**Core Classes**

1. **User**
   * Attributes: userId, name, email, password, profilePicture
   * Methods: register(), login(), logout(), updateProfile(), changePassword()
2. **Teacher** (inherits from User)
   * Additional Methods: createQuiz(), createAssignment(), uploadResource()
3. **Student** (inherits from User)
   * Additional Methods: viewProgress()

**Functional Components**

1. **Quiz**
   * Attributes: quizId, title, description, createdDate, difficulty, questions
   * Methods: createManually(), generateWithAI(), edit(), delete(), getAllQuizzes()
2. **Assignment**
   * Attributes: assignmentId, title, description, dueDate, category, createdDate
   * Methods: create(), edit(), delete(), getAllAssignments()
3. **Resource**
   * Attributes: resourceId, title, description, fileUrl, uploadDate, fileType
   * Methods: upload(), download(), delete(), getAllResources()
4. **Announcement**
   * Attributes: announcementId, title, message, createdDate, lastEditDate
   * Methods: post(), edit(), delete(), getAllAnnouncements()

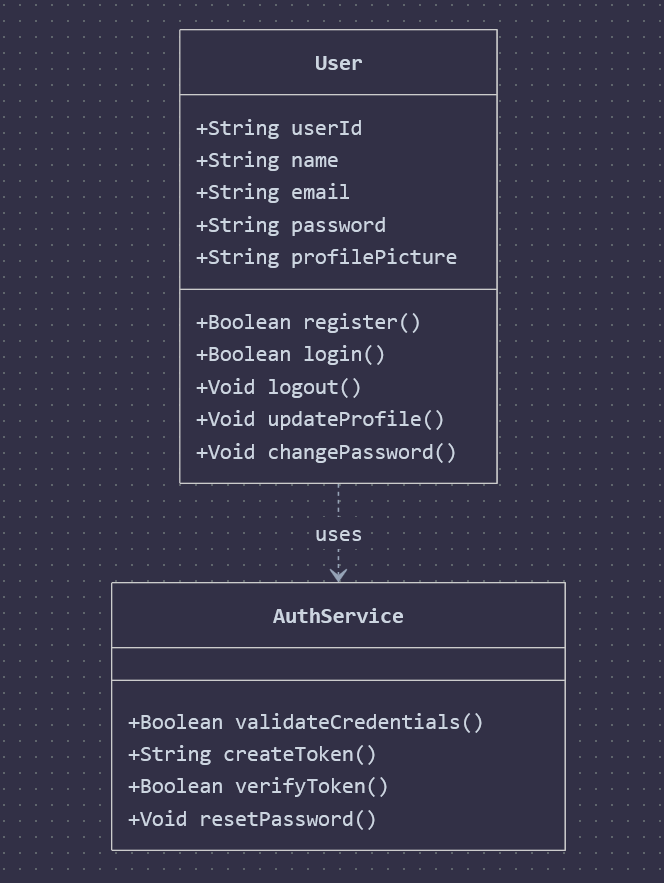
**Supporting Classes**

1. **Question**
   * Attributes: questionId, text, options, correctAnswer, difficulty
   * Methods: validate()
2. **StudentProgress**
   * Attributes: progressId, studentId, assignmentId, quizId, score, completionDate
   * Methods: calculateAverage()
3. **Settings**
   * Attributes: userId, language, notificationsEnabled
   * Methods: changeLanguage(), toggleDarkMode(), toggleNotifications(), translateContent()

**Service Classes**

1. **AuthService**
   * Methods: validateCredentials(), createToken(), verifyToken(), resetPassword()
2. **AIService**
   * Methods: generateQuizQuestions(), evaluatePasswordStrength(), translateContent()
3. **TranslationService**
   * Methods: translateText(), detectLanguage(), getSupportedLanguages()

Core access control class:



A screenshot of a computer

AI-generated content may be incorrect.

