Class Course implements Serializable

String	courseName
String	courseId
int	maximumStudents
int	currentStudents
~~ArrayList <Student>~~	listOfNames
String	courseInstructor
int	courseSectionNumber
String	courseLocation

Course ( )

Course (name, id, maximum, instructor, secNum, location)

Getters & Setters

addStudent (firstName, lastName)

deleteStudent (firstName, lastName)

displayAllInformation (list)

Abstract Class User

String	username
String	password
String	firstName
String	lastName
ArrayList <Student>	StudentListOfAClass
ArrayList <Student>	allStudent

User ( )

User (username, password, firstN, lastN)

Getters & Setters

ViewAllCourses (list)

ViewAllFullCourses (list)

Extends

Extends

Implements

Interface InterfaceAdmin

createANewCourse (Course n , ArrayList < Course > list)

deleteACourse (secNum, id, list)

editACourse (secNum, id, list)

displayInformationForAGivenCourse (secNum, id, list)

registerAStudent (username, password, firstName, lastName)

viewAllCourses (list)

viewAllFullCourses (list)

writeFullCoursesToAFile (list)

Class Admin

Admin ( )

Admin (username, password)

Admin (username, password, firstName, lastName)

Method implements InterfaceAdmin

view Students Registered In A Specific Course (secNum, id, list)

view Courses Registered By A Student (firstName, lastName, list)

Sort Courses Based On Current Student Numbers (list)

Implements

Interface InterfaceStudent

viewAll Courses (list)

viewAllFull Courses (list)

registerOnA Course (courseName, section, firstName, lastName, list)

withdrawFrom A Course (firstName, lastName, courseName, section, list)

ViewAll Courses Registered (firstName, lastName)

Class ConrseRegistrationSystem implements Serializable

Deserialization & Serialization

Admin & Student Log in & Make changes

Class Student

String username

String password

String firstName

String lastName

ArrayList ⟨ Course ⟩ my Course

Student ( )

Student (firstName, lastName)

Student (username, password, firstName, lastName)

Method implements InterfaceStudent

Workflow:

Deserialization ⟶ Admin Log In ⟶ Deserialization ⟶ Menu displayed ⟶ Select choices

⟶ Make changes ⟶ Admin Log Out ⟶ Serialization

Student Log In ⟶ Menu displayed ⟶ Select choices ⟶ Make changes ⟶ Student Log Out

⟶ Serialization

Admin OR Student Log In Again & Again (Same workflow as above)