Programming Assignment Quiz (Do programming assignment FIRST)

7/7 questions correct

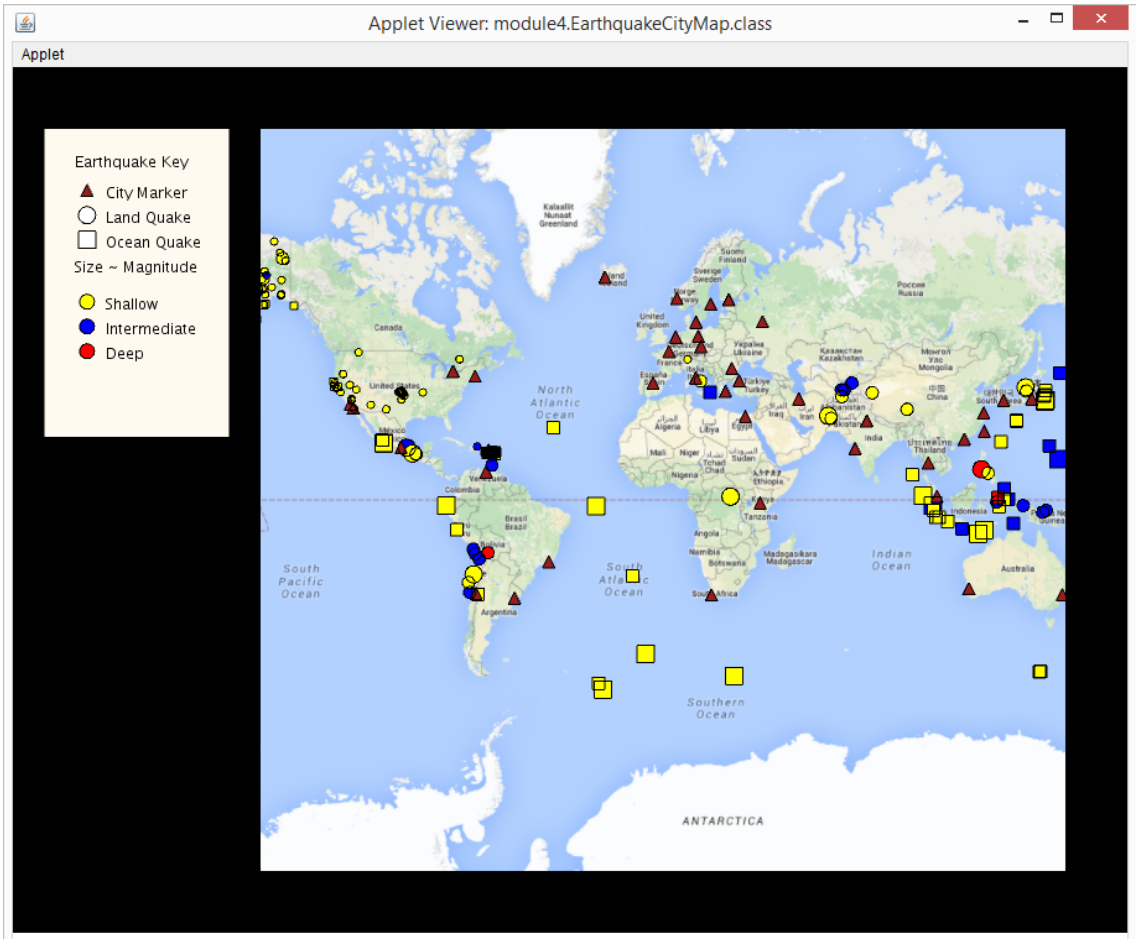
Quiz passed!

Continue Course (/learn/object-oriented-java/lecture/LMXlA/module-introduction-responding-to-user-events)

Back to Week 3 (/learn/object-oriented-java/home/week/3)

1.

Does your earthquake map display earthquakes, cities and the key, as described through the end of step 9, as shown in this screenshot?



- ○ Yes

Well done!
Great work! You've successfully completed the GUI component of the module 4 programming assignment.

- ○ No

✔ 2.

When you first ran the starter code for the programming assignment, why didn't it display any earthquake markers on the map?

- ○ There was no draw() method implemented in the EarthquakeMarker class
- ○ The EarthquarkeMarker objects had not yet been created
- ○ The Marker objects had not yet been added to the map
- ○ The drawEarthquake method was not fully implemented in the OceanQuakeMarker and LandQuakeMarker classes.

Well done!
This is the correct response. draw() was fully implemented in the EarthquakeMarker class, but it called the method drawEarthquake, which had to be implemented in the subclasses LandQuakeMarker and OceanQuakeMarker.

✔ 3.

Which of the following is/are true about the classes used in this programming assignment (SELECT ALL THAT APPLY)?

- ☐ The method call

```
drawEarthquake(pg, x, y);
```

in the draw() method in EarthquakeMarker is a call to the helper method drawEarthquake defined and fully implemented in the EarthquakeMarker class.

Well done!
This is an incorrect response. This method call will call the drawEarthquake method defined in either OceanQuakeMarker or LandQuakeMarker, depending on what actual object draw() is called on.

- ☐ The method colorDetermine, which is defined in the EarthquakeMarker class, is what determines the color of both OceanQuakeMarkers and LandQuakeMarkers.

Well done!
This is a correct response. This method is called from EarthquakeMarker's draw() method, and sets the fill color for when drawEarthquake is called.

☐ EarthquakeMarker objects cannot be instantiated using "new".

Well done!
This is a correct response. EarthquakeMarker is an abstract class, which means it cannot be instantiated.

☐ CityMarker is the parent class of EarthquakeMarker

Well done!
This is an incorrect response. SimplePointMarker is the parent class of both CityMarker and EarthquakeMarker.

☐ The call

```
super(location);
```

in the CityMarker's constructor calls the constructor of SimplePointMarker

Well done!
This is a correct response. SimplePointMarker is the superclass of CityMarker.

✔ 4.

Given the UML class hierarchy you created in step 6 of your programming assignment, which of the following assignment statements WILL NOT cause an error (SELECT ALL THAT APPLY). Assume all of the proper import statements are included at the top of the file.

☐

```
// Assume the variable feature stores a PointFeature object
Marker m = new OceanQuakeMarker(feature);
```

Well done!
This is fine because all OceanQuakeMarkers are Markers (EarthquakeMarker is the parent of OceanQuakeMarker, SimplePointMarker is the parent of EarthquakeMarker, AbstractMarker is the parent of EarthquakeMarker, and Marker is an interface implemented by AbstractMarker).

☐

```
// Assume the variable feature stores a PointFeature object
EarthquakeMarker em = new OceanQuakeMarker(feature);
```

Well done!
All OceanQuakeMarkers are EarthquakeMarkers.

☐

```
// Assume the variable feature stores a PointFeature object
SimplePointMarker pm = new OceanQuakeMarker(feature);
EarthquakeMarker em = pm;
```

Well done!
The first line is fine. But the second line will not work without a cast. Even though the object pointed to by pm is actually an OceanQuakeMarker, which is always an EarthquakeMarker, java "forgets" about that. To fix the problem, you can change the second line to:

```
EarthquakeMarker em = (EarthquakeMarker)pm;
```

☐

```
// Assume the variable loc stores a Location object
Object o = new SimplePointMarker(loc);
```

Well done!
This is fine because all objects are of type Object.

☐

```
SimplePointMarker m = new Marker();
```

Well done!
There are two problems with this code. First, Marker is an interface, and cannot be instantiated. Second, not all Markers are SimplePointMarkers.

☐

```
// Assume the variable loc stores a Location object
EarthQuakeMarker em = new SimplePointMarker(loc);
```

Well done!
This will cause an error because not all SimplePointMarkers are EarthquakeMarkers.

✔ 5.

Run your program using the file "quiz1.atom" as the input earthquakesURL. There is a line of code that you can uncomment in setUp that will do this, labeled "uncomment this line to take the quiz".

How many earthquakes were reported in China?

○ None

○ 3

○ 4

Well done!
This is the correct answer.

- ○ 10

✔ 6.

Run your program using the file "quiz1.atom" as the input earthquakesURL. There is a line of code that you can uncomment in setup that will do this, labeled "uncomment this line to take the quiz".

How many earthquakes were reported to have occurred in the ocean?

- ○ 30
- ○ 74
- ○ 192
- ○ 200

Well done!

- ○ 309

(REQUIRED) How long, total, did you spend on this programming assignment, to the nearest hour? Include only the time you were actively working on the programming assignment including time you spent watching support videos or re-watching videos specifically because you needed help on the assignment.

4~5 hours

Well done!
Thank you for your response.