Portal Chess Development Manual

Unspecified Behavior  
CS414-f20

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# Game

The game logic is implemented using Java

## Eclipse

### Source Files

Download source files from github

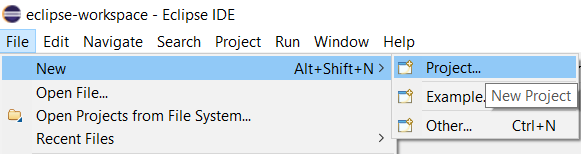
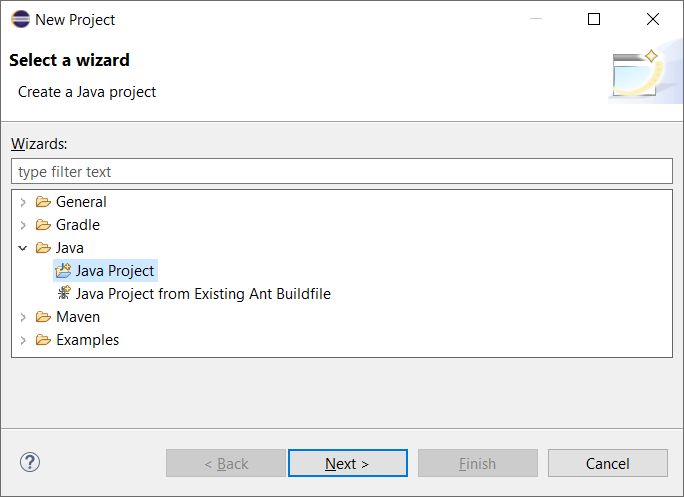
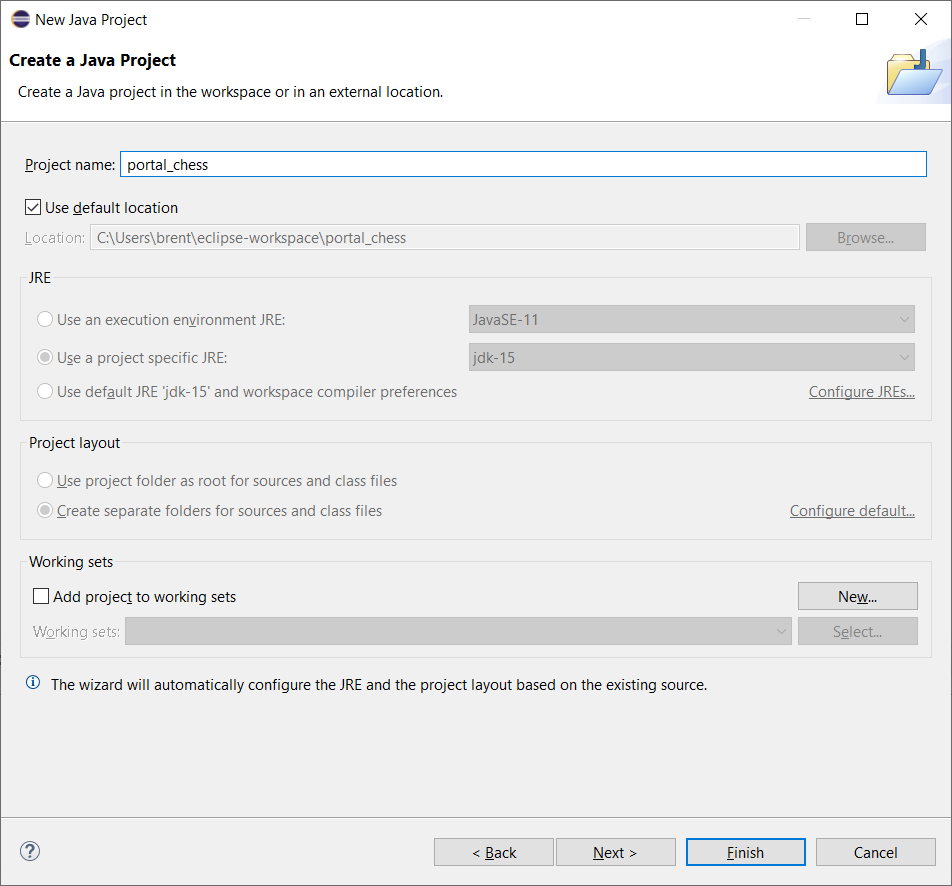
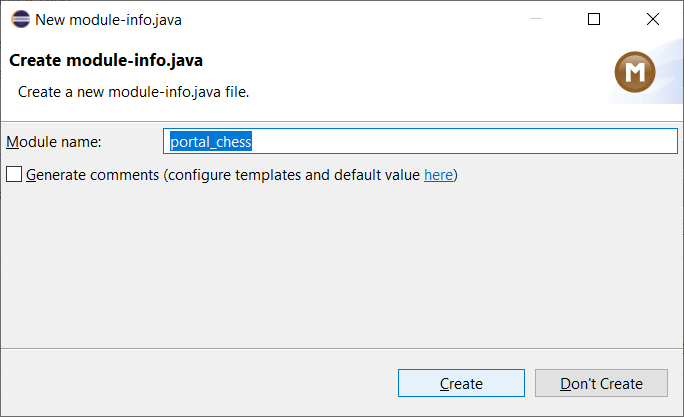
‘git clone https://github.com/bstaab/cs414-f20-UnspecifiedBehavior.git’

IDE

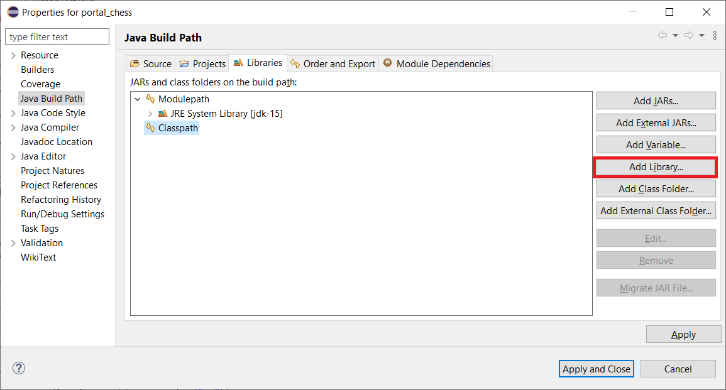
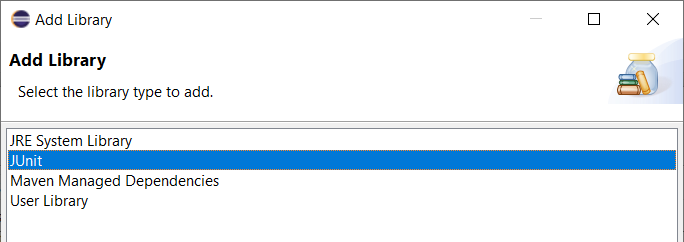
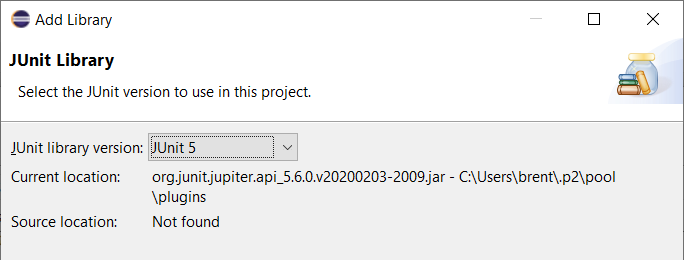
Download Eclipse IDE from the official download [link](https://www.eclipse.org/downloads/) and install

Version ‘2020‑09 R’ is used in this manual

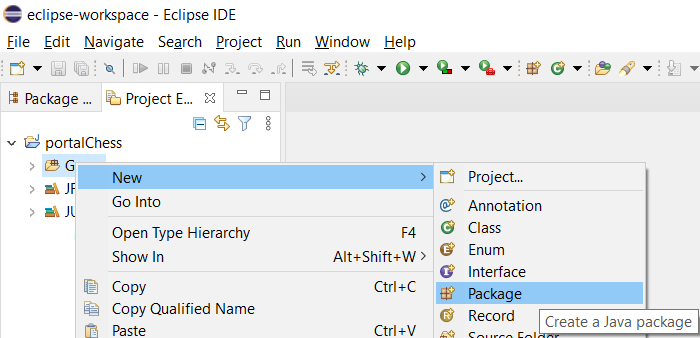
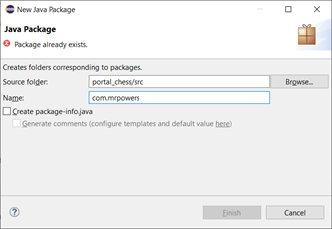
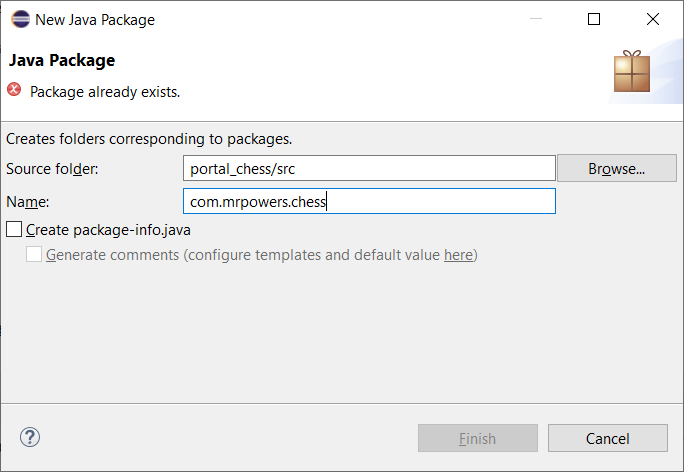
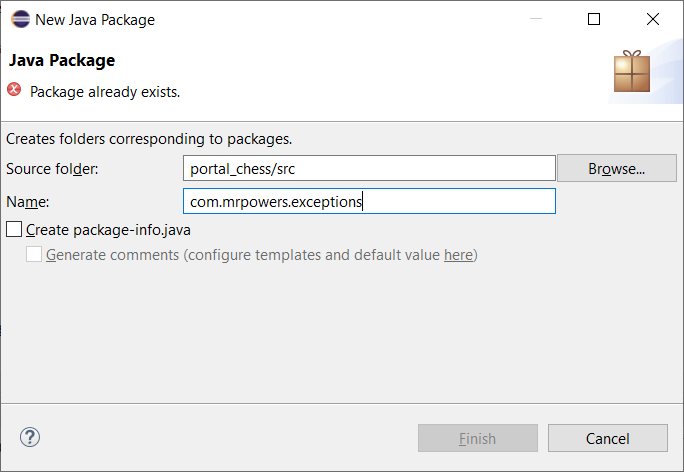
### Create project

* File->New->Project  
  
  + Select ‘Java Project’ then ‘Next >’  
    
  + Set project properties
    - Project Name: portal\_chess
    - JRE – ‘Use a projectct specific JRE:’ – jdk-15
    - Create separate folders for sources and class files
    - Click ‘Finish’  
      
  + Module name: portal\_chess  
    

### Configure project

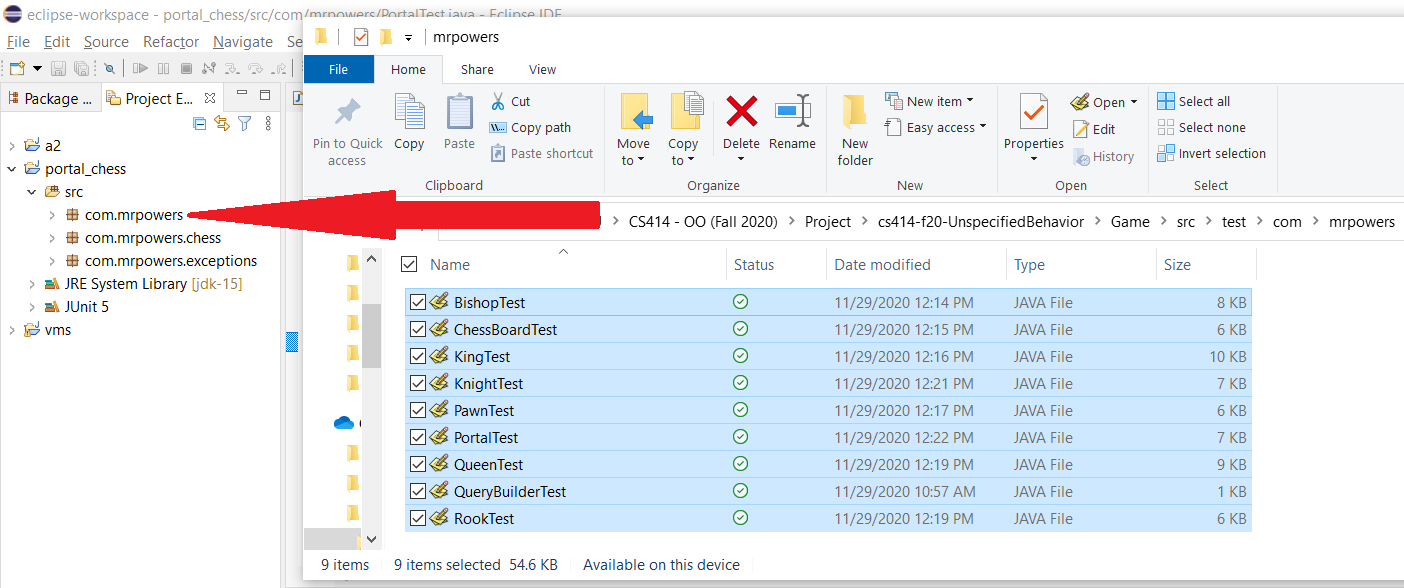
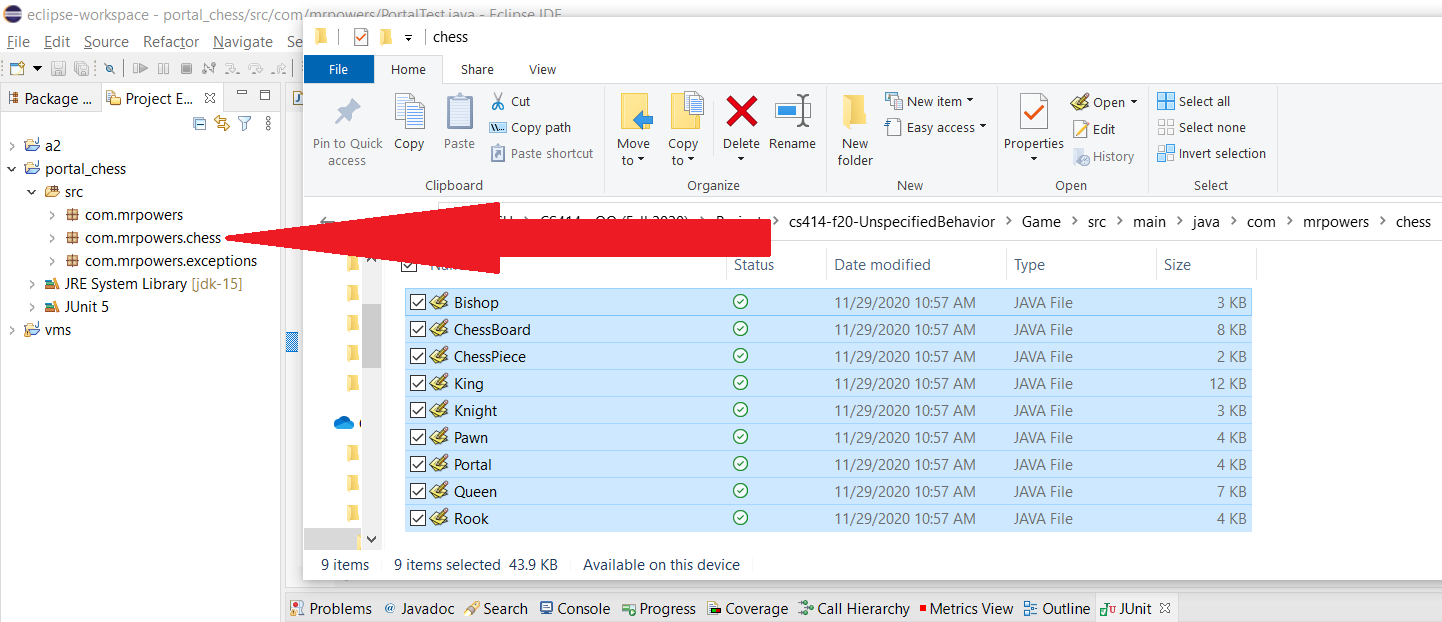
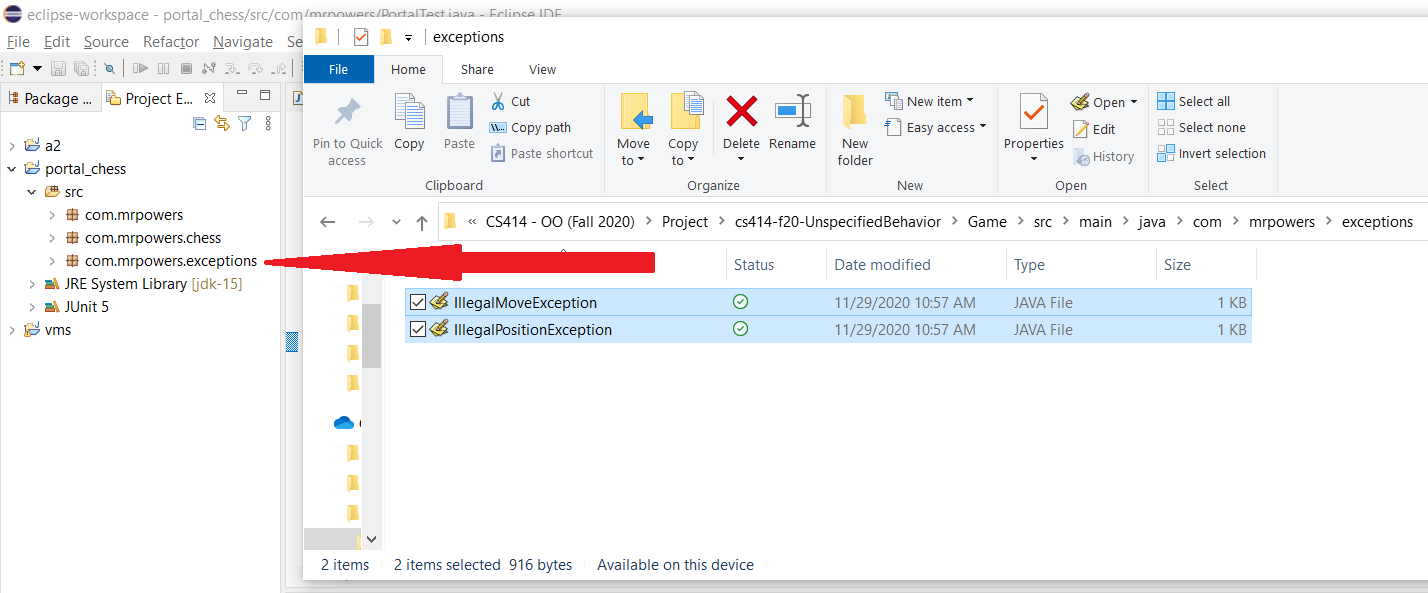
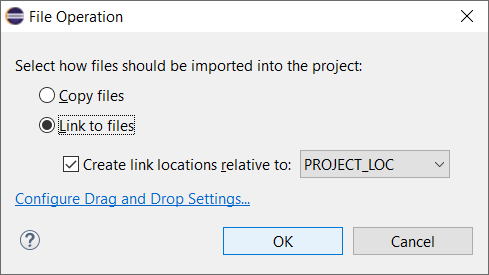
* Delete the module-info.java file
* Add JUnit to build path  
    
  + Select JUnit   
      
    - Select JUnit 5  
      

### Create Package

* Right click on the portal\_chess project, select New then Package  
  
  + Source folder: portal\_chess/src  
    Name: com.mrpowers  
    
  + Source folder: portal\_chess/src  
    Name: com.mrpowers.chess  
    
  + Source folder: portal\_chess/src  
    Name: com.mrpowers.exceptions  
    

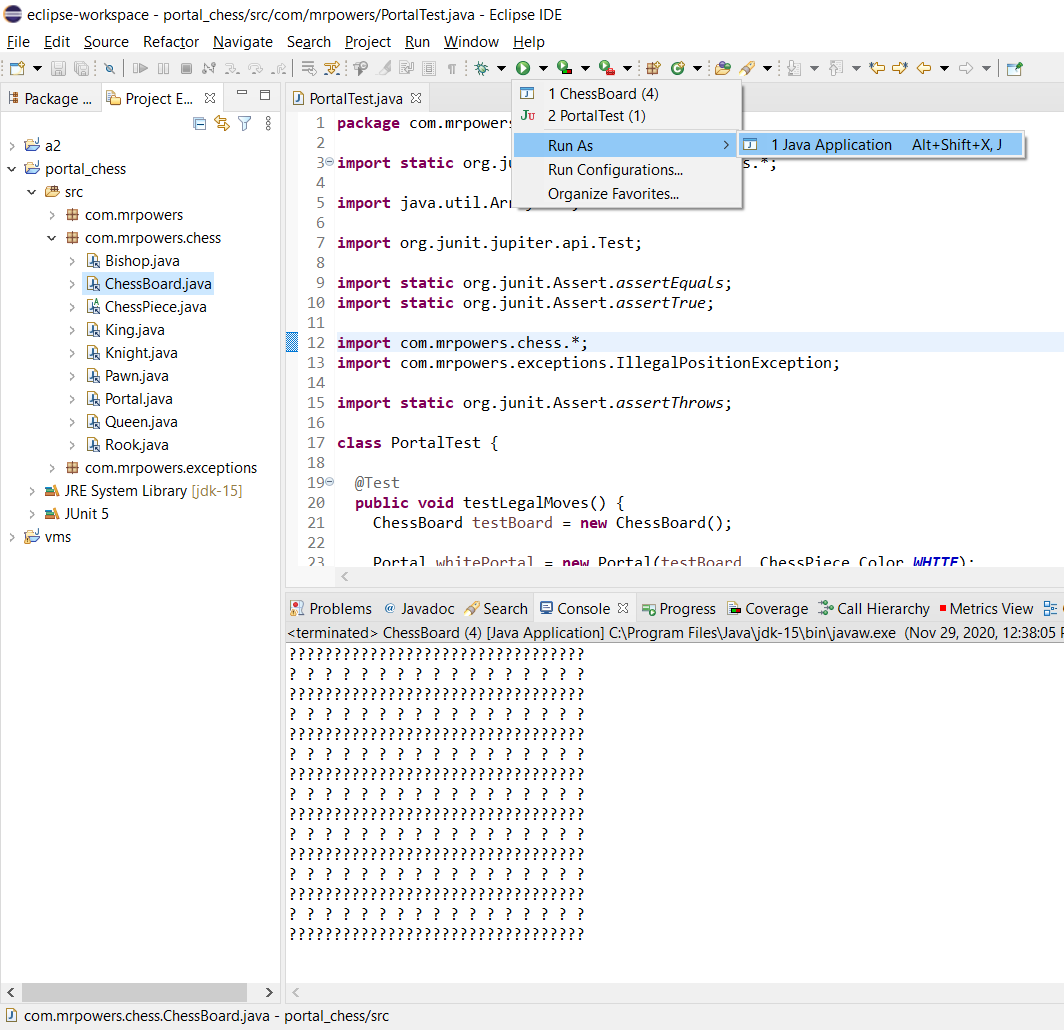
### 

### Add files to project

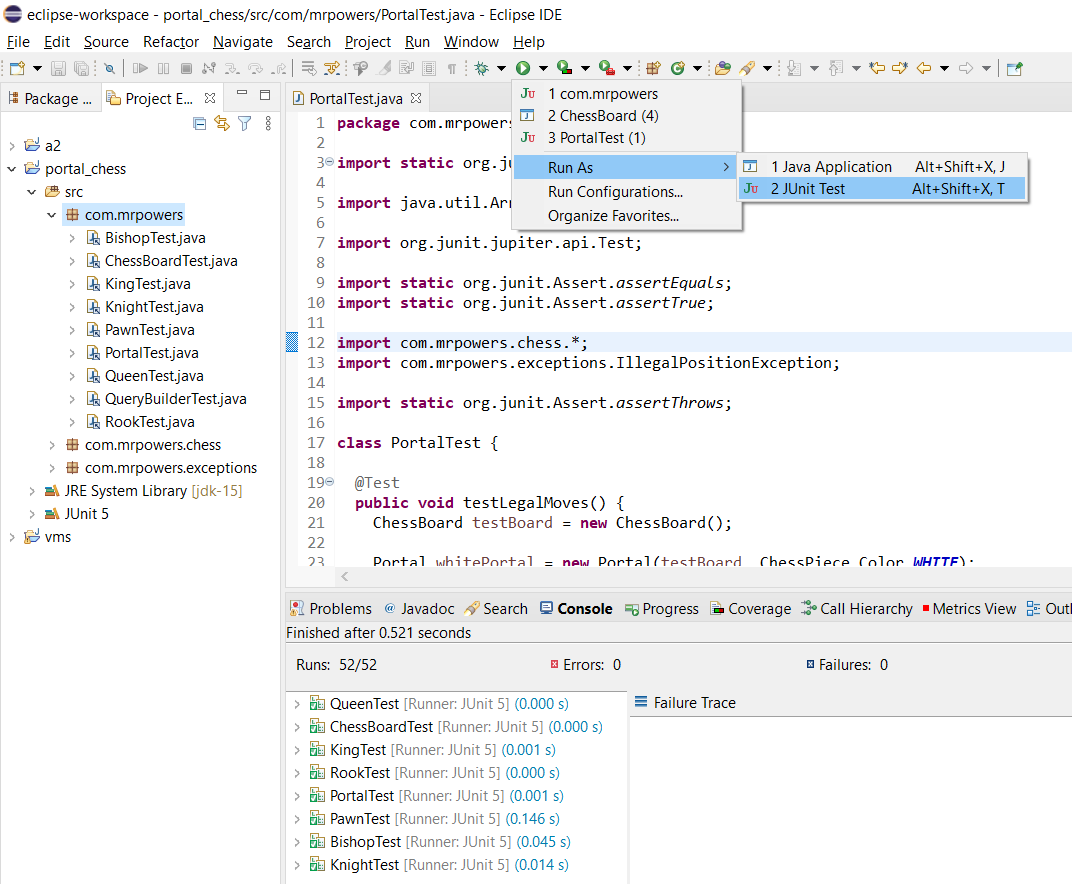
* Using file explorer, browse to the files downloaded from git  
  Click and drag into portal\_chess/src/com.mrpowers   
  
* Using file explorer, browse to the files downloaded from git  
  Click and drag into portal\_chess/src/com.mrpowers.chess
* Using file explorer, browse to the files downloaded from git  
  Click and drag into portal\_chess/src/com.mrpowers.exceptions  
  
* For all operaions, select “Link to files”  
  This will link to the original source files rather than making a new copy. Any changes you make will show up in git  
  

### 

### Compile & run

* Select ChessBoard.java
* Select the down arrow highlighted at the top of the screen
* Select Run As -> Java Application
* In the ‘Console’ window at the bottom, you should see a chess board where the lines are displayed as ‘?’  
  

### Run JUnit tests

* Select the ‘Game’ package
* Select the down arrow highlighted at the top of the screen
* Select Run As -> JUnit Test  
  

### Deploy to Localhost

* In the terminal run the command: **npm run start**
  + This will the deploy the webpage and build the server at the same time
    - While **npm run start** builds the server, you can also run **npm run build** to build the just the server without deploying the website.
* If the website is not automatically deployed, you can click the link in the terminal:

Text

Description automatically generated

* Once the website is deployed you should see the login page:

A picture containing object, indoor, table, person

Description automatically generated

# Tools

### Important Notice

* Once you have the source code cloned from the GitHub repository make sure to run **npm install** to make sure all the correct dependencies are installed.

### npm

* We are using npm instead of yarn. Make sure that npm and Node.js are installed. In order to do so:

Timeline

Description automatically generated

* If they are not installed you can go to this website: <https://www.npmjs.com/get-npm>
  + Once on the website you can download Node.js and npm

### Webpack

* We are using webpack as our module bundler in order to deploy the website
* In order to install webpack you must run:



### Material UI & Reactstrap

* For the front-end development and design, we are using a combination of Reactstrap and Material UI.
* To install Reactstrap:



* To install Material UI



### Database: MariaDB

* Hostname/Endpoint:
  + cs414-db.cuboxgv8ds8p.us-east-1.rds.amazonaws.com
* Port: 3306
* Login:

Graphical user interface, text, application, email

Description automatically generated

* Linux Command:
  + mysql -h cs414-db.cuboxgv8ds8p.us-east-1.rds.amazonaws.com -P3306 -u admin –p