AuthinticationService

+signIn(email: String, hashedPassword: String): boolean
+userExist(email: String): boolean
+isValidEmail(email: String): boolean

AdminService

-userRepo: UserRepository
-courseRepo: CourseRepository
-authServise: AuthinticationService

+addUser(user:User): boolean
+changePassword(email:String, hasedPassword: String)
+UpdateUser(user:User)
+addCourse(course:Course)
+addUserToCourse(email:String,courseCode: String)

PostService

-postRepo: PostRepository
-commentRepo: CommentRepository

+getPosts(courseCode:String)
+addPost(post: Post,courseCode: String)
+addComment(comment: Comment, postId: Long)
+getComments(courseCode: String)

UserService

-courseRepo: CourseRepository
-userRepo: UserRepository
-deliverableRepo: DeliverableRepository

+getCourses(email: String)
+getAssignments(courseCode:String)

StudentService

+getDeliverables(email: String)
+getDeliverablesForCourse(email: String, courseCode: String)
+submitDeliverable(deliverable:Deliverable)

TeacherService

+getDeliverablesForCourse(courseCode:String)
+getDeliverablesForAssignment(assignmentId:Long)
+addAssignment(assignment: Assignment)
+gradeDeliverable(deliverableId: Long, grade: int)

<<Interface>>
UserRepository

+findByRole(role:String) List<User>
+findByEmail(email:String) List<User>

<<Interface>>
CourseRepository

+findByCode(code:String) List<Course>
+findByName(name:String) List<Course>

<<Interface>>
PostRepository

User

-email: String
-firstName:String
-lastName:String
-sex:Char
-birthDate:Date
-hashedPassword: String
-role: String
-deliverables: List<Deliverable>
-courses: List<Course>

+getters()
+setters()

Course

-code:String
-name:String
-members: List<User>
-assignments: List<Assignment>
-posts: List<Post>
-comments:List<Comment>

+getters()
+setters()

Post

-id:Long
-date: Date
-type:String
-title: String
-body: String
-course: Course
-publisher: User
-comments: List<Comment>
-courses: List<Course>

+getters()
+setters()

<<Interface>>
CommentRepository

<<Interface>>
AssignmentRepository

<<Interface>>
DeliverableRepository

Comment

-id:Long
-post: Post
-body: String
-publisher: User
-date: Date
-course: Course

+getters()
+setters()

Assignment

-id:Long
-title: String
-body: String
-course: Course
-dueDate: Date
-assignedDate: Date
-deliverables: List<Deliverable>

+getters()
+setters()

Deliverable

-id:Long
-assignment: Assignment
-grade: int
-submissionDate: Date
-body: String
-student: User

+getters()
+setters()