Name: Zacharie Happel

CST141-FA2023

Project for Week 04

Due: 10/01/2023

# Source Code for All 5 Classes:

## CollegeCoursesMain.java

**package** cst141**.**projects**.**projectfour**;**

*public* class CollegeCoursesMain **{**

*public* *static* *void* main (String[] **args**) **{**

        Course courseCST141 **=** **new** Course("CST141"**,** "95537"**,** 4)**;**

        CourseTeacher courseCST141Teacher **=** **new** CourseTeacher("Prof. H."**,** "631-548-2691"**,** "hassile"**,** true)**;**

        CourseStudent[] courseCST141Student **=** **new** CourseStudent[5]**;**

*//                                                                           matric, fulltime*

        courseCST141Student[0] **=** **new** CourseStudent("Sally"**,** "631-555-1111"**,** "sally01"**,** true**,** true**,** "CST")**;**

        courseCST141Student[1] **=** **new** CourseStudent("Mohammed"**,** "631-555-2222"**,** "moham56"**,** true**,** true**,** "CST")**;**

        courseCST141Student[2] **=** **new** CourseStudent("Alex"**,** "631-555-3333"**,** "alex93"**,** false**,** false**,** "N/A")**;**

        courseCST141Student[3] **=** **new** CourseStudent("Barbara"**,** "631-555-4444"**,** "barba28"**,** true**,** false**,** "GenStud")**;**

        courseCST141Student[4] **=** **new** CourseStudent("Monique"**,** "631-555-5555"**,** "moniq71"**,** true**,** true**,** "CST")**;**

        System**.***out***.**println("\nWritten by Zacharie Happel\n")**;**

        System**.***out***.**println("Course Info: ")**;**

        courseCST141**.**printInfo()**;**

        System**.***out***.**println("\nTeacher Info: ")**;**

        courseCST141Teacher**.**printInfo()**;**

        System**.***out***.**println("\nCourse Info: ")**;**

**for** (*int* i **=** 0**;** i **<=** courseCST141Student**.***length* **-** 1**;** i**++**) **{**

            System**.***out***.**print("Student #" **+** i **+** " ")**;**

            courseCST141Student[i]**.**printInfo()**;**

**}**

**}**

**}**

## CoursePerson.java

**package** cst141**.**projects**.**projectfour**;**

*public* *abstract* class CoursePerson **{**

*protected* String fullName**;**

*protected* String phoneNumber**;**

*protected* String userName**;**

*public* CoursePerson() **{**

        fullName **=** ""**;**

        phoneNumber **=** ""**;**

        userName **=** ""**;**

**}**

*public* CoursePerson(

        String **theFullName,**

        String **thePhoneNumber,**

        String **theUserName**) **{**

            fullName **=** theFullName**;**

            phoneNumber **=** thePhoneNumber**;**

            userName **=** theUserName**;**

**}**

*public* String getFullName () **{** **return** fullName**;}**

*public* String getPhoneNumber () **{** **return** phoneNumber**;** **}**

*public* String getUserName () **{** **return** userName**;** **}**

*abstract* *void* printInfo()**;**

*abstract* String getEmailAddress()**;**

**}**

## CourseStudent.java

**package** cst141**.**projects**.**projectfour**;**

*public* class CourseStudent *extends* *CoursePerson***{**

*private* Boolean matriculated**;**

*private* Boolean fullTime**;**

*private* String programOfStudy**;**

*public* CourseStudent() **{**

*super*()**;** *// call default constructor of parent class*

        matriculated **=** false**;**

        fullTime **=** false**;**

        programOfStudy **=** ""**;**

**}**

*public* CourseStudent(

        String **theFullName,**

        String **thePhoneNumber,**

        String **theUserName,**

        Boolean **theMatriculated,**

        Boolean **theFullTime,**

        String **theProgramOfStudy**) **{**

*super*(theFullName**,** thePhoneNumber**,** theUserName)**;**

            matriculated **=** theMatriculated**;**

            fullTime **=** theFullTime**;**

            programOfStudy **=** theProgramOfStudy**;**

**}**

*public* Boolean getMatriculated() **{** **return** matriculated**;** **}**

*public* Boolean getFullTime() **{** **return** fullTime**;** **}**

*public* String  getProgramOfStudy() **{** **return** programOfStudy**;** **}**

    @**Override** *public* *void* printInfo() **{**

        System**.***out***.**println(

              "Name: " **+** *super***.**getFullName() **+**

            ", Phone Number: " **+** *super***.**getPhoneNumber() **+**

            ", User Name: " **+** *super***.**getUserName() **+**

            ", Matriculated: " **+** matriculated **+**

            ", Full Time: " **+** fullTime **+**

            ", Program of Study: " **+** programOfStudy **+**

            ", Email: " **+**  getEmailAddress()

        )**;**

**}**

    @**Override** *public* String getEmailAddress() **{**

**return** (*super***.**getUserName())**.**concat("@mail.sunysuffolk.edu")**;**

**}**

**}**

## CourseTeacher.java

**package** cst141**.**projects**.**projectfour**;**

*public* class CourseTeacher *extends* *CoursePerson* **{**

*private* Boolean fullTime**;**

*public* CourseTeacher() **{**

*super*()**;**

        fullTime **=** false**;**

**}**

*public* CourseTeacher(

        String **theFullName,**

        String **thePhoneNumber,**

        String **theUserName,**

*boolean* **theFullTime**) **{**

*super*(theFullName**,** thePhoneNumber**,** theUserName)**;**

            fullTime **=** theFullTime**;**

**}**

*public* Boolean getFullTime() **{** **return** fullTime**;** **}**

    @**Override** *public* *void* printInfo() **{**

        System**.***out***.**println(

            "Name: " **+** *super***.**getFullName() **+**

            ", Phone Number: " **+** *super***.**getPhoneNumber() **+**

            ", User Name: " **+** *super***.**getUserName() **+**

            ", Full Time: " **+** fullTime **+**

            ", Email: " **+** getEmailAddress()

        )**;**

**}**

    @**Override** *public* String getEmailAddress() **{**

**return** (*super***.**getUserName())**.**concat("@mail.sunysuffolk.edu")**;**

**}**

**}**

## Course.java

**package** cst141**.**projects**.**projectfour**;**

*public* class Course **{**

*private* String courseNumber**;**

*private* String CRN**;**

*private* *int* numberOfCredits**;**

*public* Course () **{** **}**

*public* Course (String **theCourseNumber,** String **theCRN,** *int* **theNumberOfCredits**) **{**

            courseNumber **=** theCourseNumber**;**

            CRN **=** theCRN**;**

            numberOfCredits **=** theNumberOfCredits**;**

**}**

*public* String getCourseNumber () **{** **return** courseNumber**;** **}**

*public* String getCRN () **{** **return** CRN**;** **}**

*public* *int*    getNumberOfCredits () **{** **return** numberOfCredits**;** **}**

*public* *void* printInfo () **{**

        System**.***out***.**println(

            "Course Number: " **+** courseNumber **+**

            ", CRN: " **+** CRN **+**

            ", Number of Credits: " **+** numberOfCredits

        )**;**

**}**

**}**

# Screenshots from Output:

## Compilation

## 

## Output

## 

## -------------------------------------------------------------------------------

## I certify that the above work is my own. I did not copy work from the Internet

## or from a classmate. This project will count as part of my grade for the course.