Mobile Application Development

Produced
by

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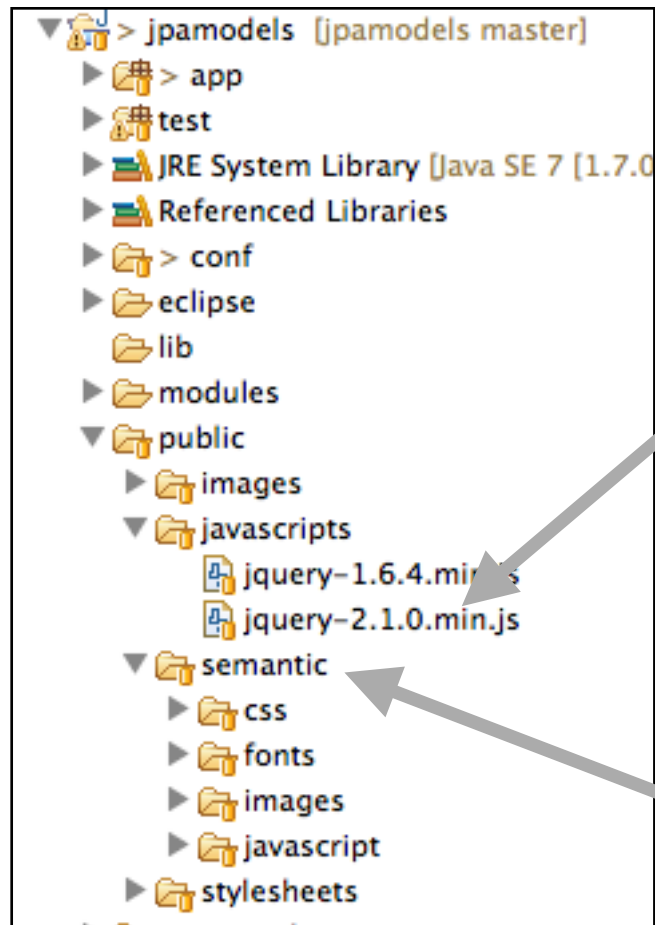
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UI

Semantic UI & JQuery

▼ 🔒 > jpamodels [jpamodels master]
  ▶ 📦 > app
  ▶ 📦 test
  ▶ 📚 JRE System Library [Java SE 7 [1.7.0
  ▶ 📚 Referenced Libraries
  ▶ 📁 > conf
  ▶ 📁 eclipse
  📁 lib
  ▶ 📁 modules
  ▼ 📁 public
    ▶ 📁 images
    ▼ 📁 javascripts
      📄 jquery-1.6.4.min.js
      📄 jquery-2.1.0.min.js
    ▼ 📁 semantic
      ▶ 📁 css
      ▶ 📁 fonts
      ▶ 📁 images
      ▶ 📁 javascript
    ▶ 📁 stylesheets

2.1.5

Semantic UI

User Interface is the language of the web

Get Started   What's New in 2.1
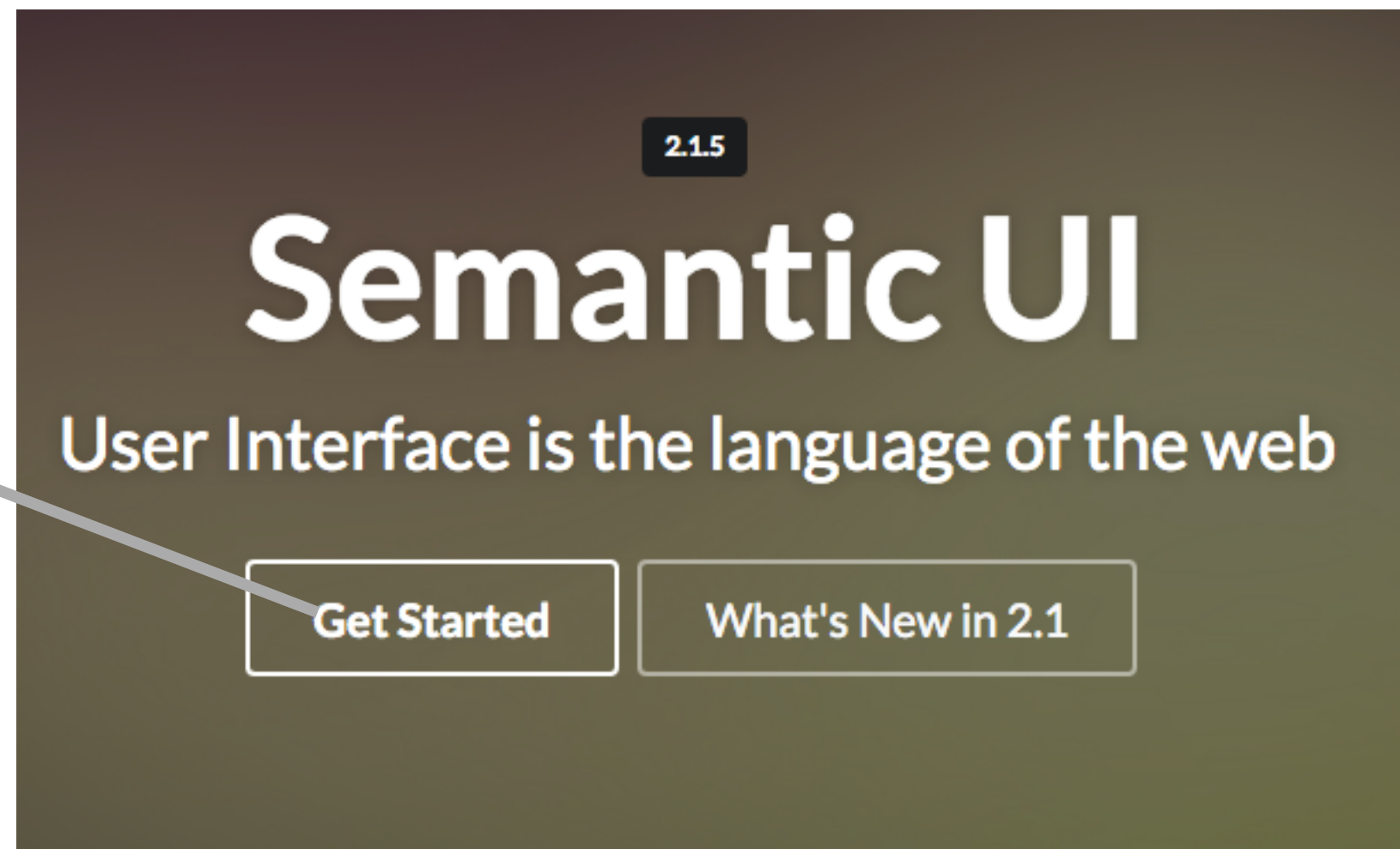
Alternatively -

- Just link to the CDN based resources in main.html

```html
<!DOCTYPE html>
<html>
  <head>
    <title>#{get 'title' /}</title>
    <meta charset="${_response_encoding}">
    <link rel="stylesheet"href="https://cdnjs.cloudflare.com/ajax/libs/semantic-ui/2.1.4/semantic.min.css"type="text/css">
     <script type="text/javascript" src="http://cdnjs.cloudflare.com/ajax/libs/jquery/2.0.3/jquery.min.js"></script>
     <script type="text/javascript" src="https://cdnjs.cloudflare.com/ajax/libs/semantic-ui/2.1.4/semantic.min.js"></script>
    <link rel="stylesheet" media="screen" href="@{'/public/stylesheets/main.css'}">
    #{get 'moreStyles' /}
    <link rel="shortcut icon" type="image/png" href="@{'/public/images/favicon.png'}">
  </head>
  <body>
    #{doLayout /}

    #{get 'moreScripts' /}
</body>
</html>
```

Division & Sponsors Controllers

Divisions	Clubs	Players	Sponsors

Divisions

Division	
senior	tramore
	dunmore
junior	fenor

```java
public class DivisionController extends Controller
{
  public static void index()
  {
    List<Division> divisions = Division.findAll();

    render (divisions);
  }
}
```

Divisions	Clubs	Players	Sponsors

Sponsors

Sponsor	Clubs
newsagent	
pub	

```java
public class SponsorsController extends Controller
{
  public static void index()
  {
    List<Sponsor> sponsors = Sponsor.findAll();
    render (sponsors);
  }
}
```

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Clubs Controller (2)

```java
public class ClubsController extends Controller
{

  public static void index()
  {
    List<Club> clubs = Club.findAll();
    render (clubs);
  }

  public static void delete(Long id)
  {
    Club club = Club.findById(id);
    if (club != null)
    {
      Logger.info("Trying to delete " + club.name);
      List<Division> divisions = Division.findAll();
      for (Division division : divisions)
      {
        if (division.members.contains(club))
        {
          division.members.remove(club);
          division.save();
          Logger.info ("removing club from division");
        }
      }
      club.delete();
    }
    index();
  }
}
```

| Divisions | Clubs | Players | Sponsors |

Clubs

Club	
dunmore	jim
	mary
tramore	sam
	john
fenor	mike
	linda

Players Controller (1)

Players

```java
public class PlayersController extends Controller
{
  public static void index()
  {
    List<Player> players = Player.findAll();
    render (players);
  }

  public static void delete(Long id)
  {
    Player player = Player.findById(id);
    if (player != null)
    {
      player.club.removePlayer(player);
      player.club.save();
      player.delete();
    }
    index();
  }

  public static void newPlayer()
  {
    List<Club> clubs = Club.findAll();
    render(clubs);
  }

  public static void createPlayer(String name, String club)
  {
    Logger.info("Name: " + name + ": Club: " + club);

    Player player = new Player (name);
    Club theClub = Club.findByName(club);
    if (theClub != null)
    {
      theClub.addPlayer(player);
      theClub.save();
    }
    index();
  }
}
```
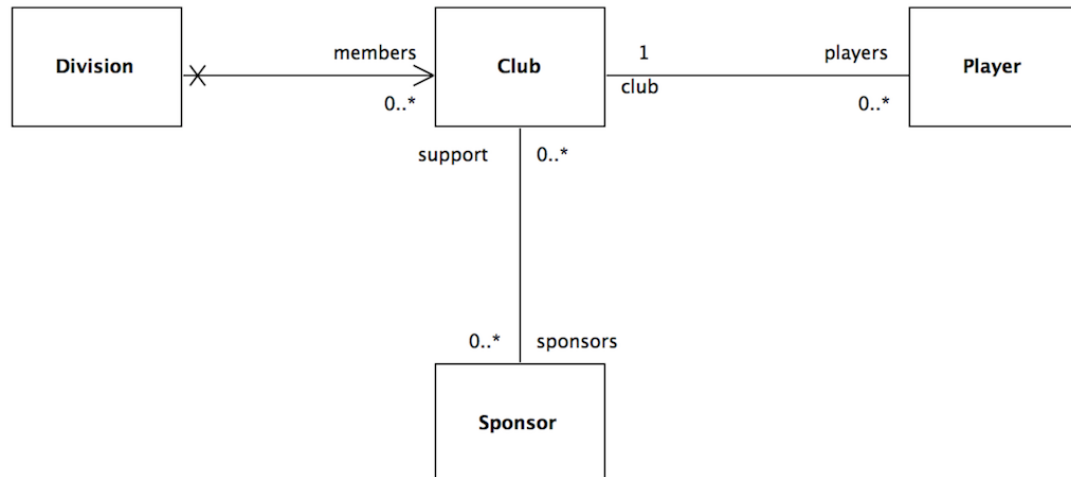
Delete Club

Divisions	**Clubs**	Players	Sponsors

Clubs

Club		
dunmore	jim mary	✖
tramore	sam john	✖
fenor	mike linda	✖


```html
<td>
  <a class="ui ui icon button" href="/clubs/delete/${club.id}">
   <i class="delete red icon"></i>
  </a>
</td>
```

GET	/clubs/delete/{id}	Clubs.delete

```java
public static void delete(Long id)
{
  Club club = Club.findById(id);
  if (club != null)
  {
    Logger.info("Trying to delete " + club.name);
    List<Division> divisions = Division.findAll();
    for (Division division : divisions)
    {
      if (division.members.contains(club))
      {
        division.members.remove(club);
        division.save();
        Logger.info ("removing club from division");
      }
    }
    club.delete();
  }
  index();
}
```
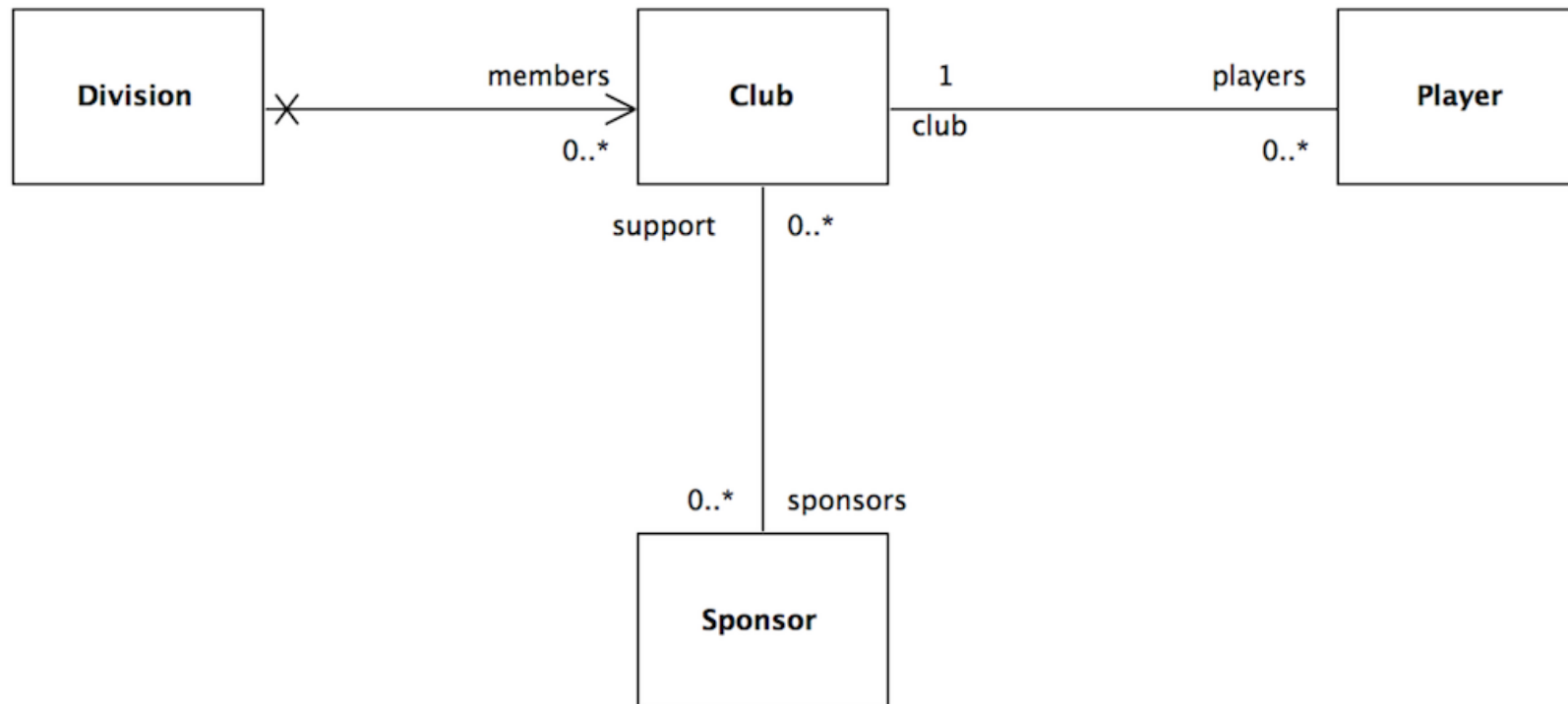
Delete Division

Divisions	Clubs	Players	Sponsors

Divisions

Division		
senior	tramore	✖
	dunmore	
junior	fenor	✖

```
<td>
  <a class="ui ui icon button" href="/divisions/delete/${division.id}">
   <i class="delete red icon"></i>
  </a>
</td>
```

```
GET    /divisions/delete/{id}                    Divisions.delete
```

```
public static void delete(Long id)
{
  Division division = Division.findById(id);
  division.delete();
  index();
}
```

Division ✕————members————▷ Club   1 ———players——— Player
                            0..*   club   0..*

support 0..*

0..* sponsors

Sponsor

Show Sponsors Clubs

| Divisions | Clubs | Players | **Sponsors** |

Sponsors

Sponsor	Clubs	
pub	tramore	✖
newsagent	tramore fenor	✖

Table inside a table

Divisions	Clubs	Players	Sponsors

Sponsors

Sponsor	Clubs	
pub	tramore	✖
newsagent	tramore fenor	✖

```
<table class="ui table">
  <thead>
    <tr>
      <th>Sponsor</th>
      <th>Clubs</th>
      <th></th>
    </tr>
  </thead>
  <tbody>
    #{list items:sponsors, as:'sponsor'}
      <tr>
        <td>${sponsor.name}</td>
      <td>
       <table class "ui table">
         <tr>
          #{list items:sponsor.support, as:'club'}
            <td>${club.name}</td> </tr>
          #{/list}
         </tr>
       </table>
      </td>
        <td></td>
      </tr>
    #{/list}
  </tbody>
</table>
```

Divisions	Clubs	Players	Sponsors

Sponsors

Sponsor	Clubs	
pub	tramore	✖
newsagent	tramore fenor	✖

```html
<td>
  <a class="ui ui icon button" href="/sponsors/delete/${sponsor.id}">
   <i class="delete red icon"></i>
  </a>
</td>
```
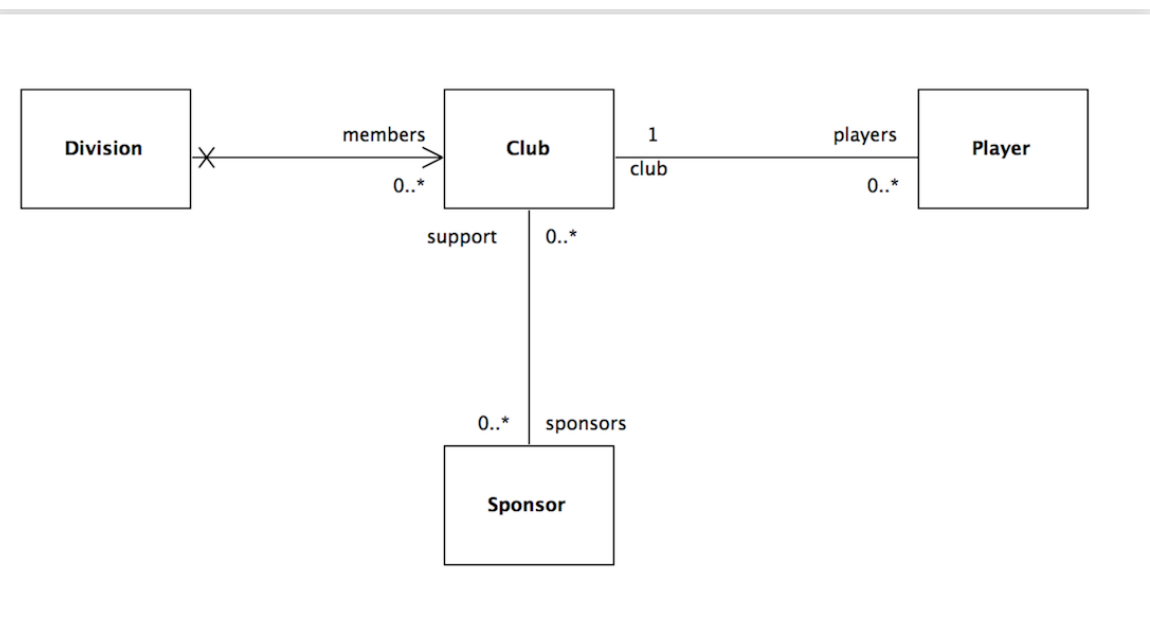
```
GET    /sponsors/delete/{id}                    Sponsors.delete
```



```java
public static void delete(Long id)
{
  Sponsor sponsor = Sponsor.findById(id);

  for (Club club  : sponsor.support)
  {
    club.sponsors.remove(sponsor);
    club.save();
  }

  sponsor.delete();
  index();
}
```

| Divisions | Clubs | Players | Sponsors |

Players

Player	Club	
jim	dunmore	✖
mary	dunmore	✖
sam	tramore	✖

👤 **ADD PLAYER**

```
GET    /players/addplayer                    Players.addPlayer
POST   /players/newplayer                    Players.newPlayer
```

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

<section class="ui raised form segment">
  <form action="/players/newplayer" method="POST">
    <div class="field">
      <label> Player Name </label>
      <input type="text" name="name">
    </div>
    <button class="ui blue submit button">Add</button>
  </form>
</section>
```

```
public static void addPlayer()
{
  render();
}

public static void newPlayer(String name)
{
  Player player = new Player (name);
  player.save();
  index();
}
```

Player Name

james

ADD

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Null Deference error in Templates

- If the player is not in a club

  - then null type violation error here

  - Attempt to dereference null reference - there is no club member in player

```
#{list items:players, as:'player'}
  <tr>
    <td>${player.name}</td>
    <td>  ${player.club.name} </td>
    <td>
    <a class="ui ui icon button" href="/players/delete/${player.id}">
     <i class="delete red icon"></i>
    </a>
  </td>
    <td></td>
  </tr>
#{/list}
```

Null Safe Operator in Templates

Divisions | **Clubs** | Players | Sponsors

Clubs

Club		
dunmore	jim mary	✖
tramore	sam	✖
fenor		✖

```
#{list items:players, as:'player'}
  <tr>
    <td>${player.name}</td>
    <td>  ${player.club?.name} </td>
    <td>
    <a class="ui ui icon button" href="/players/delete/${player.id}">
     <i class="delete red icon"></i>
    </a>
  </td>
    <td></td>
  </tr>
#{/list}
```
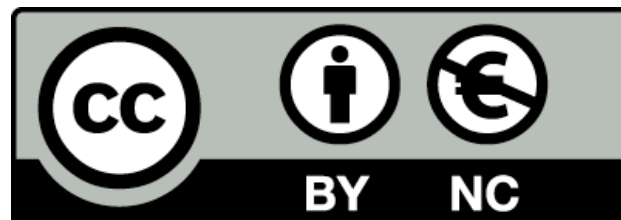
player.club?.name

- ? is a 'null-safe' operator

- i.e. if there is a club, retrieve its name member, if not, then dont.

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