

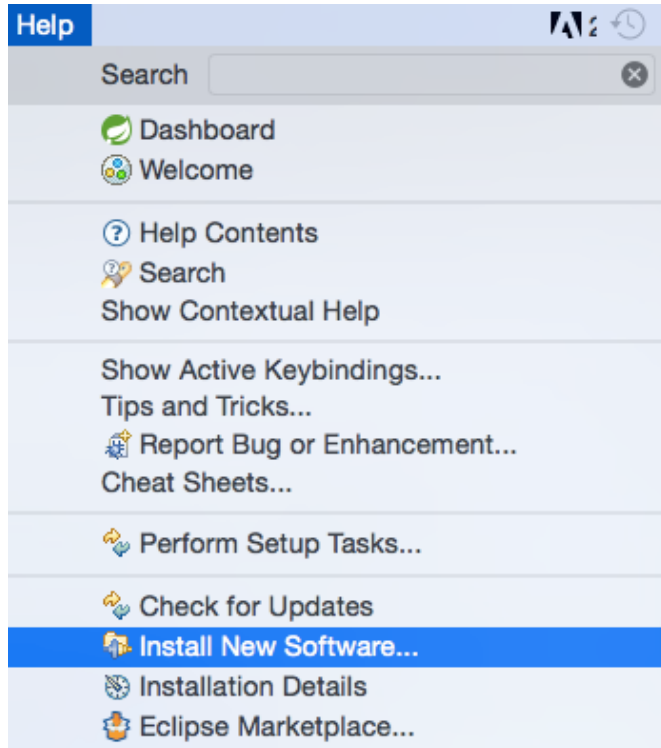
## How to set up the run environment for the application

### 1. Install the Tomcat server for the web application

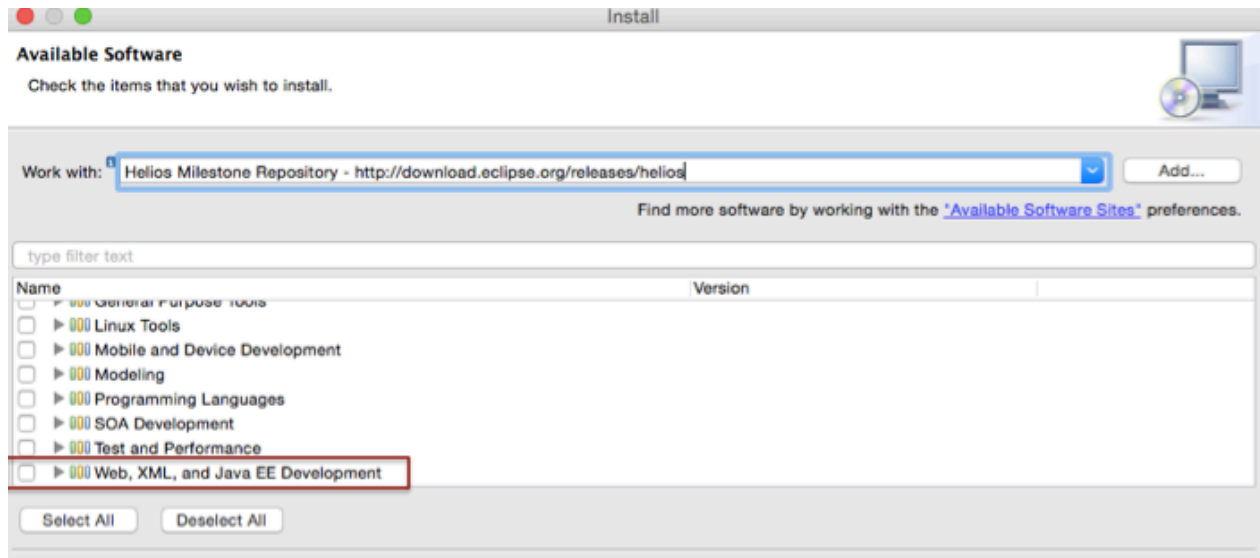
Go to this website: <http://tomcat.apache.org>, download and install the Apache Tomcat server. We will use Tomcat as the web server for the application.

### 2. Add Java EE perspective to Eclipse

In Eclipse, go to “Help” -> “Install New Software ...”

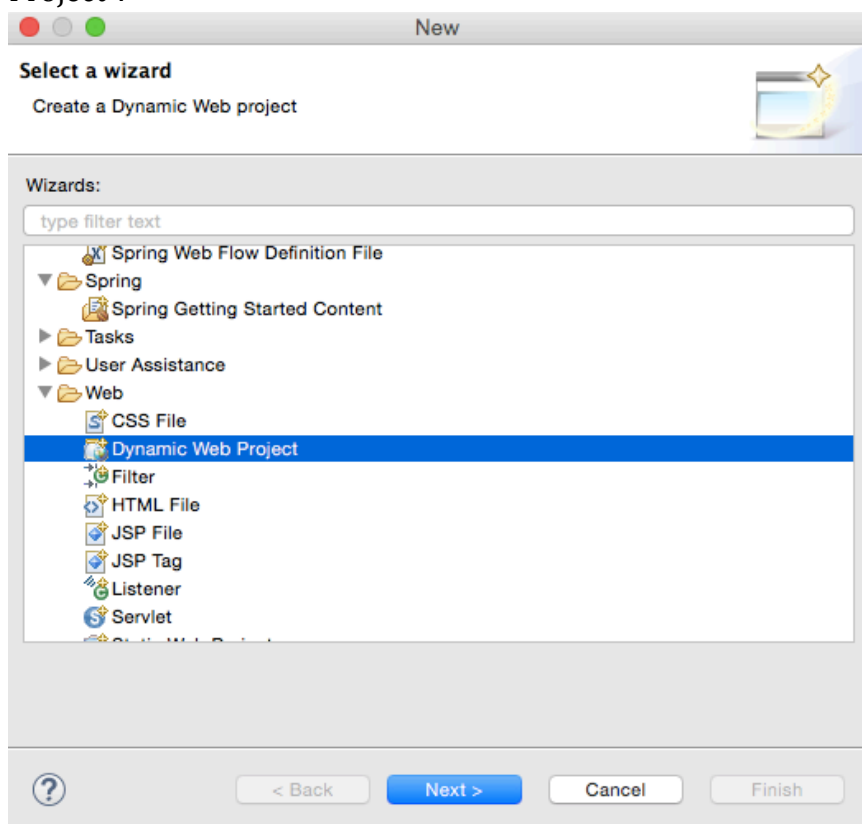


In the new dialog, in the “Work with:” pull-down list, select “Helios Milestone Repository - <http://download.eclipse.org/releases/helios>”. Select the package “Web, XML, Java EE Development” to install:



### 3. Create a dynamic web project

In the Package Explorer, right click and select "New"->"Other" and choose "Dynamic Web Project".



Add project name, directory for the project, and Tomcat server in the configuration:

**Dynamic Web Project**  
Create a standalone Dynamic Web project or add it to a new or existing Enterprise Application.

Project name:

Project location

☒ Use default location

Location:

Target runtime

Dynamic web module version

Configuration

A good starting point for working with Apache Tomcat v8.5 runtime. Additional facets can later be installed to add new functionality to the project.

EAR membership

☐ Add project to an EAR

EAR project name:

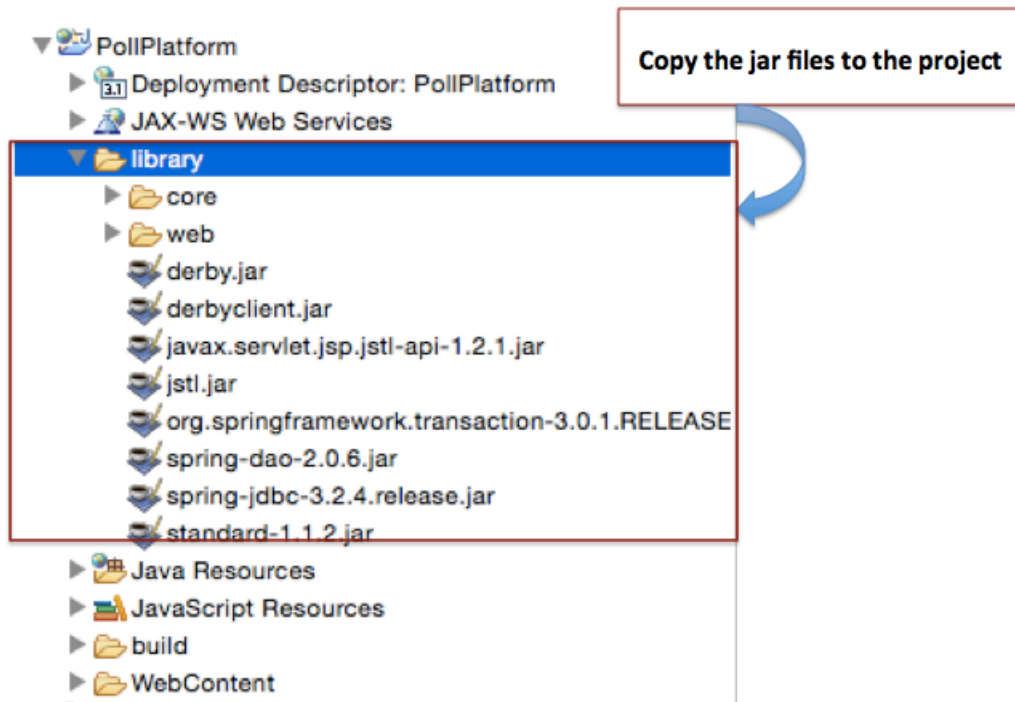
Working sets

☐ Add project to working sets

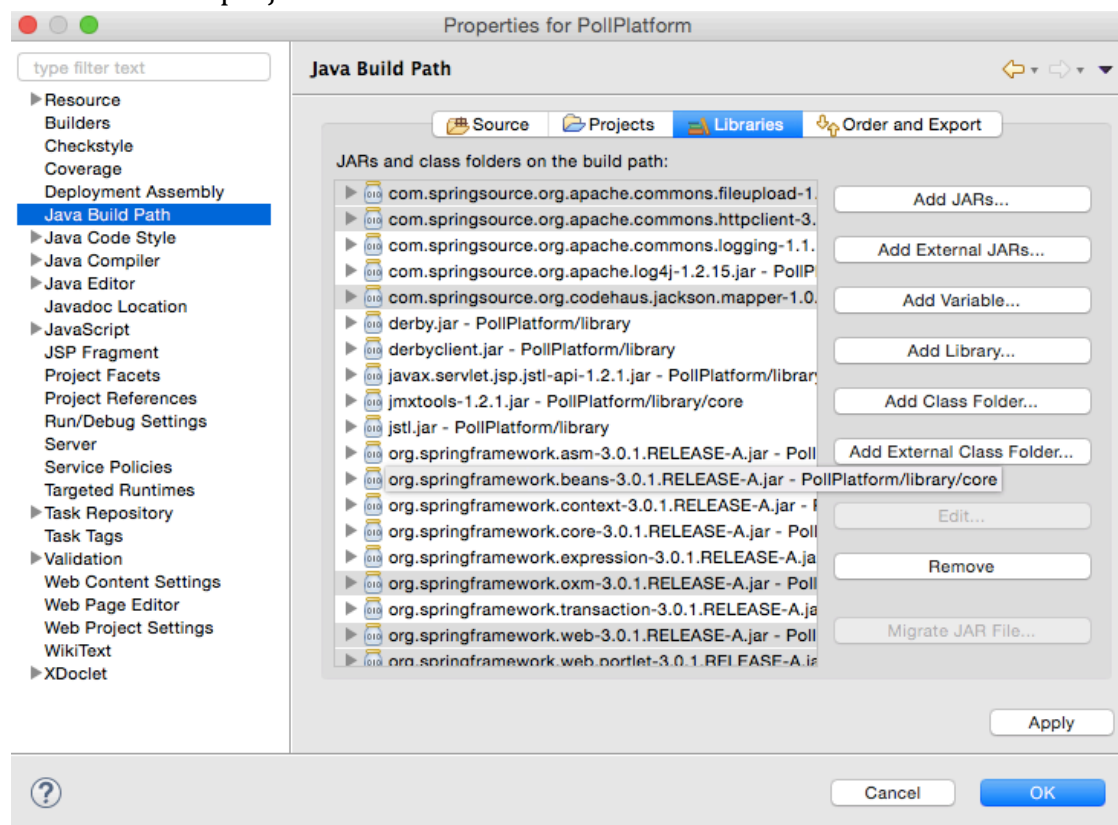
Working sets:

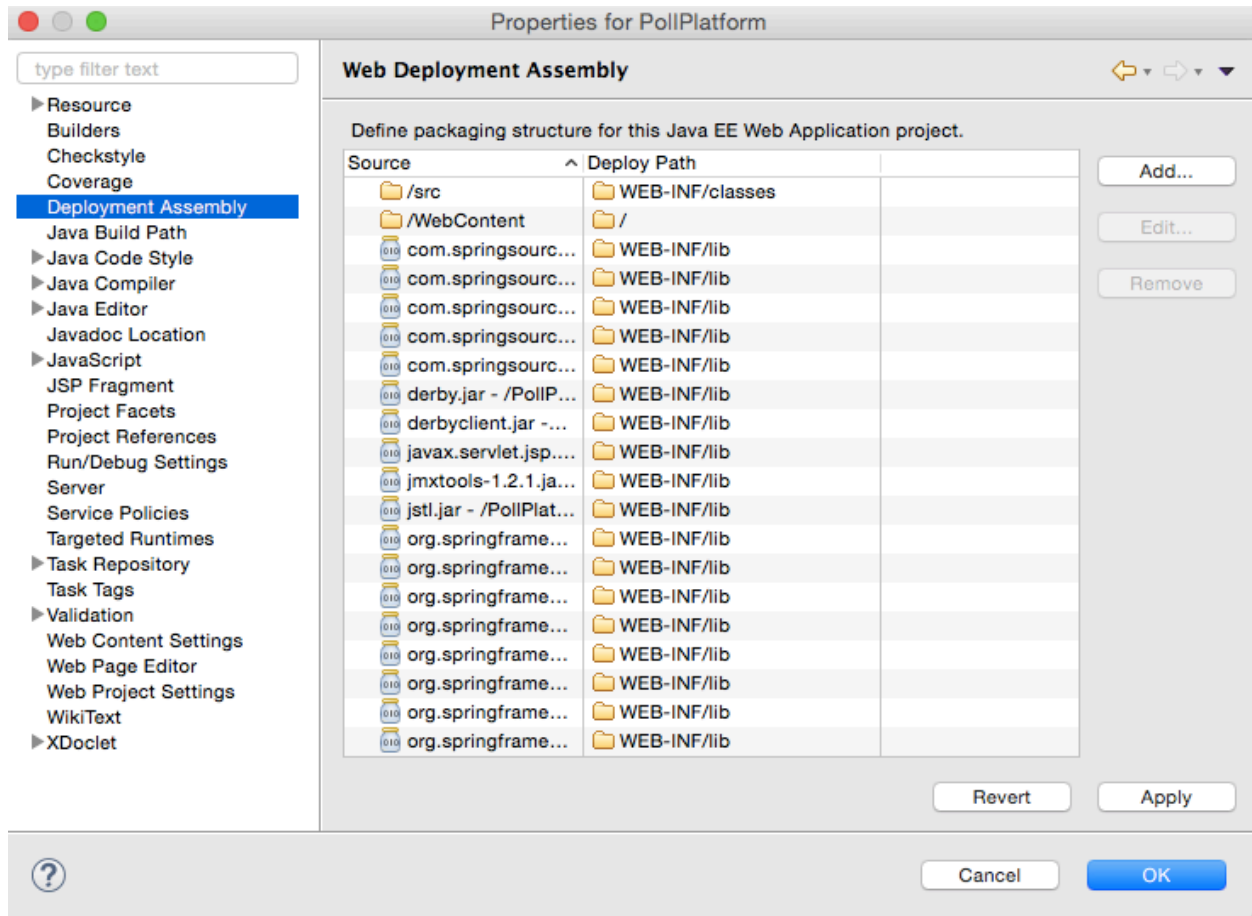
#### 4. Add the libraries (.jar files)

The library folder contains the external libraries (i.e. .jar files) for the application. Copy the folder to the project.



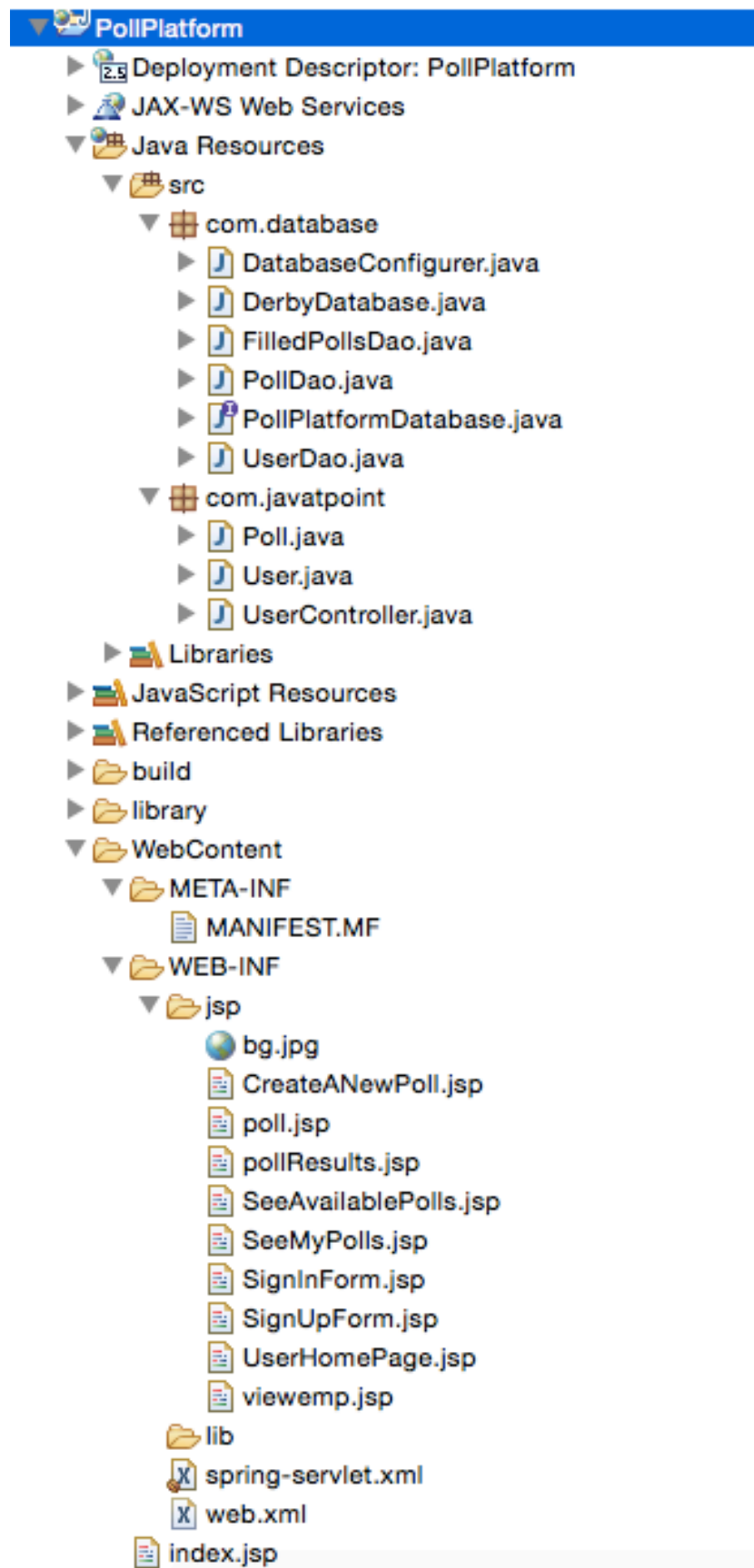
In the project properties, through “Java Build Path” and “Deployment Assembly”, add these libraries to the project.





## 5. Add Java files, jsp files, and .xml files

Copy all the files in src folder to *Java Resources*. And copy all the files in WebContent folder to *WebContent*. The directory structure of the application should look like this:



## 6. Configure the database for the application

In the ***DatabaseConfigurer.java*** under Java Resources, it is specified that apache derby is used as our database, and EmbeddedDriver is used as the driver of the database. But you have to specify the path for storing the database. Please specify the path like the example:



```
public static final String JDBC_URL = "jdbc:derby:/Users/apple/Documents/workspace/Java/PollPlatform/myDatabase;create=true";
```

When the application is run for the first time, the database has to be created. Thus, you have to include the following statements in ***DatabaseConfigurer.java***:

```
jdbcTemplate.execute("create table pollUser (name varchar(20), password varchar(20), points integer)");

jdbcTemplate.execute("create table poll (id integer primary key generated always as identity, "
    + "title varchar(20), content varchar(500), poster varchar(20), tag varchar(20), createTime TIMESTAMP, "
    + "r1 integer, r2 integer, r3 integer, r4 integer, r5 integer)");

jdbcTemplate.execute("create table filledPolls (pollId integer, raterName varchar(20), score int)");
```

But after the first run, you should comment out the statements because the tables have been created.

If you want to drop the existing tables and create new ones, please use the following statements:

```
//run these statements when you want to drop the existing tables
jdbcTemplate.execute("DROP TABLE poll");
jdbcTemplate.execute("DROP TABLE pollUser");
jdbcTemplate.execute("DROP TABLE filledPolls");
```