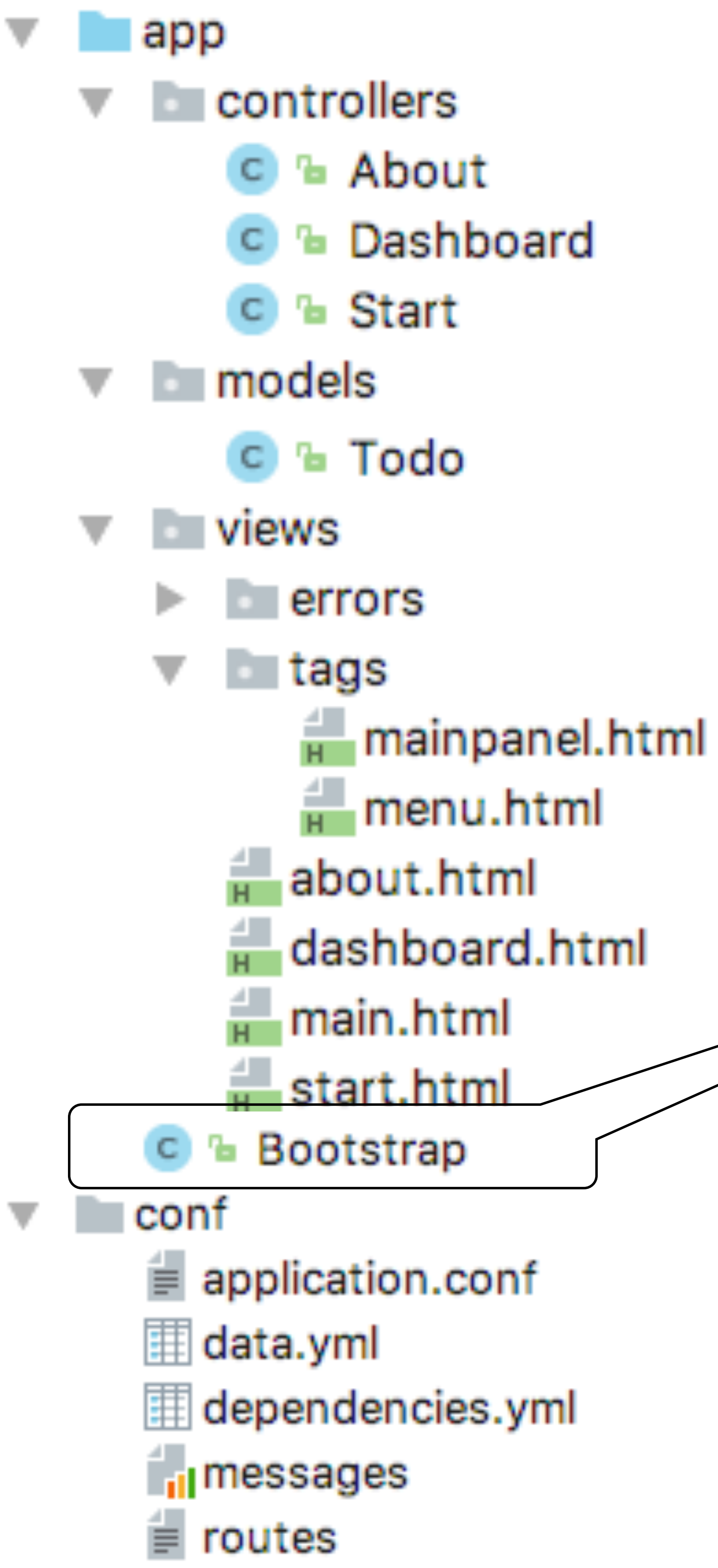
    todo.save();
    Logger.info("Addint Todo" + title);
    redirect("/dashboard");
  }
}
```

Bootstrap



- app
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    - About
    - Dashboard
    - Start
  - models
    - Todo
  - views
    - errors
    - tags
      - mainpanel.html
      - menu.html
    - about.html
    - dashboard.html
    - main.html
    - start.html
  - Bootstrap
- conf
  - application.conf
  - data.yml
  - dependencies.yml
  - messages
  - routes

```
import java.util.List;

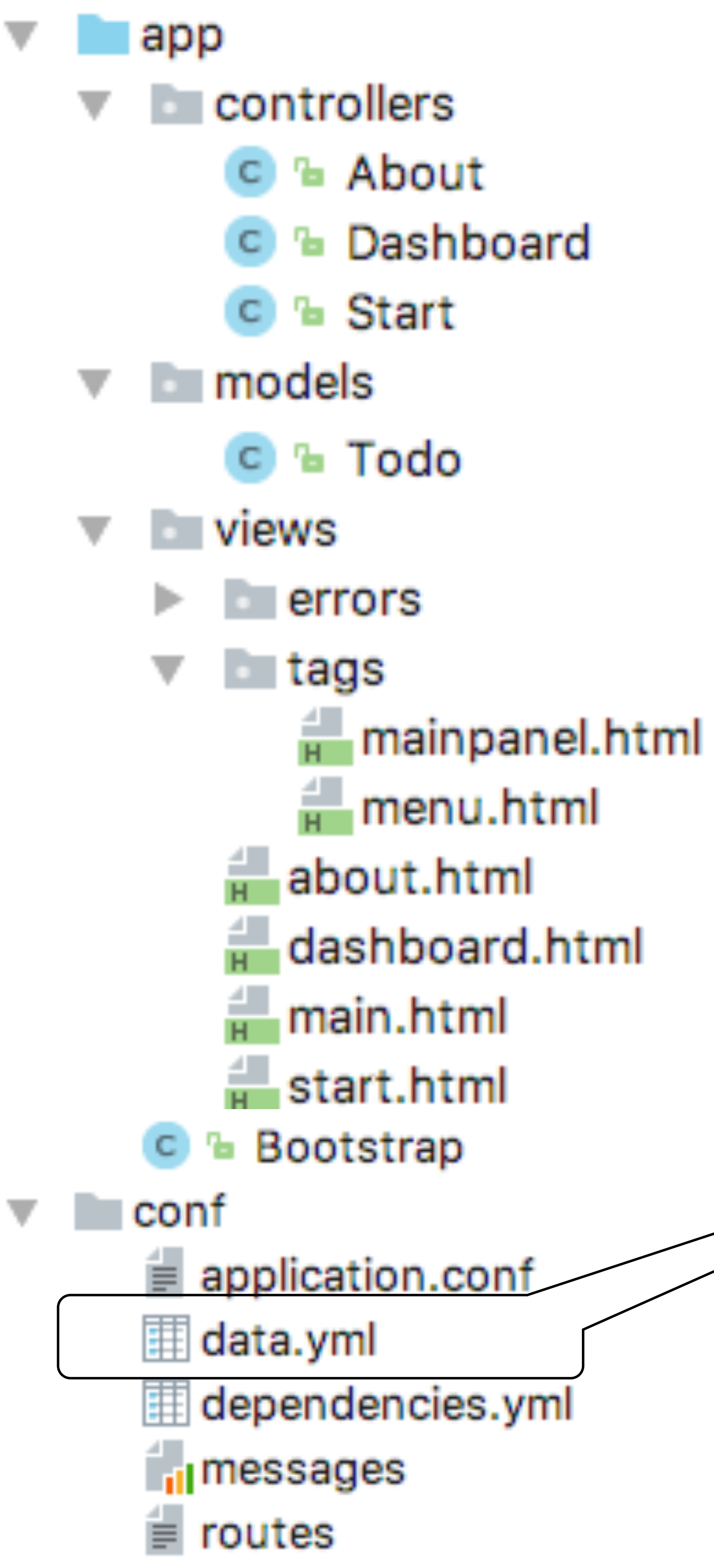
import play.*;
import play.jobs.*;
import play.test.*;

import models.*;

@OnApplicationStart
public class Bootstrap extends Job
{
  public void doJob()
  {
    Fixtures.loadModels("data.yml");
  }
}
```

This method executes every time application starts/restarts

Bootstrap



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  Bootstrap
conf
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```

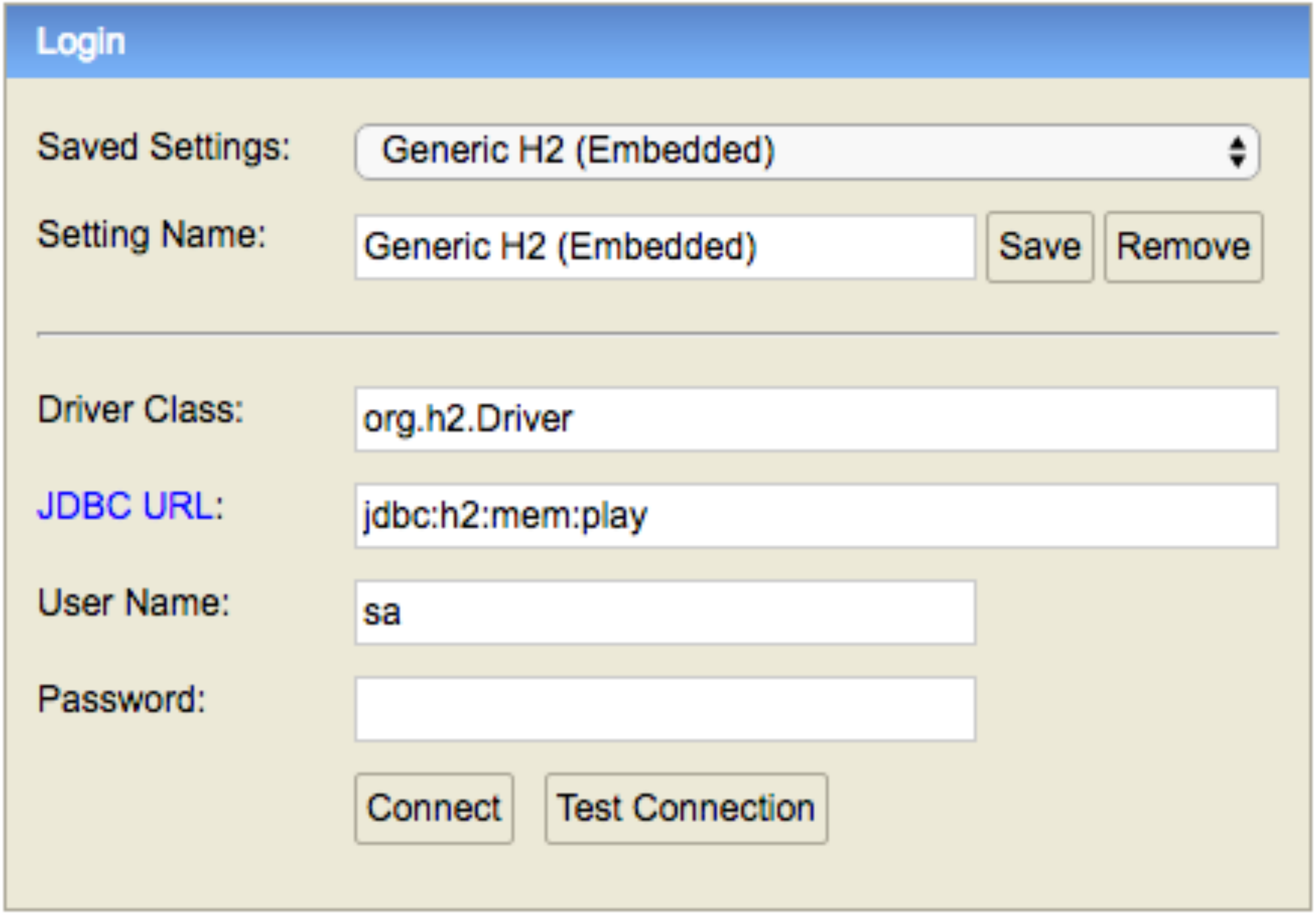
```yaml
Todo(t1):
  title: Make tea

Todo(t2):
  title: Go for snooze

Todo(t3):
  title: Make more tea
```

Todo Objects loaded by Bootstrap

http://localhost:9000/@db



Saved Settings: Generic H2 (Embedded)

Setting Name: Generic H2 (Embedded)

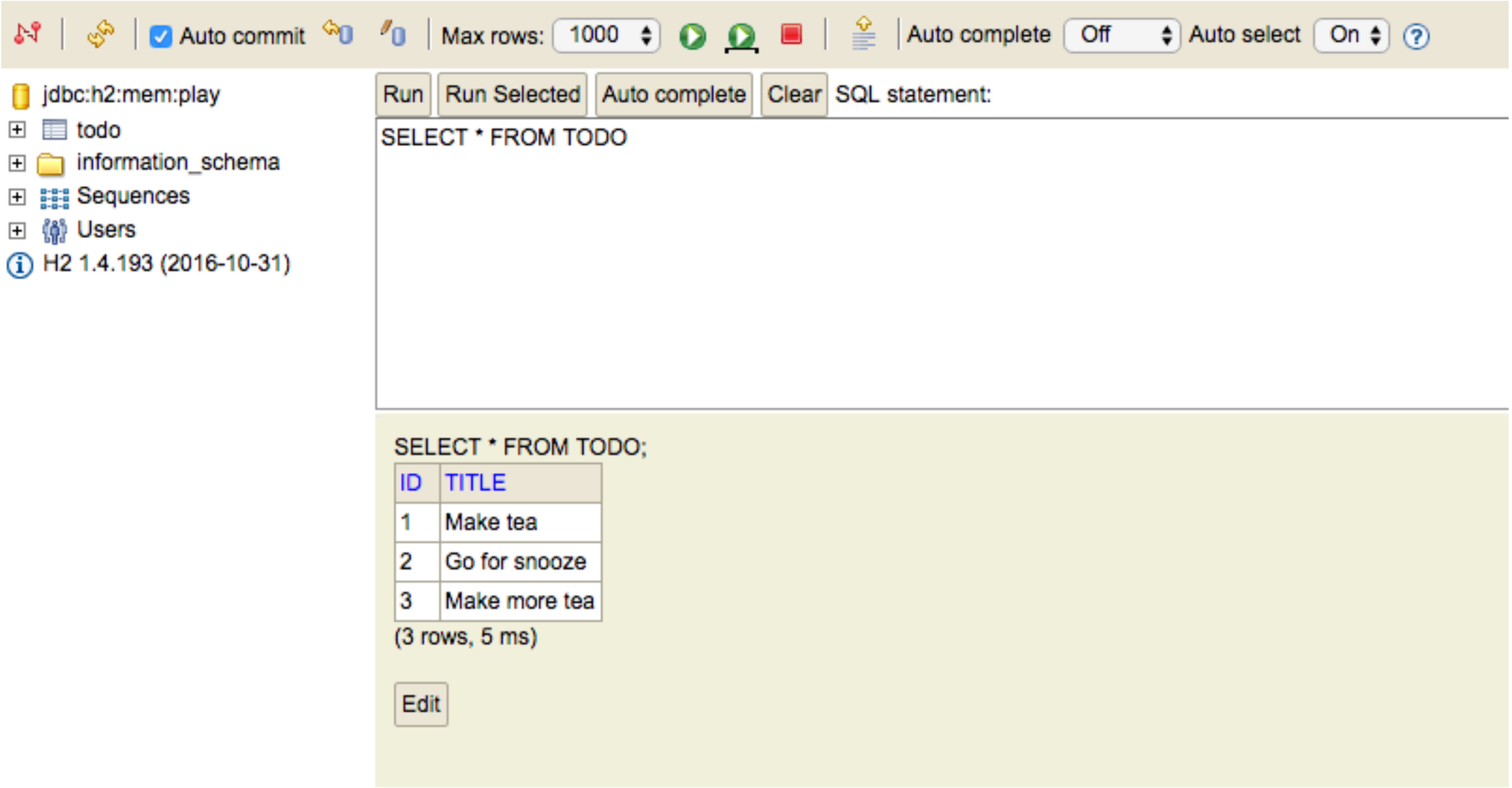
Driver Class: org.h2.Driver

JDBC URL: jdbc:h2:mem:play

User Name: sa

Password:

localhost:9000/@db



☑ Auto commit

Max rows: 1000

Auto complete Off

Auto select On

jdbc:h2:mem:play

- todo
- information_schema
- Sequences
- Users

H2 1.4.193 (2016-10-31)

SQL statement:

```
SELECT * FROM TODO
```

SELECT * FROM TODO;

ID	TITLE
1	Make tea
2	Go for snooze
3	Make more tea

(3 rows, 5 ms)