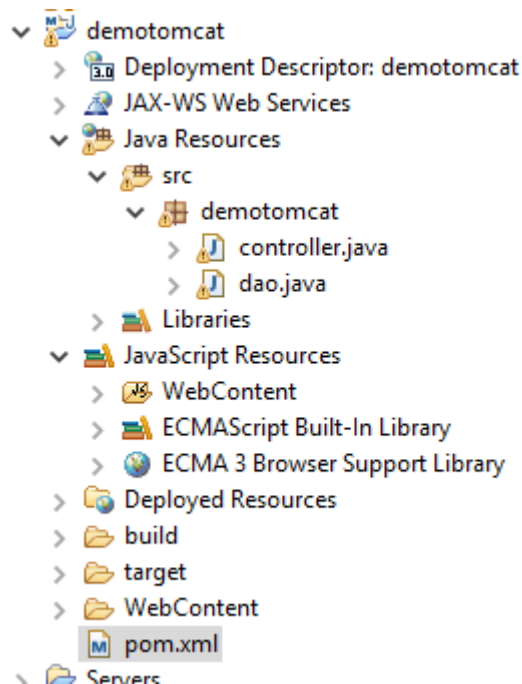


The Project Structure



Maven Dependencies

```
1 <project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
2   <modelVersion>4.0.0</modelVersion>
3   <groupId>demotomcat</groupId>
4   <artifactId>demotomcat</artifactId>
5   <version>0.0.1-SNAPSHOT</version>
6   <packaging>war</packaging>
7
8   <dependencies>
9     <dependency>
10      <groupId>javax.servlet</groupId>
11      <artifactId>javax.servlet-api</artifactId>
12      <version>3.1.0</version>
13    </dependency>
14
15    <dependency>
16      <groupId>com.sun.jersey</groupId>
17      <artifactId>jersey-client</artifactId>
18      <version>1.19.4</version>
19    </dependency>
20
21    <dependency>
22      <groupId>org.glassfish.jersey.containers</groupId>
23      <artifactId>jersey-container-servlet-core</artifactId>
24      <version>2.22</version>
25    </dependency>
26    <dependency>
27      <groupId>com.owlike</groupId>
28      <artifactId>gson</artifactId>
```

```

32 <dependency>
33   <groupId>com.googlecode.json-simple</groupId>
34   <artifactId>json-simple</artifactId>
35   <version>1.1.1</version>
36 </dependency>
37
38 <dependency>
39   <groupId>org.springframework</groupId>
40   <artifactId>spring-web</artifactId>
41   <version>5.1.2.RELEASE</version>
42 </dependency>
43 </dependencies>
44
45 <build>
46   <sourceDirectory>src</sourceDirectory>
47
48   <plugins>
49     <plugin>
50       <artifactId>maven-compiler-plugin</artifactId>
51       <version>3.3</version>
52       <configuration>
53         <source>1.8</source>
54         <target>1.8</target>
55       </configuration>
56     </plugin>
57     <plugin>
58       <artifactId>maven-war-plugin</artifactId>
59       <version>2.6</version>

```

Adding the required maven dependencies

1.Login by user

```

public ModelAndView loginProcess(HttpServletRequest request, HttpServletResponse response,
    @ModelAttribute("login") Login login) {
    ModelAndView mav = null;
    User user = userService.validateUser(login);
    if (null != user) {
        mav = new ModelAndView("welcome");
        mav.addObject("firstname", user.getFirstname());
    } else {
        mav = new ModelAndView("login");
        mav.addObject("message", "Username or Password is wrong!!");
    }
    return mav;
}

```

Getting the username and pass word and validating them.

2.Display the list of pokemon

Created controller class,to get connection between UI and DAO.

This would fetch the pokemon list from pokemonFinal.json file

```

@Path("/world")
public class controller {
    //listing the pokemon
    @GET
    @Produces({MediaType.APPLICATION_JSON})
    public JSONArray getCustomers() throws IOException, ParseException {
        System.out.println("stage 1");
        dao daobj=new dao();
        JSONArray jsonobj = daobj.display();
        return jsonobj;
    }

    public JSONArray display() throws FileNotFoundException, IOException, ParseException {

        System.out.println("entering method of display");
        JSONParser parser = new JSONParser();
        JSONArray object = (JSONArray) parser
            .parse(new FileReader("C:\\Users\\ragha\\Downloads\\pokemonFinal.txt"));
        |      System.out.println("entering");
        // System.out.println(object);

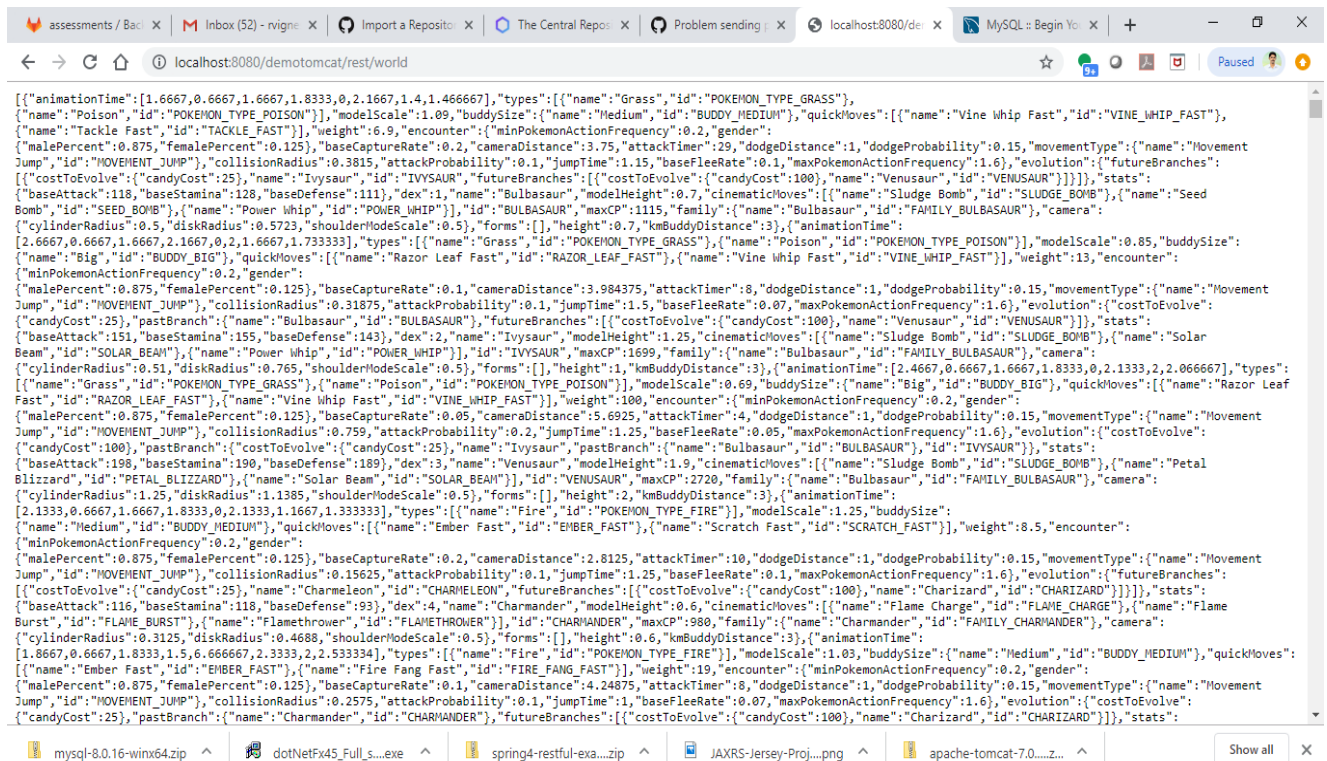
        return object;
    }
}

```

Once the json file is read ,we can access the webservice using tomcat to view the output.

OUTPUT

URL: <http://localhost:8080/demotomcat/rest/world>



Displaying the list of pokemon.

3.Adding pokemon list

```
@GET
@Produces(MediaType.TEXT_PLAIN)
@Consumes(MediaType.TEXT_PLAIN)
@Path("addpokemon/{id}/{name}/{height}")
public Response addpokemon(@PathParam("id") int dex, @PathParam("name") String name, @PathParam("height") int height) {
    System.out.println("stage 2");
    dao daobj=new dao();
    daobj.addpokemon(dex, name, height);

    return Response.status(200)
        .entity("Added the new pokemon list with dex as " + dex + " name : " + name + "and height : " + height);
}
```

Controller to add pokemon list

```

public void addpokemon(int dex,String name,float height) throws FileNotFoundException, IOException, Pars

    System.out.println("entering method of add");
    JSONParser parser = new JSONParser();
    JSONArray object = (JSONArray) parser
        .parse(new FileReader("C:\\Users\\ragha\\Downloads\\pokemonFinal.txt"));

String jsonstring=object.toJSONString();
JSONObject objtoadd = new JSONObject();
objtoadd.put("name",name);
objtoadd.put("dex", dex);
objtoadd.put("modelHeight",height);
object.add(objtoadd);
new FileWriter("C:\\Users\\ragha\\Downloads\\pokemonFinal.txt", false).close();
BufferedWriter out = null;

try {
    out = new BufferedWriter(new FileWriter("C:\\Users\\ragha\\Downloads\\pokemonFinal.txt"));
    out.write(object.toJSONString());
} catch (IOException e) {
    e.printStackTrace();
}

} finally {
    try {
        if(out != null){
            out.close();
        } else {
            System.out.println("Buffer has not been initialized!");
        }
    } catch (IOException e) {
        e.printStackTrace();
    }
}
//readfile();
System.out.println("added successfully");

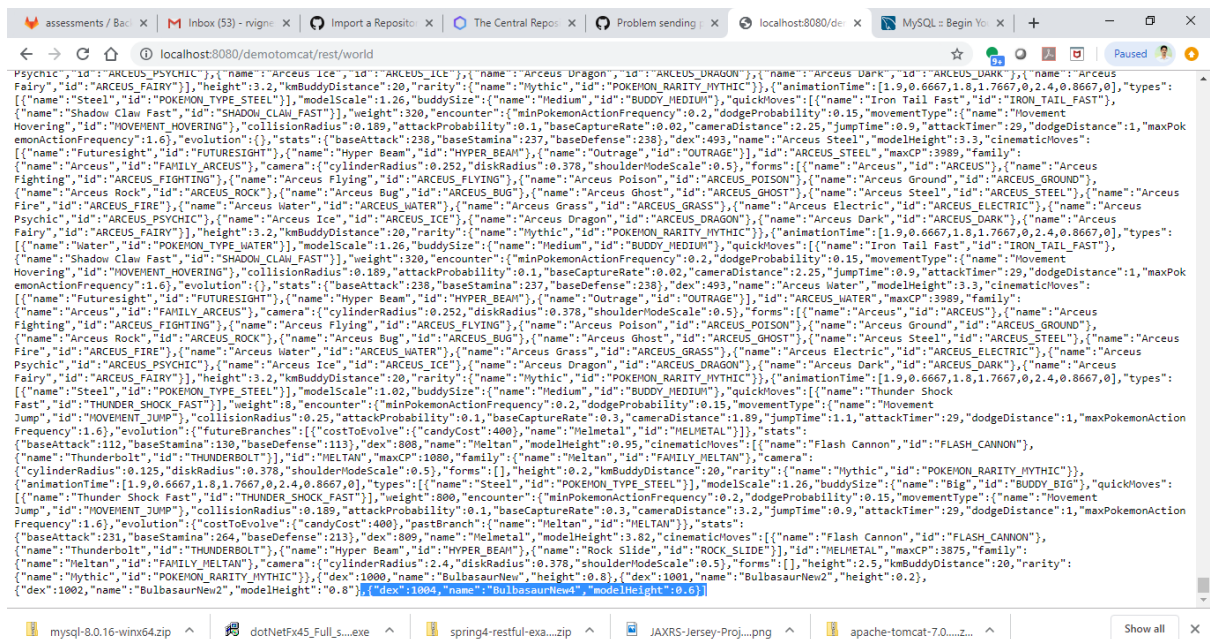
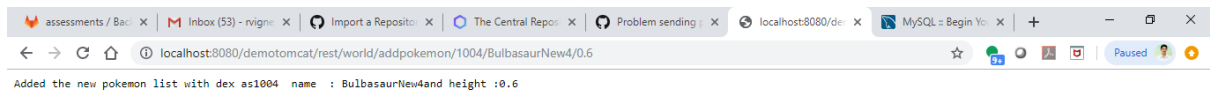
}

```

Dao to add pokemon list

OUTPUT

URL: <http://localhost:8080/demotomcat/rest/world/addpokemon/1000/BulbasaurNew/0.8>



Added the new pokemon list, the highlighted one.

4.update the existing pokemon list

```

1 //updating existing pokemon
2 @GET
3 @Produces(MediaType.TEXT_PLAIN)
4 @Consumes(MediaType.TEXT_PLAIN)
5 @Path("updatepokemon/{id}/{name}")
6 public Response updatepokemonc(@PathParam("id") int dex,@PathParam("name")float modelHeight) throws Fil
7     System.out.println("stage 3");
8     dao daobj=new dao();
9     daobj.updatepokemon(dex, modelHeight);
10
11     return Response.status(200)
12         .entity("Updated the  pokemon list with dex: " + dex + " height | : " + modelHeight).build()
13 }
14

```

Controller to update the existing pokemon list

```
public void updatepokemon(int dex, float modelHeight) throws FileNotFoundException, IOException, ParseException {  
    // TODO Auto-generated method stub  
    System.out.println("entering method of update");  
    JSONParser parser = new JSONParser();  
    JSONArray object = (JSONArray) parser.  
.parse(new FileReader("C:\\Users\\ragha\\Downloads\\pokemonFinal.txt"));  
  
String jsonString=object.toJSONString();  
//JSONObject objtoadd = new JSONObject();  
String dexval=Integer.toString(dex);  
String modelHeightval=Float.toString(modelHeight);  
String[] chksp;  
JSONArray objtoadd = new JSONArray();  
for(int i=0;i<object.size();i++){  
    String st=object.get(i).toString();  
  
if(st.contains("\"\" + \"dex\" + \"\" + \":\" + dexval)){  
    JSONParser parserl = new JSONParser();  
    JSONArray objectl = new JSONArray();  
    objectl.add(object.get(i));  
    for(int c=0;c<objectl.size();c++){  
        Map<String, Object> userl=new HashMap<String, Object>();  
        Map<String, Object> user = (Map<String, Object>) objectl.get(c);  
        String name = (String) user.get("modelHeight").toString();  
        System.out.println("0000000000000000000000000000222");  
        System.out.println(name);  
        user.remove("modelHeight");  
        user.put("modelHeight", modelHeightval);
```

```

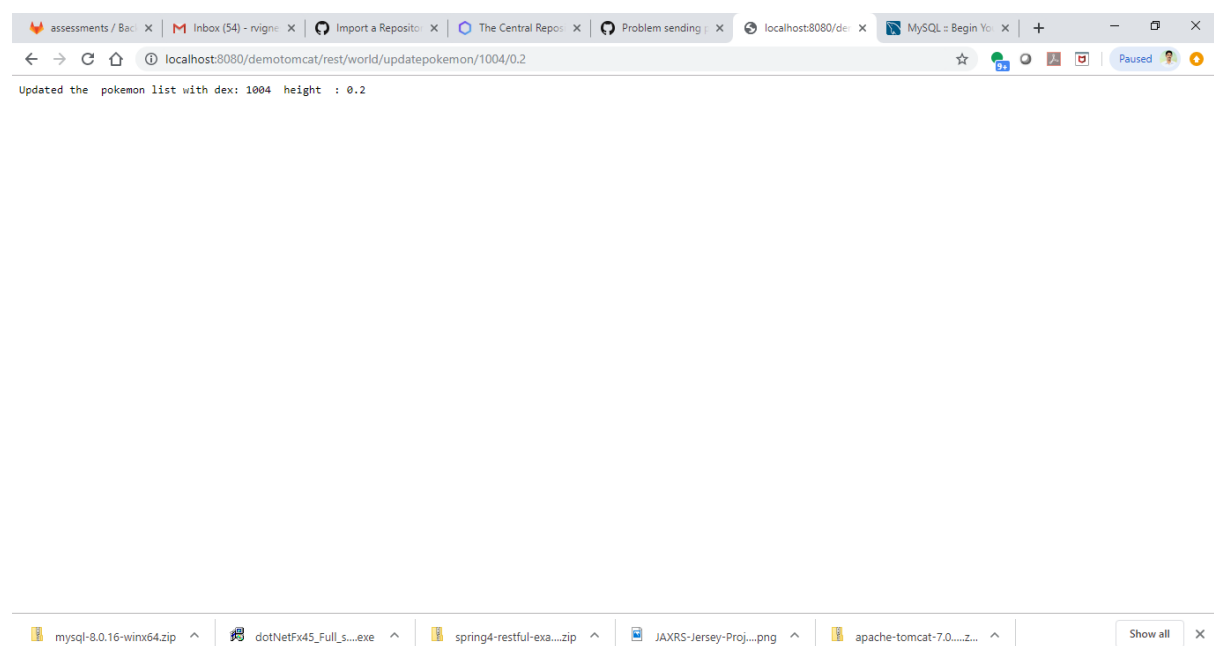
108         user.putAll(user1);
109         System.out.println(object1.get(c));
110     }
111
112     objtoadd.add(object.get(i));
113 }
114 else{
115     objtoadd.add(object.get(i));
116 }
117 }
118 System.out.println("updated successfully");
119 new FileWriter("C:\\Users\\ragha\\Downloads\\pokemonFinal.txt", false).close();
120 BufferedWriter out = null;
121
122 try {
123     out = new BufferedWriter(new FileWriter("C:\\Users\\ragha\\Downloads\\pokemonFinal.txt"));
124     out.write(objtoadd.toJSONString());
125 } catch (IOException e) {
126     e.printStackTrace();
127 } finally {
128     try {
129         if(out != null){
130             out.close();
131         } else {
132             System.out.println("Buffer has not been initialized!");
133         }
134     } catch (IOException e) {
135         e.printStackTrace();
136     }

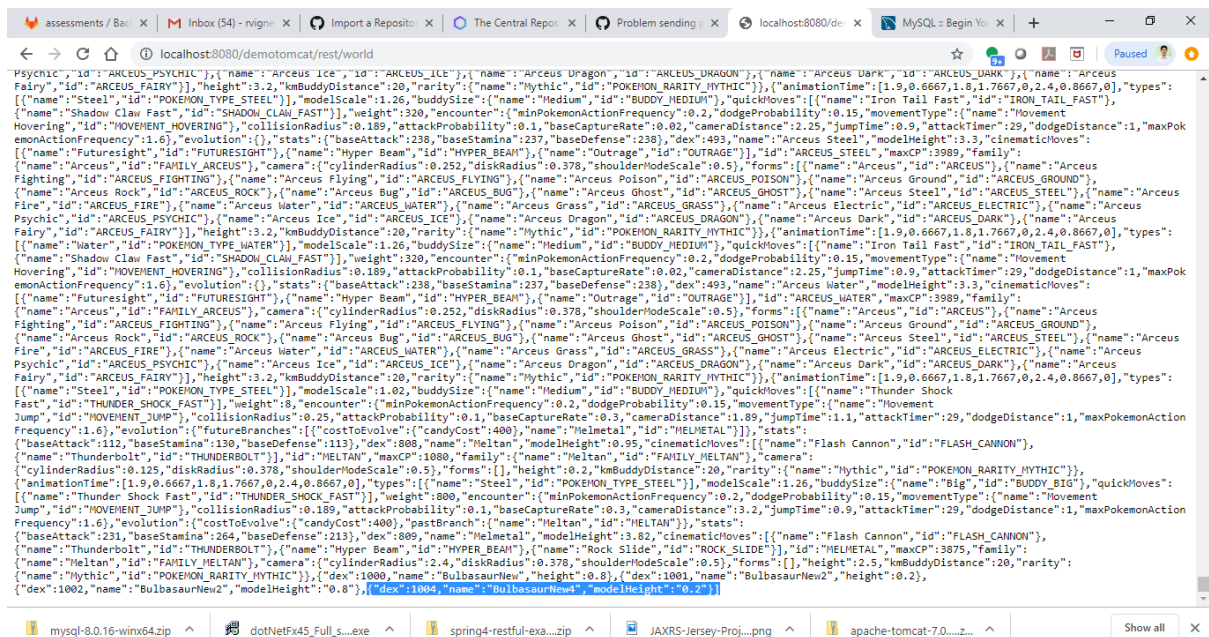
```

Dao to update the pokemon list

OUTPUT

URL: <http://localhost:8080/demotomcat/rest/world/updatepokemon/1002/0.8>





5.Deleting the pokemon list

```
//Delete existing pokemon
@GET
@Produces(MediaType.TEXT_PLAIN)
@Consumes(MediaType.TEXT_PLAIN)
@Path("/deletepokemon/{id}")
public Response deletepokemonnc(@PathParam("id") int dex) throws FileNotFoundException, IOException, Pa
    System.out.println("stage 4");
    dao daobj=new dao();
    daobj.deletepokemon(dex);

    return Response.status(200)
        .entity("Deleted the pokemon list with dex: " + dex ).build();
}
```

Controller to delete pokemon list

```

public void deletepokemon(int dex) throws FileNotFoundException, IOException, ParseException {
    // TODO Auto-generated method stub
    System.out.println("entering method of delete");
    JSONParser parser = new JSONParser();
    JSONArray object = (JSONArray) parser
        .parse(new FileReader("C:\\Users\\ragha\\Downloads\\pokemonFinal.txt"));

    String jsonString=object.toJSONString();
    JSONArray objtoadd = new JSONArray();
    String dexval=Integer.toString(dex);
    String[] chksp;

    for(int i=0;i<object.size();i++){
        String st=object.get(i).toString();

        if(st.contains "\"" + "dex" + "\"" + ":" + dexval){
            System.out.println("got it yaaaaaaaaaaaa");

        }

        else{
            objtoadd.add(object.get(i));
        }
    }

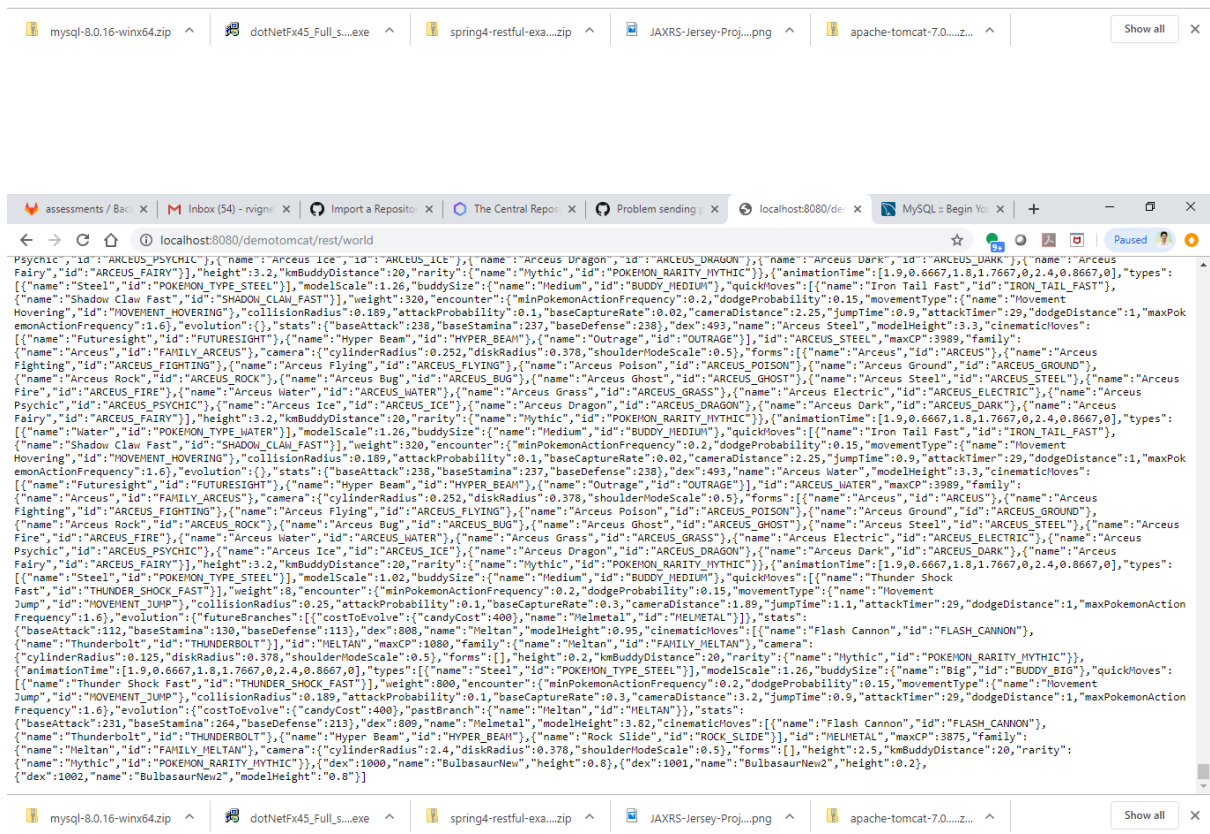
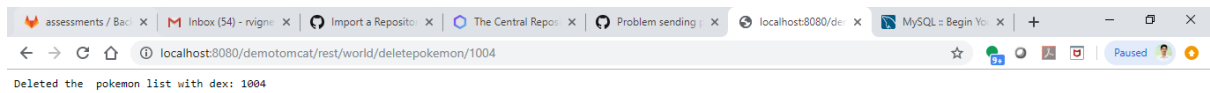
    new FileWriter("C:\\Users\\ragha\\Downloads\\pokemonFinal.txt", false).close();
    BufferedWriter out = null;
    try {
        out = new BufferedWriter(new FileWriter("C:\\Users\\ragha\\Downloads\\pokemonFinal.txt"));
        out.write(objtoadd.toJSONString());
    } catch (IOException e) {
        e.printStackTrace();
    } finally {
        try {
            if(out != null){
                out.close();
            } else {
                System.out.println("Buffer has not been initialized!");
            }
        } catch (IOException e) {
            e.printStackTrace();
        }
    }
}

```

Dao to delete the pokemon list.

OUTPUT

URL: <http://localhost:8080/demotomcat/rest/world/deletepokemon/1004>



The pokemon list has been removed

THANKYOU