Views

Playlist Views

Playlist Dashboard About

Beethoven Sonatas

Song	Artist
Piano Sonata No. 3	Beethoven
Piano Sonata No. 7	Beethoven
Piano Sonata No. 10	Beethoven

Beethoven Concertos

Song	Artist
Piano Concerto No. 1	Beethoven
Piano Concerto No. 12	Beethoven
Piano Concerto No. 23	Beethoven

Static Version

All information in html page

```
dashboard.html
```

Beethoven Sonatas

Song	Artist
Piano Sonata No. 3	Beethoven
Piano Sonata No. 7	Beethoven
Piano Sonata No. 10	Beethoven

Beethoven Concertos

Song	Artist
Piano Concerto No. 1	Beethoven
Piano Concerto No. 12	Beethoven
Piano Concerto No. 23	Beethoven

listsongs.html

```
<thead>
 Song
  Artist
 </thead>
Piano Sonata No. 3
 >
  Beethoven
 >
  Piano Sonata No. 7
 >
  Beethoven
 >
  Piano Sonata No. 10
 <td>
  Beethoven
```

Model Playlist in Application

playlist [playlist master ↓17]

controllers

📑 start.html

About.java Admin.java Dashboard.java PlaylistCtrl.java Models Package Start.java models Contains Simple Java Playlist.java Song.java Class for Song & ▼ Reproper views errors **Playlist** tags about.html ashboard.html main.html

R > playlist [playlist master ↓17] Controllers About.java Admin.java Dashboard.java PlaylistCtrl.java Start.java ▼ models Playlist.java Song.java ▼ Representation views errors tags about.html ashboard.html main.html 📑 start.html

Song & Playlist

```
package models;

public class Song
{
   public String title;
   public String artist;

   public Song(String title, String artist)
   {
     this.title = title;
     this.artist = artist;
   }
}
```

```
package models;
import java.util.ArrayList;
import java.util.List;

public class Playlist
{
   public String title;
   public List<Song> songs = new ArrayList<Song>();

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

One To Many Relationship

```
package models;
import java.util.ArrayList;
import java.util.List;

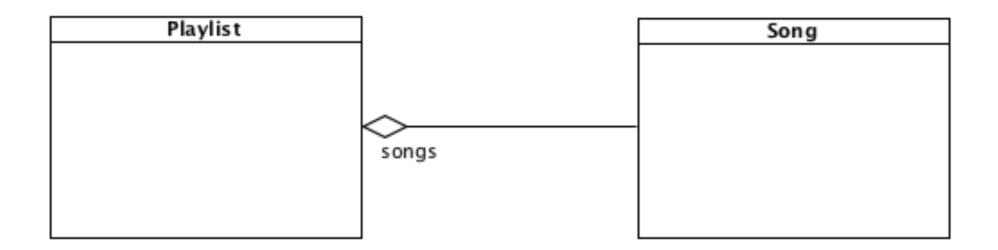
public class Playlist
{
   public String title;
   public List<Song> songs = new ArrayList<Song>();

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

```
package models;

public class Song
{
   public String title;
   public String artist;

   public Song(String title, String artist)
   {
      this.title = title;
      this.artist = artist;
   }
}
```



Creating Model Objects

Create a playlist with 3 songs

Send the playlist to the view

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

    Song s1 = new Song("Piano Sonata No. 3", "Beethoven");
    Song s2 = new Song("Piano Sonata No. 7", "Beethoven");
    Song s3 = new Song("Piano Sonata No. 10", "Beethoven");
    Playlist playlist = new Playlist("Beethoven Sonatas");
    playlist.songs.add (s1);
    playlist.songs.add (s2);
    playlist.songs.add (s3);

    render ("dashboard.html", playlist);
}
```

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

   Song s1 = new Song("Piano Sonata No. 3", "Beethoven");
   Song s2 = new Song("Piano Sonata No. 7", "Beethoven");
   Song s3 = new Song("Piano Sonata No. 10", "Beethoven");
   Playlist playlist = new Playlist("Beethoven Sonatas");
   playlist.songs.add (s1);
   playlist.songs.add (s2);
   playlist.songs.add (s3);

   render ("dashboard.html", playlist);
   }
}
```

Accessing Java Object from Template

dashboard.html

```
package models;

public class Playlist
{
   public String title;
   public List<Song> songs = new ArrayList<Song>();

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

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

      Song s1 = new Song("Piano Sonata No. 3", "Beethoven");
      Song s2 = new Song("Piano Sonata No. 7", "Beethoven");
      Song s3 = new Song("Piano Sonata No. 10", "Beethoven");
      Playlist playlist = new Playlist("Beethoven Sonatas");
      playlist.songs.add (s1);
      playlist.songs.add (s2);
      playlist.songs.add (s3);

      render ("dashboard.html", playlist);
   }
}
```

Iterating through a list

listsongs.html

```
<thead>
 Song
  Artist
 </thead>
#{list items:_playlist.songs, as:'song'}
  ${song.title}
   ${song.artist}
   #{/list}
```

playlist accessed via "_playlist" identifier

for loop to iterate through each song in the array

```
Song
Artist

Piano Concerto No. 1

Piano Concerto No. 12

Beethoven

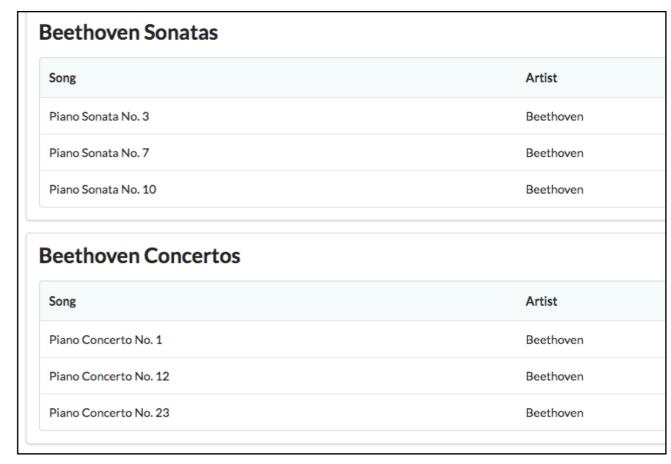
Piano Concerto No. 23

Beethoven
```

```
<thead>
  Song
   Artist
  </thead>
 #{list items:_playlist.songs, as:'song'}`
   <
     ${song.title}
    ${song_artist}
    #{/list}
```

Multiple Playlists

```
public class Dashboard extends Controller
 public static void index() {
    Logger.info("Rendering Dashboard");
    Song s1 = new Song("Piano Sonata No. 3", "Beethoven");
    Song s2 = new Song("Piano Sonata No. 7", "Beethoven");
    Song s3 = new Song("Piano Sonata No. 10", "Beethoven");
    Playlist p1 = new Playlist("Beethoven Sonatas");
    p1.songs.add (s1);
    p1.songs.add (s2);
    p1.songs.add (s3);
    Song s4 = new Song("Piano Concerto No. 1", "Beethoven");
    Song s5 = new Song("Piano Concerto No. 12", "Beethoven");
    Song s6 = new Song("Piano Concerto No. 23", "Beethoven");
    Playlist p2 = new Playlist("Beethoven Concertos");
    p2.songs.add (s4);
    p2.songs.add (s5);
    p2.songs.add (s6);
    List<Playlist> playlists = new ArrayList<Playlist>();
    playlists.add(p1);
    playlists.add(p2);
    render ("dashboard.html", playlists);
```



An array of 2 playlists passed to view

```
public class Dashboard extends Controller
  public static void index() {
    Logger.info("Rendering Dashboard");
                                                               Song
    Song s1 = new Song("Piano Sonata No. 3", "Beethoven' Song s2 = new Song("Piano Sonata No. 7", "Beethoven'
    Song s3 = new Song("Piano Sonata No. 10", "Beethove
    Playlist p1 = new Playlist("Beethoven Sonatas");
    p1.songs.add (s1);
    p1.songs.add (s2);
    p1.songs.add (s3);
    Song s4 = new Song("Piano Concerto No. 1", "Beethove
    Song s5 = new Song("Piano Concerto No. 12", "Beetho
    Song s6 = new Song("Piano Concerto No. 23", "Beetho
    Playlist p2 = new Playlist("Beethoven Concertos");
    p2.songs.add (s4);
    p2.songs.add (s5);
    p2.songs.add (s6);
    List<Playlist> playlists = new ArrayList<Playlist>();
    playlists.add(p1);
    playlists.add(p2);
    render ("dashboard.html", playlists);
```

```
Beethoven Sonatas
                                                                          Artist
 Piano Sonata No. 3
                                                                          Beethoven
 Piano Sonata No. 7
                                                                          Beethoven
                                                                          Beethoven
 Piano Sonata No. 10
Beethoven Concertos
 Song
                                                                          Artist
 Piano Concerto No. 1
                                                                          Beethoven
 Piano Concerto No. 12
                                                                          Beethoven
 Piano Concerto No. 23
                                                                          Beethoven
```

```
public static void index() {
  Logger.info("Rendering Dashboard");
  //...
  List<Playlist> playlists = new ArrayList<Playlist>();
  playlists.add(p1);
  playlists.add(p2);

render ("dashboard.html", playlists);
}
```

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

#{menu id:"dashboard"/}

#{list items:playlists, as:'playlist'}

<section class="ui segment">

<h2 class="ui header">

</h2 class="ui header
```

Pass the entire playlist to the listsongs partial

```
public static void index() {
  Logger.info("Rendering Dashboard");
  //...
  List<Playlist> playlists = new ArrayList<Playlist>(
    playlists.add(p1);
  playlists.add(p2);

  render ("dashboard.html", playlists);
}

#{menu id:"dashboard"/}
#{list items:playlists, add(p2);
```

```
Beethoven Sonatas
 Song
                                                                           Artist
 Piano Sonata No. 3
                                                                           Beethoven
 Piano Sonata No. 7
                                                                           Beethoven
 Piano Sonata No. 10
                                                                           Beethoven
Beethoven Concertos
                                                                           Artist
 Song
 Piano Concerto No. 1
                                                                           Beethoven
 Piano Concerto No. 12
                                                                           Beethoven
 Piano Concerto No. 23
                                                                           Beethoven
```

```
<thead>
  Song
  Artist
 </thead>
#{list items:_playlist.songs, as:'song'}
   ${song.title}
   ${song.artist}
   #{/list}
```