LANGUAGE LEARNING APPLICATION

Class: User

- Attributes:
    - `userID: String`
    - `username: String`
    - `email: String`
    - `password: String`
    - `profile: Profile`
    - `progress: Progress`
- Methods:
    - `login(email: String, password: String): boolean`
    - `logout(): void`
    - `register(username: String, email: String, password: String): boolean`
    - `updateProfile(profile: Profile): void`

Class: Language

- Attributes:
    - `languageID: String`
    - `name: String`
    - `nativeSpeakers: int`
    - `countries: List<String>`
    - `courses: List<Course>`
- Methods:
    - `addCourse(course: Course): void`
    - `removeCourse(courseID: String): void`
    - `getCourses(): List<Course>`

Class: Lesson

- Attributes:
  - lessonID: String
  - title: String
  - description: String
  - content: List<Content>
  - exercises: List<Exercise>
  - quizzes: List<Quiz>
  - isCompleted: boolean
- Methods:
  - addContent(content: Content): void
  - removeContent(contentID: String): void
  - addExercise(exercise: Exercise): void
  - removeExercise(exerciseID: String): void
  - addQuiz(quiz: Quiz): void
  - removeQuiz(quizID: String): void
  - markAsCompleted(): void

Class: Quiz

- Attributes:
  - quizID: String
  - title: String
  - questions: List<Exercise>
  - isCompleted: boolean
- Methods:
  - addQuestion(exercise: Exercise): void
  - removeQuestion(exerciseID: String): void
  - markAsCompleted(): void

Class: Progress

- Attributes:
    - userID: String
    - courses: List<Course>
    - achievements: List<Achievement>
- Methods:
    - addCourse(course: Course): void
    - removeCourse(courseID: String): void
    - getOverallProgress(): float
    - addAchievement(achievement: Achievement): void
    - getAchievements(): List<Achievement>

Class: SkillLevel

- Attributes:
    - skillLevelID: String
    - name: String (e.g., Beginner, Intermediate, Advanced)
    - description: String
    - courses: List<Course>
    - requiredAchievements: List<Achievement>
- Methods:
    - addCourse(course: Course): void
    - removeCourse(courseID: String): void
    - addAchievement(achievement: Achievement): void
    - removeAchievement(achievementID: String): void
    - getProgress(userID: String): float

Class: Certification

- Attributes:
  - `certificationID: String`
  - `title: String`
  - `description: String`
  - `requirements: List<Achievement>`
  - `courses: List<Course>`
  - `issueDate: Date`
  - `expiryDate: Date`
- Methods:
  - `addCourse(course: Course): void`
  - `removeCourse(courseID: String): void`
  - `addRequirement(achievement: Achievement): void`
  - `removeRequirement(achievementID: String): void`
  - `issueCertification(userID: String): void`

Class: Subscription

- Attributes:
  - `subscriptionID: String`
  - `userID: String`
  - `plan: SubscriptionPlan`
  - `startDate: Date`
  - `endDate: Date`
  - `status: String` (e.g., Active, Inactive, Canceled)
- Methods:
  - `activateSubscription(): void`
  - `cancelSubscription(): void`
  - `renewSubscription(): void`

Class: Resource

- Attributes:
  - resourceID: String
  - title: String
  - description: String
  - category: ResourceCategory
  - uploadDate: Date
  - author: User
  - usage: List<ResourceUsage>
- Methods:
  - addUsage(userID: String): void
  - getUsageStatistics(): List<ResourceUsage>

Class: Community

- Attributes:
  - Community ID: String
  - postID: String
  - userID: String
  - content: String
  - timestamp: Date
- Methods:
  - editCommunity(content: String): void
  - deleteCommunity(): void