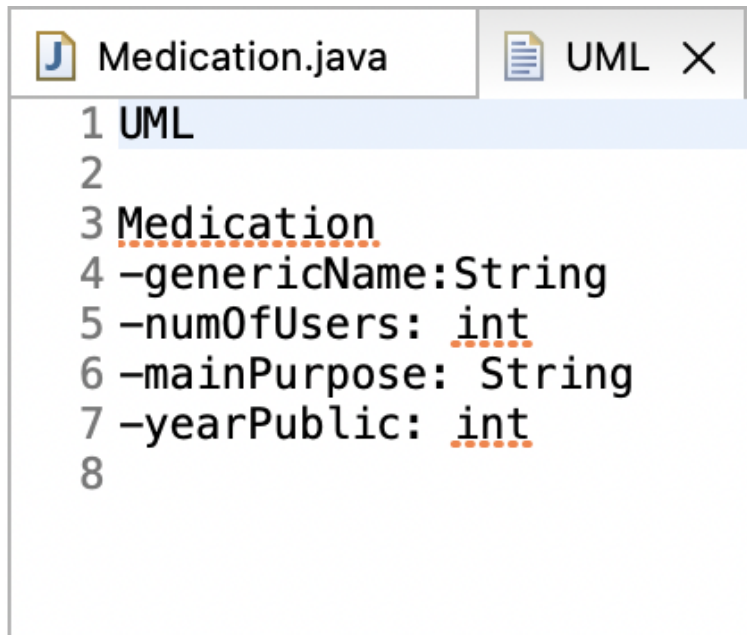


Competencies #2: Objects

1. UML



The image shows a screenshot of an IDE window with two tabs: 'Medication.java' and 'UML'. The 'UML' tab is active, displaying a list of lines from the 'Medication.java' file. The lines are numbered 1 through 8. Line 1 is 'UML', line 2 is empty, line 3 is 'Medication', line 4 is '-genericName:String', line 5 is '-numOfUsers: int', line 6 is '-mainPurpose: String', line 7 is '-yearPublic: int', and line 8 is empty. The text is in a monospaced font, and the 'UML' tab has a close button (X).

```
1 UML
2
3 Medication
4 -genericName:String
5 -numOfUsers: int
6 -mainPurpose: String
7 -yearPublic: int
8
```

2. Class

```
Medication.java X UML
1 package project;
2
3 public class Medication implements Comparable<Medication>{
4     private String genericName;
5     private int numOfUsers;
6     private String mainPurpose;
7     private int yearPublic;
8
9     public Medication(String genericName, int numOfUsers, String mainPurpose, int yearPublic) {
10         this.genericName = genericName;
11         this.numOfUsers = numOfUsers;
12         this.mainPurpose = mainPurpose;
13         this.yearPublic = yearPublic;
14     }
15
16     public String getGenericName() {
17         return genericName;
18     }
19
20     public void setGenericName(String genericName) {
21         this.genericName = genericName;
22     }
23
24     public int getNumOfUsers() {
25         return numOfUsers;
26     }
27
28     public void setNumOfUsers(int numOfUsers) {
29         this.numOfUsers = numOfUsers;
30     }
31
32     public String getMainPurpose() {
33         return mainPurpose;
34     }
35
36     public void setMainPurpose(String mainPurpose) {
37         this.mainPurpose = mainPurpose;
38     }
39
40     public int getYearPublic() {
41         return yearPublic;
42     }
43
44     public void setYearPublic(int yearPublic) {
45         this.yearPublic = yearPublic;
46     }
47
48     public String toString() {
49         return "Medication: \t" + this.genericName + ", num of users: \t #" + this.numOfUsers + "Main purpose: \t" + this.mainPurpose + "Year open to public: \t" + this.yearPublic;
50     }
51
52     public boolean equals(Medication med) {
53         if(this.toString().equalsIgnoreCase(med.toString())) {
54             return true;
55         } else {
56             return false;
57         }
58     }
59
60     @Override
61     public int compareTo(Medication med) {
62         if(this.getGenericName().compareTo(med.getGenericName()) > 0) {
63             return 1;
64         } else if(this.getGenericName().compareTo(med.getGenericName()) < 0) {
65             return -1;
66         } else {
67             return 1;
68         }
69     }
70 }
71
72
```