

User(abstract):

Variables:

- Id
- name
- email
- password

methods:

- void logout();
- void login();
- getter and setter

Admin :

Variables:

- NOTHING

methods:

- Call all services
- Payment(Student s)

Student : *//(inherits from User)*

Variables:

- ArrayList<Course> enrolledCourses
- ArrayList<Certificate>earnedCertificates

methods:

- enroll_course ();
- earn_certificate ();
- browse_available_course ();
- Do_quiz()
- time_spent()
- finish_lesson();

Instructor : *//(inherits from User)*

Variables:

- ArrayList<Course> createCourses
- ArrayList<Certificate> createdCertificates
- ArrayList<quizes> createdquizes

methods:

- manage_courses();
- upload_lessons();

- delete_lessons
- add_quiz();
- delete_quiz();
- generate_certificate();

Course :

Variables:

- ArrayList<Quiz> quiz
- ArrayList< Instructor > instructor
- Certificate
- Lessons
- Instrouctours
- price

methods:

- getter and setter

Course :

Variables:

- lesson_id
- lesson title
- lesson content
- lesson_optional_resource

methods:

- getter and setter

Quiz:

Variables:

- quiz_id
- number_questions
- course_name
- passing_score
- name

methods:

- getter and setter

***** Service DEAL WITH DATABASE(JSON)*****

UserService :

Variables:

- NOTHING

methods:

- add_instructors(**Instructor i**) && update && delete
- add_student(**Student s**) && update && delete

CourseService

Variables:

- NOTHING

methods:

- add_courses(Course c) && update && delete

QuizService

Variables:

- NOTHING

methods:

- add_quiz(Quiz q) && update && delete

JsonDatabaseManager:

Variables:

- NOTHING

methods:

- add_courses(Course c) && update && delete to courses.txt
- add_instructors(Instructor i) && update && delete to user.txt
- add_student(Student s) && update && delete to user.txt
- add_quizes (Quiz q) && update && delete to quiz.txt
- add_lessons (Lesson l) && update && delete to lesson.txt
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