PIMCollection class

Electronic Submission Only!

Assignment

PIMCollection class

This project involves the creation of a custom collection object that can be used to manage PIMEntities (from Homework3). You must create a class named PIMCollection that implements the interface Collection. In addition to being a Collection, your class must implement the following methods:

getNotes

```
public Collection getNotes();
```

`getNotes()` returns a Collection that holds all the PIMNote items currently in the PIMCollection. If there are no PIMNote items in the PIMCollection, this method should return an empty Collection. Note that it is not specified exactly what implementation of a Collection is returned (that's up to you), just that whatever is returned implements the Collection interface.

getTodos

```
public Collection getTodos();
```

`getNotes()` returns a Collection that holds all the PIMTodo items currently in the PIMCollection. If there are no PIMTodo items in the PIMCollection, this method should return an empty Collection. Note that it is not specified exactly what implementation of a Collection is returned (that's up to you), just that whatever is returned implements the Collection interface.

getAppointments

```
public Collection getAppointments();
```

`getAppointments()` returns a Collection that holds all the PIMAppointment items currently in the PIMCollection. If there are no PIMAppointment items in the PIMCollection, this method should return an empty Collection. Note that it is not specified exactly what implementation of a Collection is returned (that's up to you), just that whatever is returned implements the Collection interface.

getContacts

```
public Collection getContact();
```

`getContacts()` returns a Collection that holds all the PIMContact items currently in the PIMCollection. If there are no PIMContact items in the PIMCollection, this method should return an empty Collection. Note that it is not specified exactly what implementation of a Collection is returned (that's up to you), just that whatever is returned implements the Collection interface.

getItemsForDate

```
public Collection getItemsForDate(Date d);
```

`getItemsForDate` returns a Collection that holds all the PIMEntities in the PIMCollection that have a date that matches the date d. If there are no items that match the date, this method should return an empty Collection. Note that it is not specified exactly what implementation of a Collection is returned (that's up to you), just that whatever is returned implements the Collection interface.

Note: It is expected that all PIMEntities in the returned collection implement the interface you created during Homework3. (There should only be PIMTodo and PIMAppointment items, since notes and contacts are not associated with dates).

Testing PIMCollection

We will test your **`PIMCollection`** program using your other classes (everything from Homework3). Although your PIMCollection class should not depend on any of your other classes (except for possibly the name of the "dateable" interface you created), we will use your classes when testing a PIMCollection, so make sure you include them in your submission. Feel free to make any changes you want to your Homework3 classes for this assignment.

You do not need to provide us with a main() that tests your IMCollection class, but feel free to do so if you want. We can write our own main that creates a PIMCollection object and puts some PIMEntities into it to test it. (Although since we don't have standard interfaces to PIMNote, PIMTodo, etc we won't be putting anythings except priorities in the PIMNotes, PIMTodos, PIMAppointments, etc).

IMPORTANT NOTE

Your PIMCollection class must be a Collection! All methods defined of any Collection object must be supported. Although this sounds difficult, all you need to do is to extend an existing Collection class (like an ArrayList or HashSet). Use whatever makes sense to you as your base class, but it isn't necessary (or wise) to implement the entire Collection interface from scratch (just inherit it!).

For All Assignments

How To Submit

Electronic Submission Only!

Submission of your homework is via huaweicloud ClassRoom and the general idea is to upload your files as attachments. For this Homework you should submit your .java files (remain your src directories) with a readme description inside very beginning of block comment.

The name of attachment (zip or rar file) of your message should include your **student#_HW#_fullname**. Anything else you want to tell us should be included in a **readme.txt** file. Make sure your submission includes your full name, student No and Email address in every single source file, we can't record your grade unless we know your name or student No.

Don't submit compiled code (.class files)!

Multiple Submissions: You can resubmit for each project following the huawei ClassRoom instructions, we will always grade the last submission received.