

# App Development & Modeling

BSc in Applied Computing

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Produced  
by

Eamonn de Leastar (edeleastar@wit.ie)

Department of Computing, Maths & Physics  
Waterford Institute of Technology

<http://www.wit.ie>

<http://elearning.wit.ie>



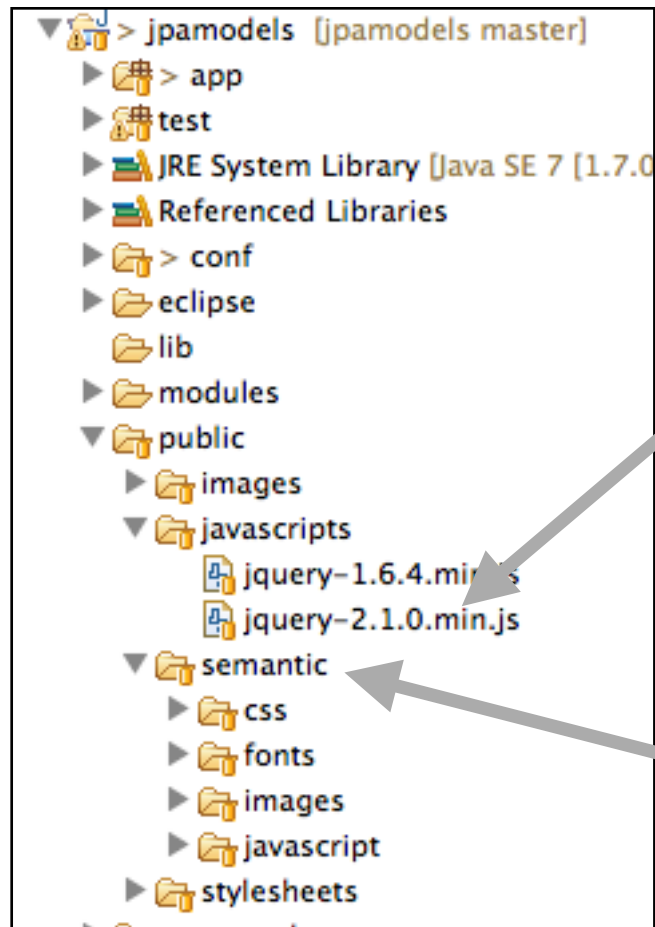
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UI

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# Semantic UI & JQuery



## jQuery 2.x

jQuery 2.x has the same API as jQuery 1.x, but *does not support Internet Explorer 6, 7, or 8*. All the notes in the [jQuery 1.9 Upgrade Guide](#) apply here as well. Since IE 6/7/8 are still relatively common, we recommend using the 1.x version unless you are certain no IE 6/7/8 users are visiting the site. Please read the [2.0 release notes](#) carefully.

[Download the compressed, production jQuery 2.1.0](#)

[Download the uncompressed, development jQuery 2.1.0](#)

[Download the map file for jQuery 2.1.0](#)

[jQuery 2.1.0 release notes](#)



# Alternatively -

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- Just link to the CDN based resources in main.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
<b>Divisions</b>			
Division			
senior	tramore		
	dunmore		
junior	fenor		

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

        render (divisions);
    }
}
```

Divisions	Clubs	Players	Sponsors
<b>Sponsors</b>			
Sponsor		Clubs	
newsagent			
pub			

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

        render (sponsors);
    }
}
```

# Clubs Controller (2)

```
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)

---

Divisions	Clubs	Players	Sponsors
<b>Players</b>			
Player	Club		
jim	dunmore		
mary	dunmore		
sam	tramore		
john	tramore		
mike	fenor		
linda	fenor		
 <b>ADD PLAYER</b>			

# Players

---

```
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
<b>Clubs</b>			
<b>Club</b>			
dunmore	jim mary	<input type="button" value="✖"/>	
tramore	sam john	<input type="button" value="✖"/>	
fenor	mike linda	<input type="button" value="✖"/>	

```

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

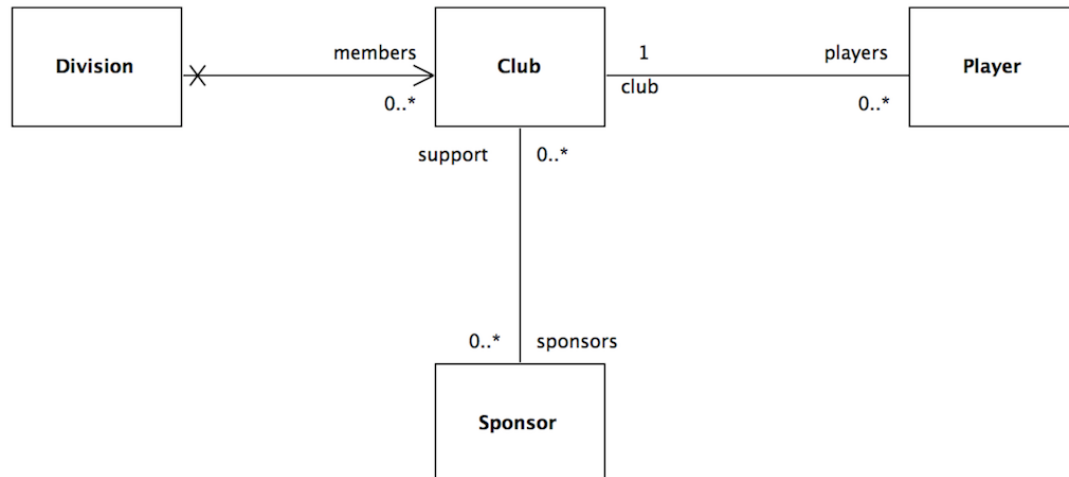
```

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

```

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();
}

```



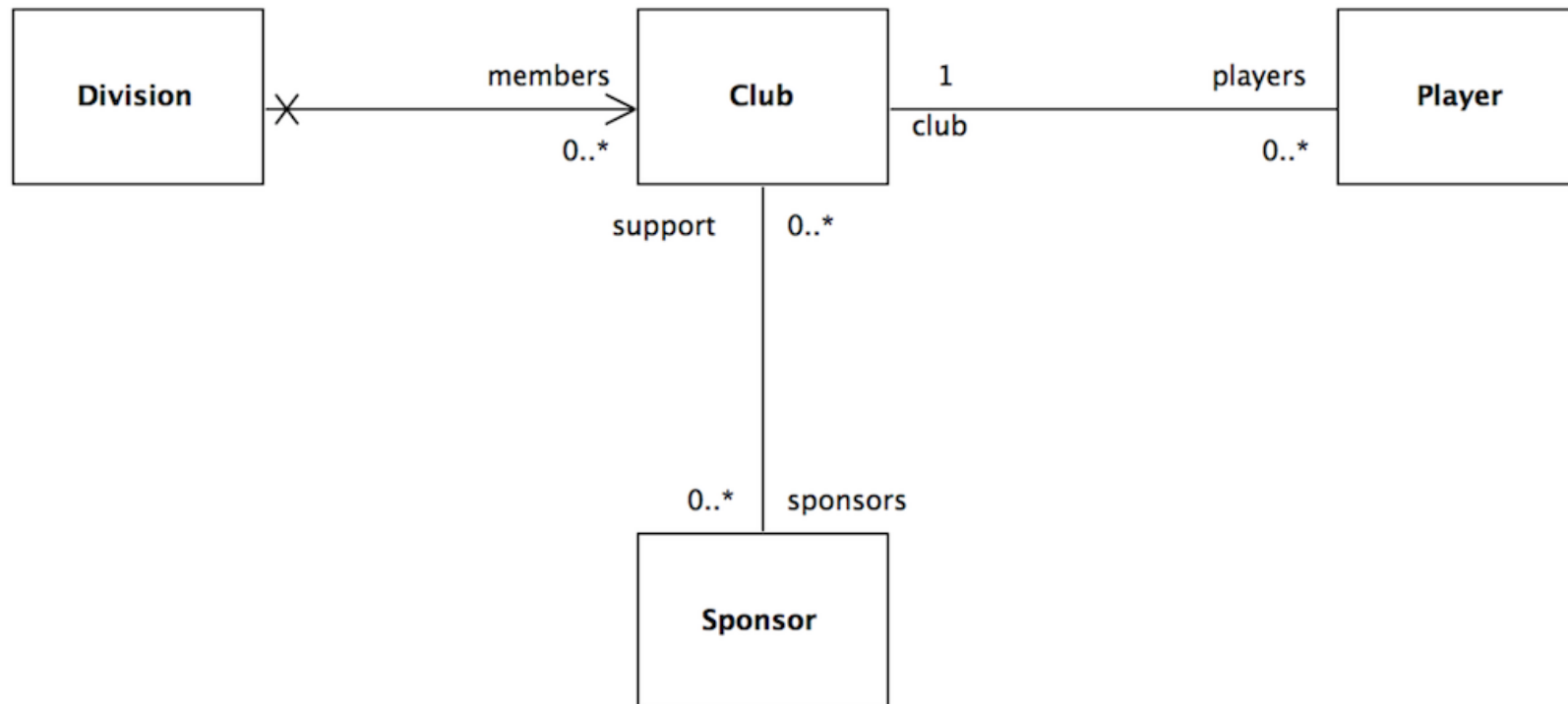
# Delete Division

Divisions	Clubs	Players	Sponsors
<b>Divisions</b>			
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();
}
```



# Show Sponsors Clubs

---

Divisions	Clubs	Players	Sponsors
<b>Sponsors</b>			
Sponsor	Clubs		
pub	tramore		
newsagent	tramore		
	fenor		

# Table inside a table

Divisions	Clubs	Players	Sponsors
<b>Sponsors</b>			
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>
      </td>
      <td></td>
    </tr>
    #{/list}
  </tbody>
</table>
```

# Delete Sponsors

Divisions	Clubs	Players	Sponsors
<b>Sponsors</b>			
Sponsor	Clubs		
pub	tramore		<input type="button" value="✖"/>
newsagent	tramore		<input type="button" value="✖"/>
	fenor		

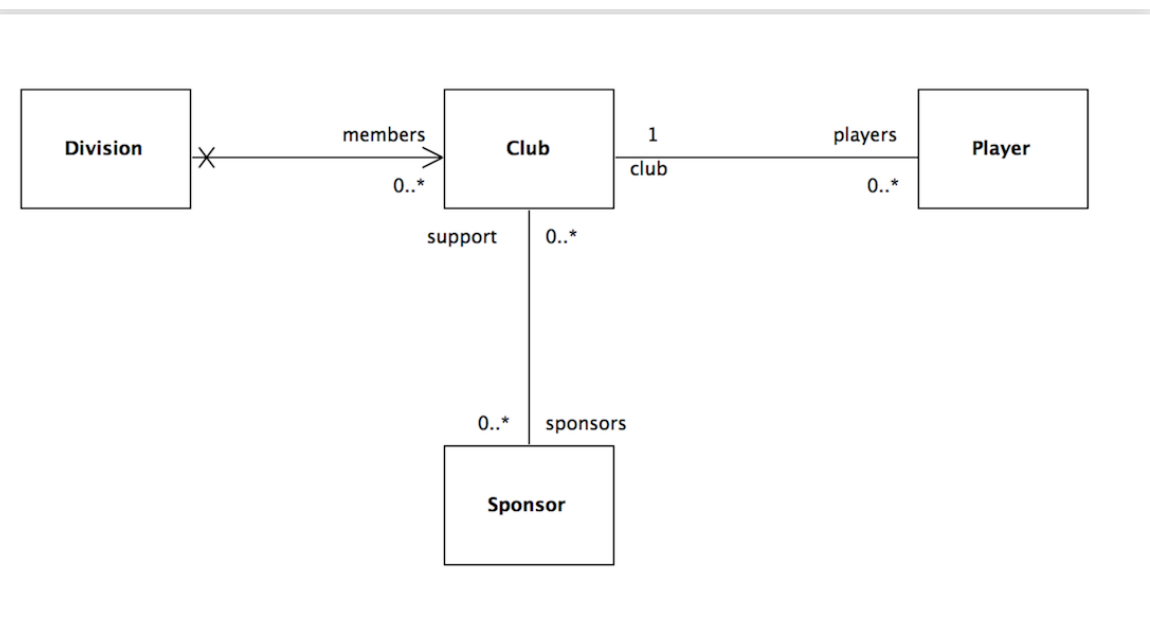
```
<td>
  <a class="ui ui icon button" href="/sponsors/delete/${sponsor.id}">
    <i class="delete red icon"></i>
  </a>
</td>
```

GET	/sponsors/delete/{id}	Sponsors.delete
-----	-----------------------	-----------------

```
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

# Create Player

GET    /players/addplayer  
 POST   /players/newplayer

Players.addPlayer  
 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

Divisions	Clubs	Players	Sponsors
<b>Clubs</b>			
Club			
dunmore	jim mary		✕
tramore	sam		✕
fenor			✕

# 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}

```

Divisions	Clubs	Players	Sponsors
<b>Clubs</b>			
Club			
dunmore	jim mary		✕
tramore	sam		✕
fenor			✕

# Null Safe Operator in Templates

player.club.?name

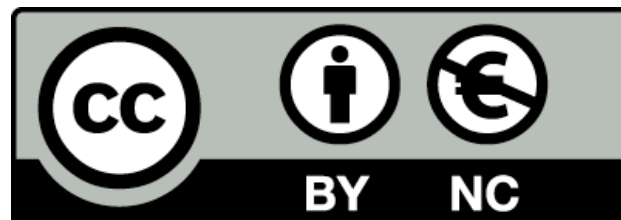
```

#{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}

```

- .? is a 'null-safe' operator
- i.e. if there is a club, retrieve its name member, if not, then dont.





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