**Mahmoud Mzoughi – Training Module**

**Brief Summary :**

* **Purpose: The Training Module provides a powerful platform to create, deliver, and engage learners with compelling educational content. It lays the foundation for building interactive quizzes, managing rich training materials, and tracking learner progress.**
* **Key Features:**
  + **Customizable Quizzes: Design engaging quizzes with various question types to assess knowledge retention and track performance.**
  + **Diverse Content Management: Organize and deliver diverse training content including text, videos, images, and other interactive elements.**
  + **Progress Tracking: Monitor learner progress, quiz completion, and content engagement to offer insights and support.**

**Tables:**

* **Quiz**
* **QuizQuestion**
* **TrainingContent**

**3 Modules : Quiz | QuizQuestion | TrainingContent :**

**Module 1: Quiz**

* **1.1 CRUD**
  + Create Quiz
  + Read Quiz (fetch details by ID)
  + Update Quiz (title, description, etc.)
  + Delete Quiz
* **1.2 Fonctions Métiers**
  + Calculate average quiz score for a group of users
  + Automatically generate quizzes based on selected topics or difficulty
  + Recommend related quizzes based on a user's history
* **1.3 Fonctions Avancées**
  + Quiz analytics dashboard (completion rates, scores, etc.)
  + Import/Export quizzes in a standard format
  + Integration with a leaderboard system

**Module 2: QuizQuestion**

* **1.1 CRUD**
  + Create QuizQuestion (with association to a Quiz)
  + Read QuizQuestion
  + Update QuizQuestion (text, answers, correct answer designation)
  + Delete QuizQuestion
* **1.2 Fonctions Métiers**
  + Support different question types (multiple-choice, true/false, fill-in-the-blank, etc.)
  + Randomize question order within a quiz
  + Assign difficulty levels to questions
* **1.3 Fonctions Avancées**
  + Visual question builder (drag-and-drop interface)
  + Support for image/video-based questions
  + Adaptive quizzing (questions adjust difficulty based on previous answers)

**Module 3: TrainingContent**

* **1.1 CRUD**
  + Create TrainingContent (text, video, links, etc.)
  + Read TrainingContent
  + Update TrainingContent
  + Delete TrainingContent
* **1.2 Fonctions Métiers**
  + Categorize content (topics, tags)
  + Implement completion tracking for users
  + Curated learning paths (sequences of TrainingContent)
* **1.3 Fonctions Avancées**
  + Interactive content (embedded quizzes, simulations)
  + Content search with advanced filtering (by topic, type, etc.)
  + Integration with external content sources (e.g., YouTube, Udemy)