

Selected files

5 printable files

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CS5800_HW1\CS5800_Q4\src\com\cpp\cs5800q4\CS5800_Q4.java

```
1 package com.cpp.cs5800q4;
2
3 public class CS5800_Q4 {
4     public static void main(String[] args) {
5         Instructor instructor0 = new Instructor("Nima", "Davarpanah", "3-2636");
6         Textbook textbook0 = new Textbook("Clean Code", "Robert C. Martin", "Prentice Hall");
7         Course course = new Course("Advanced Software Engineering", instructor0, textbook0);
8         course.print();
9         System.out.println();
10
11         // allow multiple textbooks and instructors
12         Course2 course2 = new Course2("Advanced Software Engineering");
13
14         Instructor instructor = new Instructor("Nima", "Davarpanah", "3-2636");
15         Textbook textbook = new Textbook("Clean Code", "Robert C. Martin", "Prentice Hall");
16
17         course2.addInstructor(instructor);
18         course2.addTextbook(textbook);
19
20         Instructor instructor1 = new Instructor("Yu", "Sun", "9-2470");
21         Textbook textbook1 = new Textbook("Prompt Engineering", "Bob Burger", "Scholastic Books");
22
23         course2.addInstructor(instructor1);
24         course2.addTextbook(textbook1);
25         course2.print();
26     }
27 }
```

```
28 | }  
29 |
```

CS5800_HW1\CS5800_Q4\src\com\cpp\cs5800q4\Course.java

```
1  package com.cpp.cs5800q4;  
2  
3  public class Course {  
4      private String courseName;  
5      private Instructor instructor;  
6      private Textbook textbook;  
7  
8      public Course(String courseName, Instructor instructor, Textbook textbook) {  
9          this.courseName = courseName;  
10         this.instructor = instructor;  
11         this.textbook = textbook;  
12     }  
13  
14     public String getCourseName() {  
15         return courseName;  
16     }  
17  
18     public void setCourseName(String courseName) {  
19         this.courseName = courseName;  
20     }  
21  
22     public Instructor getInstructor() {  
23         return instructor;  
24     }  
25  
26     public void setInstructor(Instructor instructor) {  
27         this.instructor = instructor;  
28     }  
29  
30     public Textbook getTextbook() {  
31         return textbook;  
32     }  
33  
34     public void setTextbook(Textbook textbook) {
```

```
35     this.textbook = textbook;
36 }
37
38 public void print() {
39     System.out.println("Course Name: " + courseName);
40     System.out.println("Instructor First Name: " + instructor.getFirstName());
41     System.out.println("Instructor Last Name: " + instructor.getLastName());
42     System.out.println("Office Number: " + instructor.getOfficeNumber());
43     System.out.println("Textbook Title: " + textbook.getTitle());
44     System.out.println("Textbook Author: " + textbook.getAuthor());
45     System.out.println("Textbook Publisher: " + textbook.getPublisher());
46 }
47
48
49 }
50
51
```

CS5800_HW1\CS5800_Q4\src\com\cpp\cs5800q4\Course2.java

```
1 package com.cpp.cs5800q4;
2
3 import java.util.ArrayList;
4
5 public class Course2 {
6     private String courseName;
7     private ArrayList<Instructor> instructors;
8     private ArrayList<Textbook> textbooks;
9
10    public Course2(String courseName) {
11        this.courseName = courseName;
12        this.instructors = new ArrayList<>();
13        this.textbooks = new ArrayList<>();
14    }
15
16    public String getCourseName() {
17        return courseName;
18    }
19
```

```
20     public void setCourseName(String courseName) {
21         this.courseName = courseName;
22     }
23
24     public ArrayList<Instructor> getInstructors() {
25         return instructors;
26     }
27
28     public void setInstructors(ArrayList<Instructor> instructors) {
29         this.instructors = instructors;
30     }
31
32     public ArrayList<Textbook> getTextbooks() {
33         return textbooks;
34     }
35
36     public void setTextbooks(ArrayList<Textbook> textbooks) {
37         this.textbooks = textbooks;
38     }
39
40     public void addInstructor(Instructor instructor) {
41         this.instructors.add(instructor);
42     }
43
44     public void addTextbook(Textbook textbook) {
45         this.textbooks.add(textbook);
46     }
47
48     public void print() {
49         System.out.println("Course Name: " + courseName);
50
51         System.out.println("  Instructors: ");
52         for(Instructor instructor: instructors) {
53             System.out.println("\t| " + "Instructor First name: " + instructor.getFirstName());
54             System.out.println("\t| " + "Instructor Last name: " + instructor.getLastName());
55             System.out.println("\t| " + "Office Number: " + instructor.getOfficeNumber());
56             System.out.println();
57         }
```

```
58
59     System.out.println("  Textbooks: ");
60     for(Textbook textbook: textbooks) {
61         System.out.println("\t| " + "Textbook Title: " + textbook.getTitle());
62         System.out.println("\t| " + "Textbook Author: " + textbook.getAuthor());
63         System.out.println("\t| " + "Textbook Publisher: " + textbook.getPublisher());
64         System.out.println("");
65     }
66
67 }
68
69
70 }
71
```

CS5800_HW1\CS5800_Q4\src\com\cpp\cs5800q4\Instructor.java

```
1  package com.cpp.cs5800q4;
2
3  public class Instructor {
4      private String firstName;
5      private String lastName;
6      private String officeNumber;
7
8      public Instructor (String firstName, String lastName, String officeNumber) {
9          this.firstName = firstName;
10         this.lastName = lastName;
11         this.officeNumber = officeNumber;
12     }
13
14     public String getFirstName() {
15         return firstName;
16     }
17
18     public void setFirstName(String firstName) {
19         this.firstName = firstName;
20     }
21
22     public String getLastName() {
```

```
23         return lastName;
24     }
25
26     public void setLastName(String lastName) {
27         this.lastName = lastName;
28     }
29
30     public String getOfficeNumber() {
31         return officeNumber;
32     }
33
34     public void setOfficeNumber(String officeNumber) {
35         this.officeNumber = officeNumber;
36     }
37
38 }
39
40
```

CS5800_HW1\CS5800_Q4\src\com\cpp\cs5800q4\Textbook.java

```
1 package com.cpp.cs5800q4;
2
3 public class Textbook {
4     private String title;
5     private String author;
6     private String publisher;
7
8     public Textbook (String title, String author, String publisher) {
9         this.title = title;
10        this.author = author;
11        this.publisher = publisher;
12    }
13
14    public String getTitle() {
15        return title;
16    }
17
18    public void setTitle(String title) {
```

```
19         this.title = title;
20     }
21
22     public String getAuthor() {
23         return author;
24     }
25
26     public void setAuthor(String author) {
27         this.author = author;
28     }
29
30     public String getPublisher() {
31         return publisher;
32     }
33
34     public void setPublisher(String publisher) {
35         this.publisher = publisher;
36     }
37
38 }
39
```