# CPSC 476: ASSIGNMENT 1

## SHARED EVENTS CALENDAR

CSPC 476 Assignment 1

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## DESCIPTION

The assignment architecture is Model 2. It is a design pattern used in JEE web application. It is known as Model-View-Controller (MVC) design pattern. The Controller Servlet –EventServlet.java- handles the user's request. intercepts all the incoming requests. EventServlet intercepts all the incoming requests. It receives request that contains action as parameter. Actions in JSP are hidden input field in form or <c:param> in <c:url>. Depend on action value the EventServlet will response by redirect request to View JSPs.

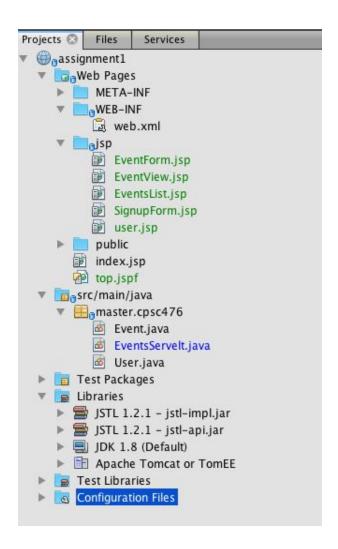
EventServlet-controller- get and puts data in java beans and these beans are then bound to the session or response to be sent to the JSP –view- to display the information. The assignment has two beans: User and Event. To pass variables between EventServlet and JSPs, the assignment use HTTPSession and HTTPRequest depend on scope. Request scope ends when the associated response is finished. The session scope ends when the session has been timed.

JSPs are the view component in this pattern. In that JSP use JSTL and EL to loop through the data in the request scoped bean and build an HTML table with that data. The assignment has the following JSPs:

- /jsp/EventForm.jsp : it represents event creation form.
- /jsp/SignupForm.jsp : it represents sign up form.
- /jsp/EventView.jsp : it represents event detail.
- /jsp/User.jsp: it represents a user information, events list of user interested list,
   and events list for user created events.
- /jsp/EventsList.jsp: it represents a list of all coming events and map with markers to events location.
- top.jspf: it contains login form, links to sign out, user home, events list.
- index.jsp: it is a welcome page. It forward to /jsp/EventsList.jsp.

The assignment uses HTML5 and JQuery in representation layer. HTML5 has many new features that rich user interface development such as dateTime-local input type and validation attributes. For example, in the assignment used dateTime-local for input event date, and used its attributes min=today date and max=after a year date to insure event date enter will be in next 360 day. Also, JQuery library simplify the representation scripting such as selection DOM elements and create plugin.

All javascript files, CSS, and images are located in public folder. I tried to put javascript files in js folder and images in other folder but tomcat not accept any folder other public!.



### Action values are:

- "createEvent" with post method: to create new event. EventServlet read event values from /jsp/EventForm.jsp. Then store in events list in memory, and it also store in user's created events list. It is required login.
- "signup" with get method: to show signup form by redirect to /jsp/SignupForm.jsp.
- "signout" with get method: to logout by remove user bean form HTTPSession.

- "create" with get method: to show event create form by redirect to /jsp/EventForm.jsp. It is required login.
- "view" with get method: to show event detail by redirect to /jsp/EventView.jsp.
   Event Id is passed as parameter. It is required login.
- "userHome" with get method: to show user detail by redirect to /jsp/User.jsp. User
   Id is passed as parameter. It is required login.
- "likeEvent" with get method: to add event to user interested list. User id and event id are passed as parameters. It is required login.
- "unlikeEvent" with get method: to remove event from user interested list. User id and event id are passed as parameters. It is required login.
- "list" with get method: to show all events list. It is the default action if action value is null. It is not required login.
- "createUser" with post method: to create new user. EventServlet read user values from /jsp/SignupForm.jsp. Then store in users list in memory.
- "signin" with post method: to login process. EventServlet read event user from /jsp/top.jsp, check email id and password in uses list in memory if it match, then store user detail in HTTPSession. To searching in users list, using a new lambda expressions that included in Java Platform Standard Edition 8.

## Build instructions

In this assignment, Apache Maven manage the build, package and deploy process. Maven saves developer's effort. I have eight years experience with Ant, but I see the difference with first maven project. It is only one xml file for whole project, and we do not care about library or include, exclude, path...etc.

To packaging and deploying the assignment using Maven, we have to do the following:

- prepare assignment's Project Object Model -pom.xml-.
- update tomcat-users.xml
- for package execute

mvn package

• or for deploy execute after start tomcat manager

mvn tomcat7:deploy

### Prepare pom.xml:

- 1. Add Maven dependencies for servlet and JSTL:
- Servlet

<dependency>

<groupId>javax.servlet</groupId>

```
<artifactId>javax.servlet-api</artifactId>
    <version>3.1.0</version>
    <scope>provided</scope>
  </dependency>
   • JavaServer Pages Standard Tag Library (JSTL)
  <dependency>
      <groupId>javax.servlet</groupId>
      <artifactId>jstl</artifactId>
      <version>1.2</version>
  </dependency>
  2. Add Tomcat plugin
<build>
   <finalName>assignment1</finalName>
   <defaultGoal>tomcat7:deploy</defaultGoal>
   <plugins>
      <plugin>
```

```
<groupId>org.apache.tomcat.maven</groupId>
           <artifactId>tomcat7-maven-plugin</artifactId>
           <version>2.2</version>
           <configuration>
                   <update>true</update>
                   <url>http://localhost:8080/manager/text</url>
                   <server>TomcatServer
                   <username>admin</username>
                   <password>password</password>
              </configuration>
    </plugin>
  </plugins>
</build>
```

## **Update tomcat-users.xml**

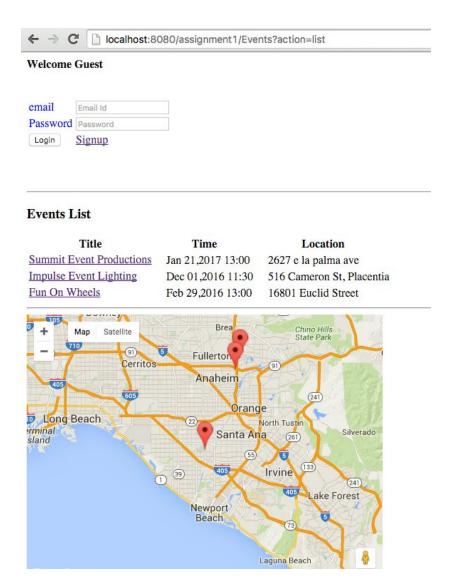
- 1. In tomcat path, open file bin/tomcat-users.xml
- 2. Change the permission as:

<role rolename="manager-gui"/>

```
<role rolename="manager"/>
<role rolename="manager-script"/>
<role rolename="tomcat"/>
<role rolename="manager-status"/>
<role rolename="manager-jmx"/>
<role rolename="manager-jmx"/>
<role rolename="manager-jmx"/>
<user password="password"
roles="manager-script,tomcat,manager,manager-gui,manager-status,manager-jmx"
username="admin"/>
```

## **DEMONSTRATING**

Main screen without login contains events list, and top page contains login form and link sign-up link. The title in events list is link to event detail.

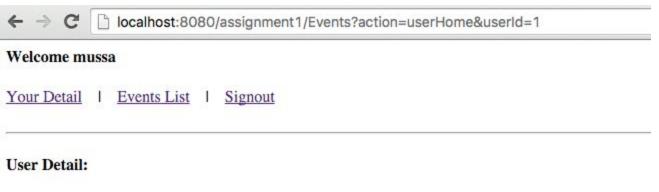


To login: user the following information:

email: mmubarki@gmail.com

password: 123456

After login: servlet forward into user detail screen. It contains user information, user's interested events list, and user created events list. User has option to drop unlike events from interested events list. Also each event has link to its detail. Each event in interested or created can be add to google calendar.



Name: mussa

Name: mussa

Name: mmubarki@gmail.com

### **Interested Events**

Impulse Event Lighting in : Dec 01,2016 11:30 at : 516 Cameron St, Placentia

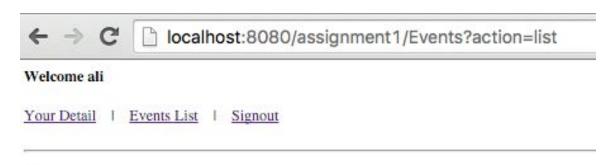
## Summit Event Productions in : Jan 21,2017 13:00 at : 2627 e la palma ave

### Mine Events

- Impulse Event Lighting in : Dec 01,2016 11:30 at : 516 Cameron St, Placentia
- Summit Event Productions in : Jan 21,2017 13:00 at : 2627 e la palma ave

create new event

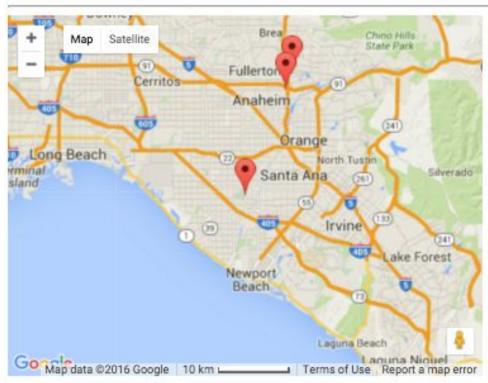
Main page if login contains event list and link to create new event, and top page contains three links: to user detail page, to events list, and sign-out link.



## **Events List**

### create event

Title	Time	Location	
Summit Event Productions	Jan 21,2017 13:00	2627 e la palma ave	<b>~</b>
Impulse Event Lighting	Dec 01,2016 11:30	516 Cameron St, Placentia	<b>~</b>
Fun On Wheels	Feb 29,2016 13:00	16801 Euclid Street	<b>V</b>



Event view without login. It contains link to events list.



### Events List

### **Event View**

#### Title

Summit Event Productions

### Description

We are a boutique lighting design production company based in the MD/DC/VA area

#### Time

Jan 21,2017 13:00

### Location

2627 e la palma ave



Event view if login. It contains link to create event.



create event

### **Event View**

### Title

Summit Event Productions

### Description

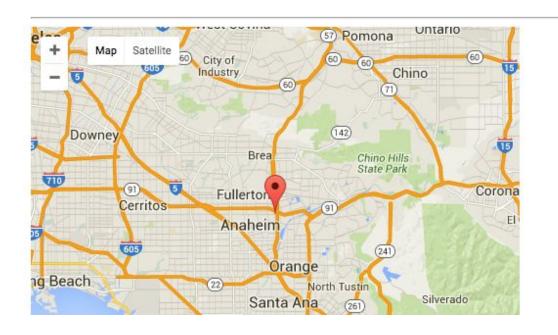
We are a boutique lighting design production company based in the MD/DC/VA area

### Time

Jan 21,2017 13:00

### Location

2627 e la palma ave



## Sing-up form with validation

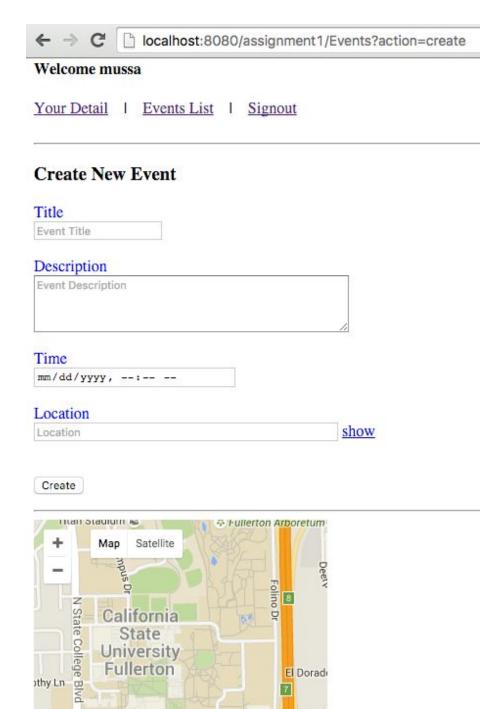


## Home

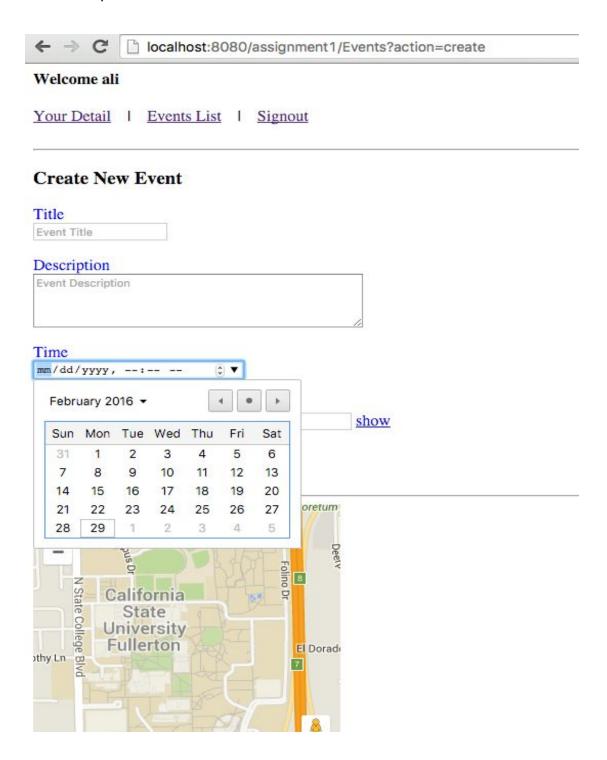
## Signup Form



### create new event form



In create new event form: uses dateTime-local input type. It is not supported in Firefox and Internet Explorer.



### Create new event after filled



### Create New Event

### Title

Fun On Wheels

### Description

Fun on Wheels Mobile Recreation Program is a free drop-in program designed to bring recreation and other resources into the neighborhoods for children, ages 5-18. The program offers homework assistance, fitness fun, art enrichment, and resource materials. No registration is needed, All programs.

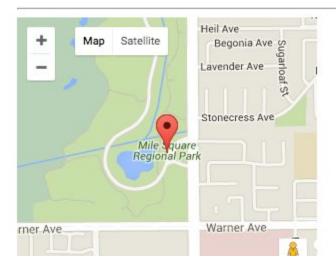
### Time

02/29/2016, 01:00 PM

### Location

16801 Euclid Street show

Create



### View event after creation



create event

### **Event View**

#### Title

Fun On Wheels

### Description

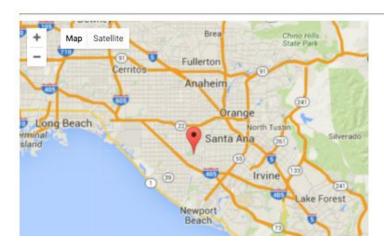
Fun on Wheels Mobile Recreation Program is a free drop-in program designed to bring recreation and other resources into the neighborhoods for children, ages 5-18. The program offers homework assistance, fitness fun, art enrichment, and resource materials. No registration is needed! All programs are closed on holidays and days of inclement weather

### Time

Feb 29,2016 13:00

### Location

16801 Euclid Street



### Add event into interested list



### Welcome ali

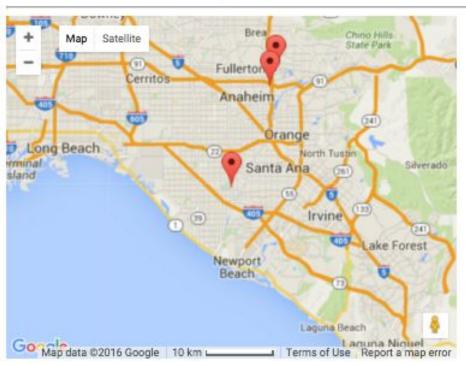
Your Detail | Events List | Signout

event:Impulse Event Lighting added to interested list

### **Events List**

### create event

Title	Time	Location	
Summit Event Productions	Jan 21,2017 13:00	2627 e la palma ave	<b>✓</b>
Impulse Event Lighting	Dec 01,2016 11:30	516 Cameron St, Placentia	
Fun On Wheels	Feb 29,2016 13:00	16801 Euclid Street	<b>✓</b>



## Drop event from interested list



### User Detail:

Name: ali

Name: ali@gmail.com

### Interested Events

You are not select any events

### Mine Events

Fun On Wheels in: Feb 29,2016 13:00 at: 16801 Euclid Street

create new event