# User -username: String -firstName: String -lastName: String -password: String -id: int -schoolID: int +isAdministrator(): boolean = false +isTeacher(): boolean = false +isStudent(): boolean = false +getUsername(): String +getFirstName(): String +getLastName(): String +getPassword(): String +getID(): int +getSchoollD(): int +setUsername(username: String): void +setFirstName(firstName: String): void +setLastName(lastName: String): void +setPassword(password: String): void +toString(): String Administrator Teacher Student +isAdministrator(): boolean = true +isTeacher(): boolean = true +isStudent(): boolean = true +toString(): String +toString(): String +toString(): String

### School

- -name: String
- -schoolID: int
- -userList: File
- -classList: File
- -admins: ArrayList<Administrator>
- -teachers: ArrayList<Teacher>
- -students: ArrayList<Student>
- -classes: ArrayList<SchoolClass>
- -blocks: int

## +addAdministrator(a: Administrator): void

- +addTeacher(t: Teacher): void
- +addStudent(s: Student): void
- +addClass(cl: SchoolClass): void
- -writeInUser(u: User, role: String): void
- -writeInClass(cl: SchoolClass): void
- -addExistingUsers(): void
- -addExistingClasses(): void
- +deleteUser(u: User): void
- +deleteClass(cl: SchoolClass): void
- +getName(): String
- +getSchoollD(): int
- +getUsers(): ArrayList<User>
- +getClasses(): ArrayList<SchoolClass
- +getBlocks(): int
- +setBlocks(blocks: int): void
- +refactorUser(username: String, firstName: String, lastName: String, password: String, id: int): void -editUser(u: User, username: String, firstName:
- String, lastName: String, password: String): void
- +toString(): String

#### SchoolClass

- -name: String
- -block: int
- -classID: int
- -schoolID: int
- -teachers: ArrayList<Teacher>
- -students: ArrayList<Student>
- -gradingMethod: int
- -classRoster: File
- -classAssignments: File
- -assignments: ArrayList<Assignment>
- -addUser(u: User, role: String): boolean
- +hasID(id: int): boolean
- +deleteUser(u: User): boolean
- +addStudent(s: Student): boolean
- +addTeacher(t: Teacher): boolean
- +addExistingStudent(s: Student): void
- +addExistingTeacher(t: Teacher): void
- +deleteStudent(s: Student): boolean
- +deleteTeacher(t: Teacher): boolean
- +deleteFiles(): void
- +getName(): String
- +getBlock(): int
- +getClassID(): int
- +getSchoollD(): int
- +getGradingMethod(): int
- +getTeachers(): ArrayList<Teacher>
- +getStudents(): ArrayList<Student>
- +setName(name: String): void
- +semame(name: sumg):
- +setBlock(block: int): void
- +setClassID(classID: int): void
- +setSchoolID(schoolID: int): void
- +setGradingMethod(gradingMethod: int): void...

## Assignment

- -name: String
- -points: int
- -weightCategory: String-grades: ArrayList<Double>
- +setGrade(index: int, grade: double): boolean
- +addStudentDisplacement(index: int): boolean
- +removeStudentDisplacement(index int): boolean
- +toString(): String