

Data collection format for Assignment Submission Portal with Quiz functionality project:

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Data Collection

1. Users Table

Stores user details for students and staff.

Column Name	Data Type	Description
user_id	INT (PK, AUTO_INC)	Unique user ID.
name	VARCHAR(255)	Full name of the user.
dob	DATE	Date of birth of the user.
department	VARCHAR(100)	Department the user belongs to.
role	ENUM (Student/Staff)	Role of the user (Student or Staff).
email	VARCHAR(255)	Email address.
password	VARCHAR(255)	Encrypted password.
created_at	DATETIME	Timestamp when user was created.

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2. Staffs Table

Stores details specific to staff users.

Column Name	Data Type	Description
staff_id	INT (PK, AUTO_INC)	Unique staff ID.
user_id	INT (FK)	References Users table.
designation	VARCHAR(100)	Staff designation (e.g., Professor).
specialization	VARCHAR(255)	Area of expertise.
created_at	DATETIME	Timestamp when staff record was created.

### 3. Assignments Table

Stores assignment details created by staff.

Column Name	Data Type	Description
assignment_id	INT (PK, AUTO_INC)	Unique assignment ID.
staff_id	INT (FK)	References Staffs table.
title	VARCHAR(255)	Title of the assignment.
description	TEXT	Detailed description of the assignment.
deadline	DATE	Due date for assignment submission.
created_at	DATETIME	Assignment creation timestamp.

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### 4. Submissions Table

Tracks student submissions for assignments.

Column Name	Data Type	Description
submission_id	INT (PK, AUTO_INC)	Unique submission ID.
assignment_id	INT (FK)	References Assignments table.
student_id	INT (FK)	References Users table (role = Student).
file_link	VARCHAR(255)	Link to submitted assignment file.
submitted_at	DATETIME	Timestamp of submission.
status	ENUM (Pending/Approved/Rejected)	Status of submission.

## 5. Quizzes Table

Manages quizzes created by staff.

Column Name	Data Type	Description
quiz_id	INT (PK, AUTO_INC)	Unique quiz ID.
staff_id	INT (FK)	References Staffs table.
title	VARCHAR(255)	Title of the quiz.
description	TEXT	Quiz details.
created_at	DATETIME	Timestamp when the quiz was created.

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## 6. Questions Table

Stores questions for quizzes.

Column Name	Data Type	Description
question_id	INT (PK, AUTO_INC)	Unique question ID.
quiz_id	INT (FK)	References Quizzes table.
question_text	TEXT	The question content.
option_a	VARCHAR(255)	Option A for the question.
option_b	VARCHAR(255)	Option B for the question.
option_c	VARCHAR(255)	Option C for the question.
option_d	VARCHAR(255)	Option D for the question.
correct_option	VARCHAR(1)	Correct option (A/B/C/D).

## 7. Quiz\_Attempts Table

Tracks quiz attempts and performance by students.

Column Name	Data Type	Description
attempt_id	INT (PK, AUTO_INC)	Unique attempt ID.
quiz_id	INT (FK)	References Quizzes table.
student_id	INT (FK)	References Users table (role = Student).
score	INT	Total score of the quiz attempt.
attempted_at	DATETIME	Timestamp of quiz attempt.

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## 8. Question\_Attempts Table

Tracks each question a student attempted within a quiz.

Column Name	Data Type	Description
attempt_id	INT (FK)	References Quiz_Attempts table.
question_id	INT (FK)	References Questions table.
selected_option	VARCHAR(1)	The student's selected option.
is_correct	BOOLEAN	Whether the selected option is correct.

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## 9. Notifications Table

Manages system notifications for users.

Column Name	Data Type	Description
notification_id	INT (PK, AUTO_INC)	Unique notification ID.
user_id	INT (FK)	References Users table.
message	TEXT	Notification message.
created_at	DATETIME	Timestamp when notification was sent.
is_read	BOOLEAN	Whether the notification has been read.

## Summary of Tables

1. **Users:** Stores general user details.
  2. **Staffs:** Specific details for staff users.
  3. **Assignments:** Assignment information created by staff.
  4. **Submissions:** Tracks student submissions.
  5. **Quizzes:** Manages quiz details.
  6. **Questions:** Stores questions and options.
  7. **Quiz\_Attempts:** Records quiz attempts and scores.
  8. **Question\_Attempts:** Tracks answers selected per question.
  9. **Notifications:** Handles user notifications.
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## Notes

- Tables use **primary keys (PK)** for unique identification and **foreign keys (FK)** to establish relationships.
- The **Question\_Attempts** table allows detailed tracking of each question attempt.
- Data types can be adjusted depending on your database system (e.g., MySQL, PostgreSQL).

Let me know if further refinements are needed!