CEBU INSTITUTE OF TECHNOLOGY - UNIVERSITY
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Functional Requirement Document (FRD)
for
Discere: Online Quiz/Activity
Management System

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CHAPTER ONE: INTRODUCTION

1.1 Project Overview

Discere is a learning platform that allows learners to create flashcards, study materials, and quizzes to enhance their learning experience. The goal of this document is to outline the functional requirements for the Minimum Viable Product (MVP) version of Discere.

1.2 Project Objectives

The primary objectives of the "Discere" system are:

- To provide a centralized platform for creating and managing quizzes and activities.
- To enhance the efficiency of the assessment process by automating grading and providing instant feedback.
- To improve learners' engagement and learning outcomes through interactive quizzes and activities.

1.3 Project Scope

The MVP version of Discere will include the core functionalities required for learners to create and manage flashcards, study those flashcards, and take quizzes based on their flashcards. This document details the essential functions that will be implemented in the MVP.

1.4 System Purpose

This chapter section includes the systematic purpose of the Online Quiz/Activity Management System, Discere, according to the following structure: users, location, responsibilities, and needs.

1.4.1 Users

The primary users of the system include:

- **Learners:** Participate in quizzes and activities, receive feedback, and track their

performance.

- **Administrators:** Oversee the overall operation of the system, manage user accounts, and ensure system integrity.

1.4.2 Responsibilities

- **Learners:** Complete quizzes and activities, review feedback, and engage in self-assessment.
- **Administrators:** Manage user roles, ensure data security, and maintain the system.

1.4.3 Need

There is a growing need for digital solutions in education, especially in the context of remote learning. Traditional methods of assessment are often time-consuming and lack immediacy in feedback, which can hinder the learning process. The "Discere" system addresses these challenges by providing a streamlined, efficient, and interactive platform for quiz and activity management, ultimately contributing to better learning outcomes.

CHAPTER TWO: FUNCTIONAL OBJECTIVES

2.1 Functional Requirements

2.1.1 User Registration and Authentication

- **FR1.1**: **User Registration** - The system shall allow users to create an account using their email address and a password.
- **FR1.2**: **User Login** - The system shall allow users to log in using their registered email and password.
- **FR1.3**: **Password Recovery** - The system shall allow users to recover their password using their registered email address.

2.1.2 Flashcard Creation and Management

- **FR2.1**: **Create Flashcards** - The system shall allow users to create flashcards by providing a term and its corresponding definition or explanation.
- **FR2.2**: **Edit Flashcards** - The system shall allow users to edit existing flashcards to update or correct information.
- **FR2.3**: **Delete Flashcards** - The system shall allow users to delete flashcards that are no longer needed.

2.1.3 Flashcard Organization

- **FR3.1**: **Create Decks** - The system shall allow users to organize flashcards into decks based on subjects or topics.
- **FR3.2**: **Edit Decks** - The system shall allow users to edit the title or description of a deck.
- **FR3.3**: **Delete Decks** - The system shall allow users to delete entire decks of flashcards.

2.1.4 Study Mode

- **FR4.1**: **Study Flashcards** - The system shall provide a study mode where users can review flashcards in a deck, one by one, with the option to flip the card to see the answer.
- **FR4.2**: **Shuffle Flashcards** - The system shall allow users to shuffle flashcards within a deck to randomize the order for studying.

2.1.5 Quiz Mode

- **FR5.1**: **Create Quizzes** - The system shall allow users to generate quizzes based on selected flashcards from one or more decks.
- **FR5.2**: **Take Quizzes** - The system shall present quizzes to users in multiple-choice format or fill-in-the-blank format, depending on the flashcard type.
- **FR5.3**: **View Quiz Results** - The system shall display quiz results to the user, showing correct and incorrect answers, along with a score.

2.1.6 User Profile and Progress Tracking

- **FR6.1**: **User Profile** - The system shall provide a user profile section where users can view their account information and update their profile details.
- **FR6.2**: **Track Progress** - The system shall track and display users' study progress, including the number of flashcards reviewed, quizzes taken, and average quiz scores.

2.2 Non-Functional Requirements

2.2.1 Performance

- **NFR1**: The system shall be able to handle up to 1,000 concurrent users without performance degradation.

2.2.2 Security

- **NFR2**: User data, including flashcards and quiz results, shall be stored securely with encryption.

2.2.3 Usability

- **NFR3**: The system's interface shall be intuitive and user-friendly, allowing users to navigate and perform tasks with minimal instruction.