



DBMS Mini-Project Synopsis

1.	Project Title: Online MCQ Exam Portal	
2.	Submitted by:	
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3.	Tools used: Visual Studio Code, MySQL, XAMPP Programming languages: PHP Front end design: HTML, CSS, JavaScript Database: MySQL	
4.	Abstract of the Project: <ul style="list-style-type: none">• The "Online MCQ Exam Portal" is a Database Management System (DBMS) mini project designed to streamline and enhance the process of conducting multiple-choice question (MCQ) exams in an online environment.• This project aims to provide a user-friendly and efficient platform for both administrators and examinees, ensuring seamless exam administration, secure data management, and insightful result analysis.• Key features of the "Online MCQ Exam Portal" include a dynamic question bank management system, a timer mechanism for exam duration control, and an automated grading system for instant result generation.	

	<ul style="list-style-type: none"> The portal also provides detailed performance analytics, enabling both administrators and examinees to analyse strengths and weaknesses in various subject areas.
5.	<p>Scope/Objective of the Project:</p> <ul style="list-style-type: none"> Implement a secure login system for administrators and examinees. Define access levels and permissions to ensure data security. Implement a timer mechanism to control the exam duration. Develop tools for administrators and examinees to analyse performance in detail. Provide insights into strengths and weaknesses across different subject areas. Provide a user-friendly interface for both administrators and examinees to ensure a positive experience. Simplify the process of creating, conducting, and managing online MCQ exams for administrators. Enable administrators and examinees to analyse performance trends and identify areas for improvement.
6.	<p>ER Diagram:</p> <pre> erDiagram USER --o{ SCORE : "scores" SUBJECT --o{ SCORE : "Based" SUBJECT --o{ QUESTIONS : "has" QUESTIONS --o{ OPTIONS : "has" USER { string USN PK string Name string Password } SUBJECT { string Sid PK string Sname } SCORE { string Time Taken float Score } QUESTIONS { string Qid PK string question } OPTIONS { string Qid FK string Oid PK string Answer string O1 string O2 string O3 string O4 } </pre> <p>The ER Diagram illustrates the database structure for the project. It includes the following entities and relationships:</p> <ul style="list-style-type: none"> USER (Entity): Attributes include <u>USN</u> (Primary Key), Name, and Password. SUBJECT (Entity): Attributes include <u>Sid</u> (Primary Key) and Sname. SCORE (Entity): Attributes include Time Taken and Score. QUESTIONS (Entity): Attributes include <u>Qid</u> (Primary Key) and question. OPTIONS (Entity): Attributes include <u>Qid</u> (Foreign Key to QUESTIONS), <u>Oid</u> (Primary Key), Answer, O1, O2, O3, and O4. <p>Relationships are defined as follows:</p> <ul style="list-style-type: none"> scores (Relationship): Connects USER (1) to SCORE (n). Based (Relationship): Connects SUBJECT (n) to SCORE (m). has (Relationship): Connects SUBJECT (1) to QUESTIONS (n). has (Relationship): Connects QUESTIONS (1) to OPTIONS (1).

7.	Applications/Advantages of the project: <ol style="list-style-type: none"> 1) Efficient examination management. 2) Remote exam support. 3) Automated result generation and grading. 4) Immediate feedback. 5) Personalized assessment report. 6) Random selection of questions. 7) Ranking and history of exam attempted 8) Instructions is provided about the tests. 9) Admin can add questions of each subject.
8.	Any other details (Please specify):

Signature with date

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