

App Development & Modeling

BSc in Applied Computing

Produced
by

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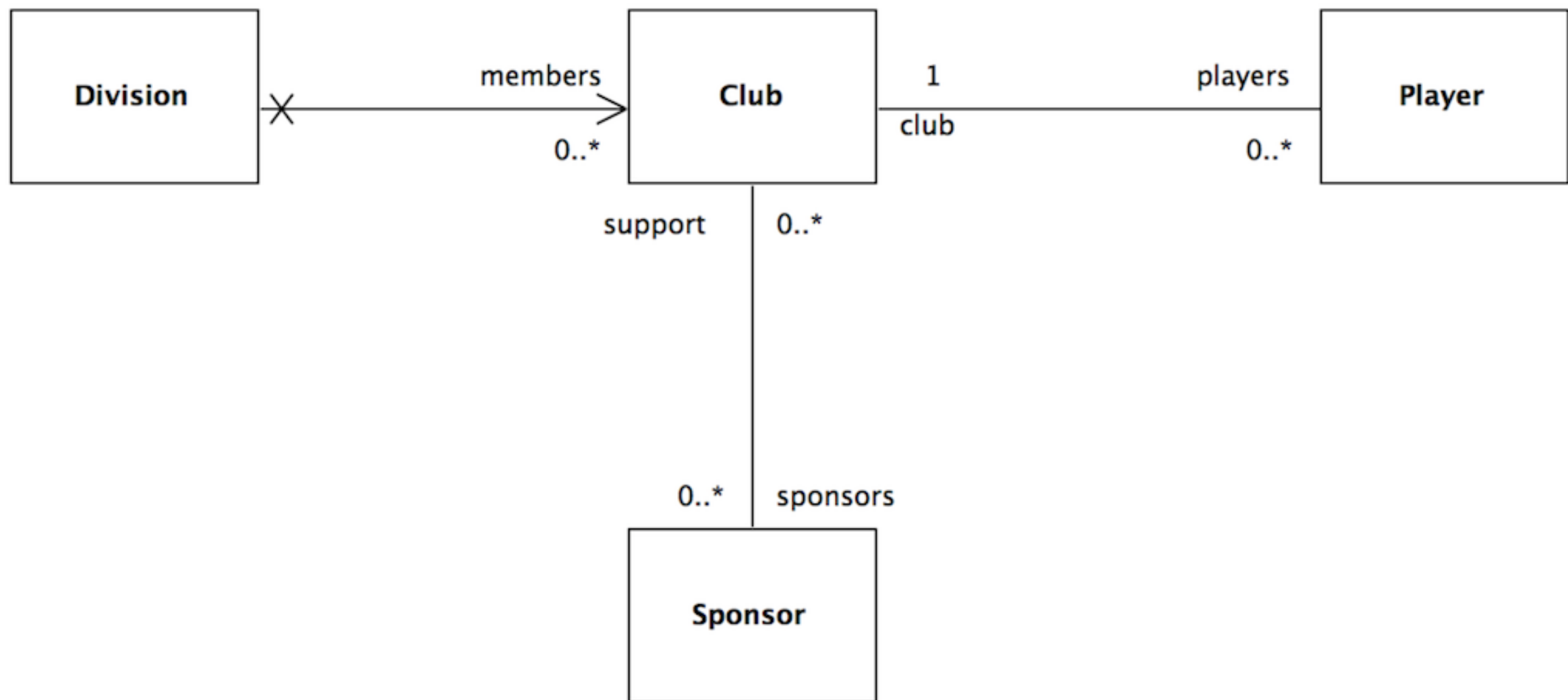


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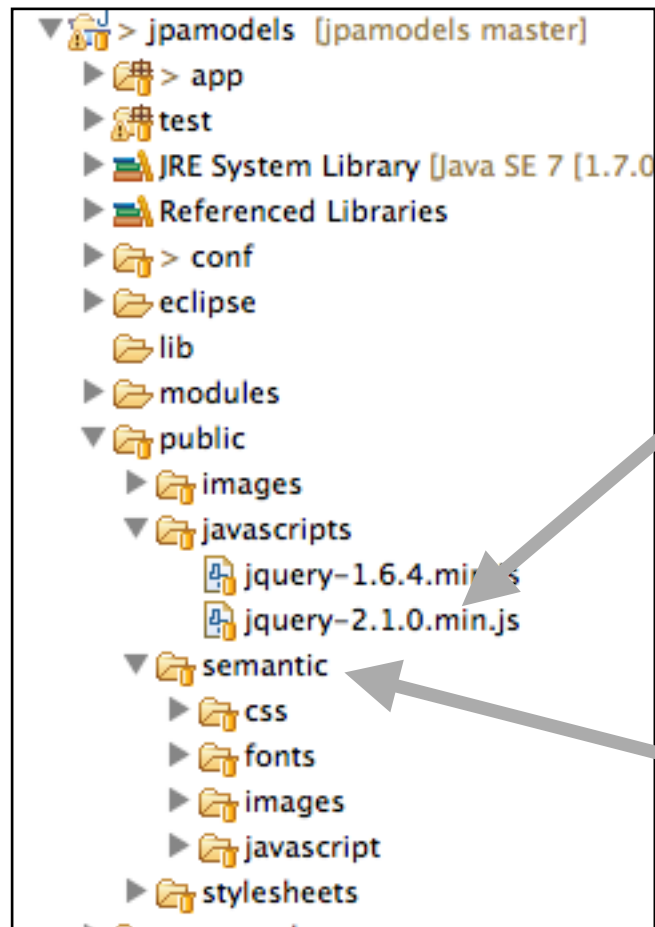


JPA 2

OneToMany, ManyToOne, ManyToMany



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](#)



Delete Club

Divisions	Clubs	Players	Sponsors
-----------	--------------	---------	----------

Clubs

Club		
dunmore	jim	<input type="button" value="X"/>
	mary	
tramore	sam	<input type="button" value="X"/>
	john	
fenor	mike	<input type="button" value="X"/>
	linda	

Delete Club

Divisions	Clubs	Players	Sponsors
Clubs			
Club			
dunmore	jim mary	✕	
tramore	sam john	✕	
fenor	mike linda	✕	

```

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

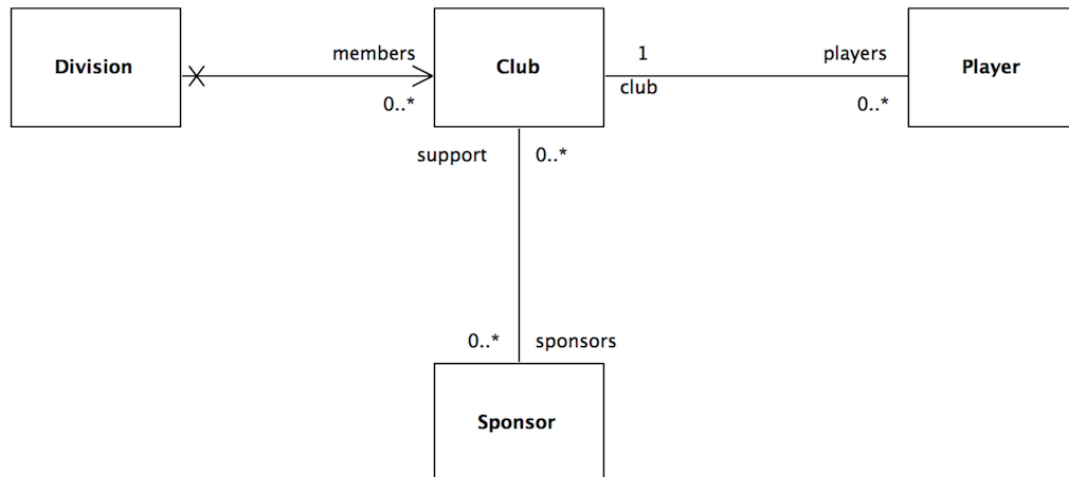
```

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();
}

```



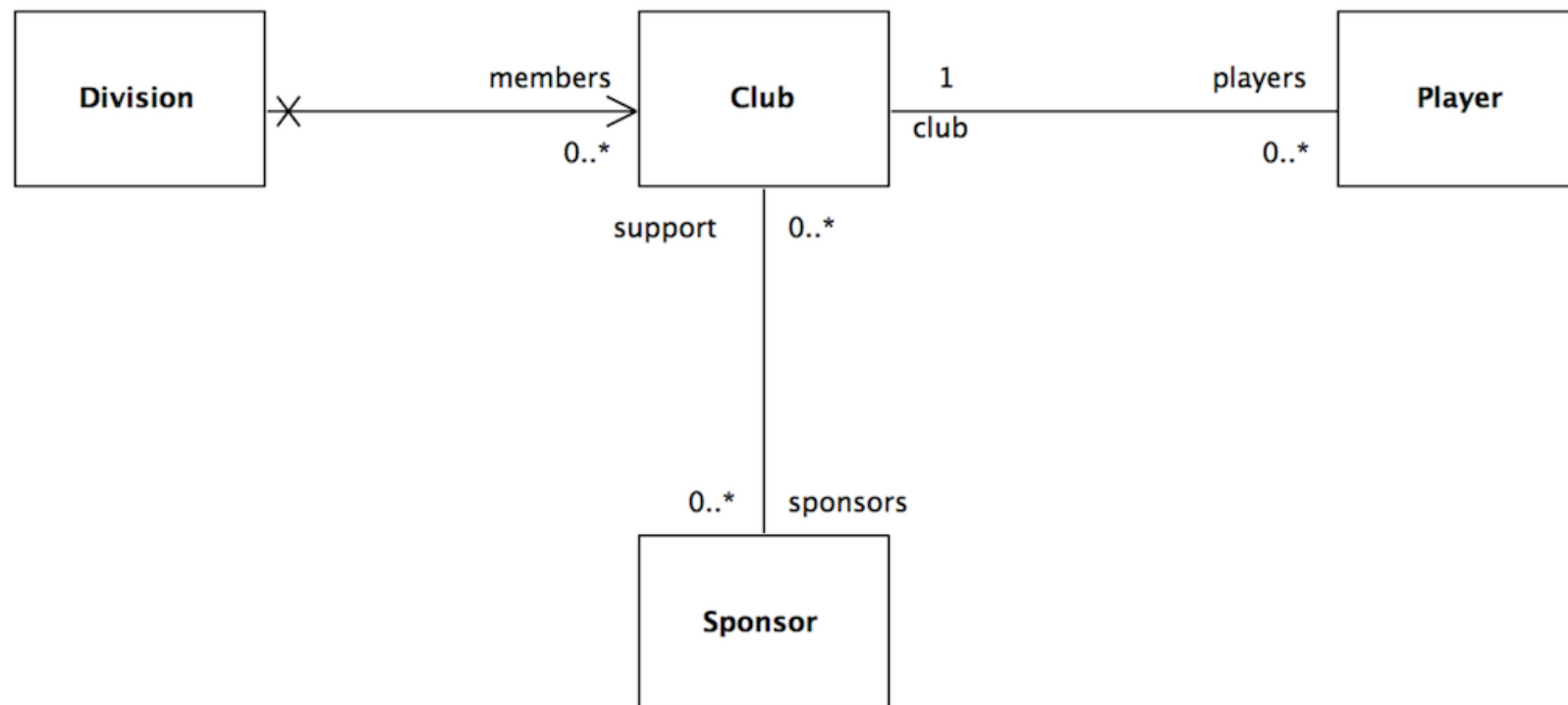
Delete Division

Divisions	Clubs	Players	Sponsors
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();
}
```



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>
    <tr>
      <td>{{sponsor.name}}</td>
      <td>
        <table class "ui table">
          <tr>
            <td>{{list items:sponsor.support, as:'club'}}
              <td>{{club.name}}</td> </tr>
            </tr>
          </table>
        </td>
      </tr>
    </tbody>
  </table>
```

Yaml file - Forward References

- Test data in Yaml file cannot refer to objects that have not been seen in the file yet (reading from top to bottom)
- Bidirectional references can be included by including the objects twice
 - Once at top (partial)
 - Once at end (complete)

```
Sponsor(pub):  
  name: pub  
  
Sponsor(newsagent):  
  name: newsagent
```

```
Club(tramore):  
  name: tramore  
  sponsors:  
    - pub  
    - newsagent  
  
Club(fenor):  
  name: fenor  
  sponsors:  
    - newsagent
```

```
Sponsor(newsagent):  
  name: newsagent  
  support:  
    - tramore  
    - fenor  
  
Sponsor(pub):  
  name: pub  
  support:  
    - tramore
```

Delete Sponsors

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

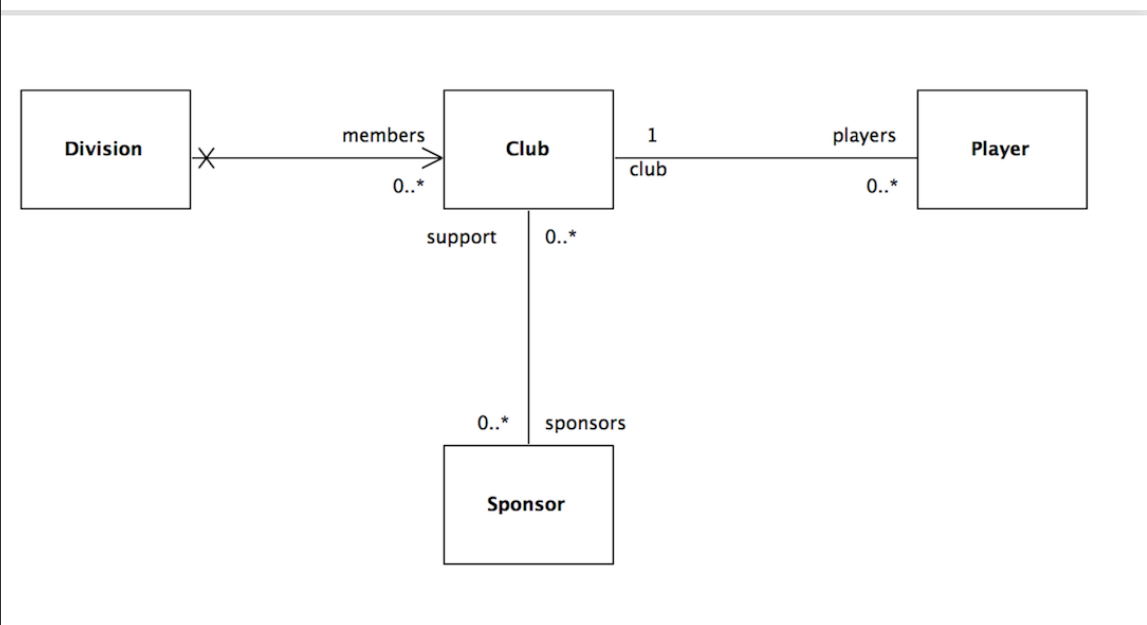
```
<td>
  <a class="ui ui icon button" href="/sponsors/delete/${sponsor.id}">
    <i class="delete red icon"></i>
  </a>
</td>
```

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

ADD

Divisions	Clubs	Players	Sponsors
Clubs			
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
Clubs			
Club			
dunmore	jim mary		✕
tramore	sam		✕
fenor			✕

Null Safe Operator in Templates

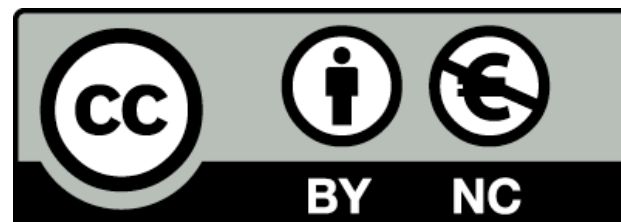
player.club.?name

```

#{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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