

Selected files

5 printable files

CS5800_Q4\src\com\cpp\cs5800q4\Course.java
CS5800_Q4\src\com\cpp\cs5800q4\Course2.java
CS5800_Q4\src\com\cpp\cs5800q4\CS5800_Q4.java
CS5800_Q4\src\com\cpp\cs5800q4\Instructor.java
CS5800_Q4\src\com\cpp\cs5800q4\Textbook.java

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_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_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_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_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
```