**EXAMINATION SYSTEM DB DOCUMENTATION**

**Introduction:**

The Examination System Desktop Application is a user-friendly software solution developed to cater to the needs of both instructors and students within an educational environment. This application serves as a centralized platform for managing exams and monitoring academic progress. Designed with simplicity and functionality in mind, the Examination System Desktop Application offers intuitive interfaces tailored to the specific requirements of instructors and students.

**Tables Description:**

**Table: Logins**

* **Description**: Stores login information for users.
* **Columns**:
  + **Email**: Email address of the user. (Primary Key)
  + **Password**: Password associated with the email for login authentication.

**Table: Department**

* **Description**: Stores information about academic departments.
* **Columns**:
  + **DepartmentID**: Unique identifier for each department. (Primary Key)
  + **DepartmentName**: Name of the department.
  + **ManagerID**: ID of the department manager.

**Table: Student**

* **Description**: Stores information about students.
* **Columns**:
  + **StudentId**: Unique identifier for each student. (Primary Key)
  + **FirstName**: First name of the student.
  + **LastName**: Last name of the student.
  + **Address**: Address of the student.
  + **Email**: Email address of the student.
  + **PhoneNum**: Phone number of the student.
  + **DepartmentID**: ID of the department the student belongs to. (Foreign Key referencing Department)

**Table: Instructor**

* **Description**: Stores information about instructors.
* **Columns**:
  + **InstructorID**: Unique identifier for each instructor. (Primary Key)
  + **FirstName**: First name of the instructor.
  + **LastName**: Last name of the instructor.
  + **HireDate**: Date when the instructor was hired.
  + **PhoneNumber**: Phone number of the instructor.
  + **Email**: Email address of the instructor.
  + **DepartmentID**: ID of the department the instructor belongs to. (Foreign Key referencing Department)

**Table: Topic**

* **Description**: Stores information about academic topics.
* **Columns**:
  + **TopicID**: Unique identifier for each academic topic. (Primary Key)
  + **TopicTitle**: Title of the academic topic.

**Table: Course**

* **Description**: Stores information about courses.
* **Columns**:
  + **CourseID**: Unique identifier for each course. (Primary Key)
  + **CourseName**: Name of the course.
  + **TopicID**: ID of the academic topic the course belongs to. (Foreign Key referencing Topic)

**Table: Question**

* **Description**: Stores information about exam questions.
* **Columns**:
  + **QuestionID**: Unique identifier for each question. (Primary Key)
  + **QuestionText**: Text of the question.
  + **QuestionType**: Type of the question (True/False or Multiple Choice).
  + **Complexity**: Complexity level of the question.
  + **CourseID**: ID of the course the question belongs to. (Foreign Key referencing Course)

**Table: Choice**

* **Description**: Stores choices for multiple-choice questions.
* **Columns**:
  + **ChoiceID**: Unique identifier for each choice. (Primary Key)
  + **ChoiceText**: Text of the choice.
  + **IsCorrect**: Indicates whether the choice is correct or not.
  + **QuestionID**: ID of the question the choice belongs to. (Foreign Key referencing Question)

**Table: Exam**

* **Description**: Stores information about exams.
* **Columns**:
  + **ExamID**: Unique identifier for each exam. (Primary Key)
  + **ExamDate**: Date and time of the exam.
  + **InstructorID**: ID of the instructor conducting the exam. (Foreign Key referencing Instructor)
  + **CourseID**: ID of the course the exam belongs to. (Foreign Key referencing Course)

**Table: Grades**

* **Description**: Stores grades for exams.
* **Columns**:
  + **ExamID**: ID of the exam. (Primary Key)
  + **StudentID**: ID of the student. (Primary Key)
  + **Score**: Score obtained by the student in the exam.

**Table: Enroll**

* **Description**: Stores enrollments of students in courses.
* **Columns**:
  + **StudentID**: ID of the student. (Primary Key)
  + **CourseID**: ID of the course. (Primary Key)

**Table: Teach**

* **Description**: Stores information about instructors teaching courses.
* **Columns**:
  + **CourseID**: ID of the course. (Primary Key)
  + **InstructorID**: ID of the instructor. (Primary Key)

**Table: ExamQuestion**

* **Description**: Associates exam questions with exams.
* **Columns**:
  + **ExamID**: ID of the exam. (Primary Key)
  + **QuestionID**: ID of the question. (Primary Key)

**Table: Answer**

* **Description**: Stores answers given by students in exams.
* **Columns**:
  + **ExamID**: ID of the exam. (Primary Key)
  + **StudentID**: ID of the student. (Primary Key)
  + **QuestionID**: ID of the question. (Primary Key)
  + **Answer**: ID of the chosen choice for the question. (Foreign Key referencing Choice)

**ERD**A diagram of a diagram

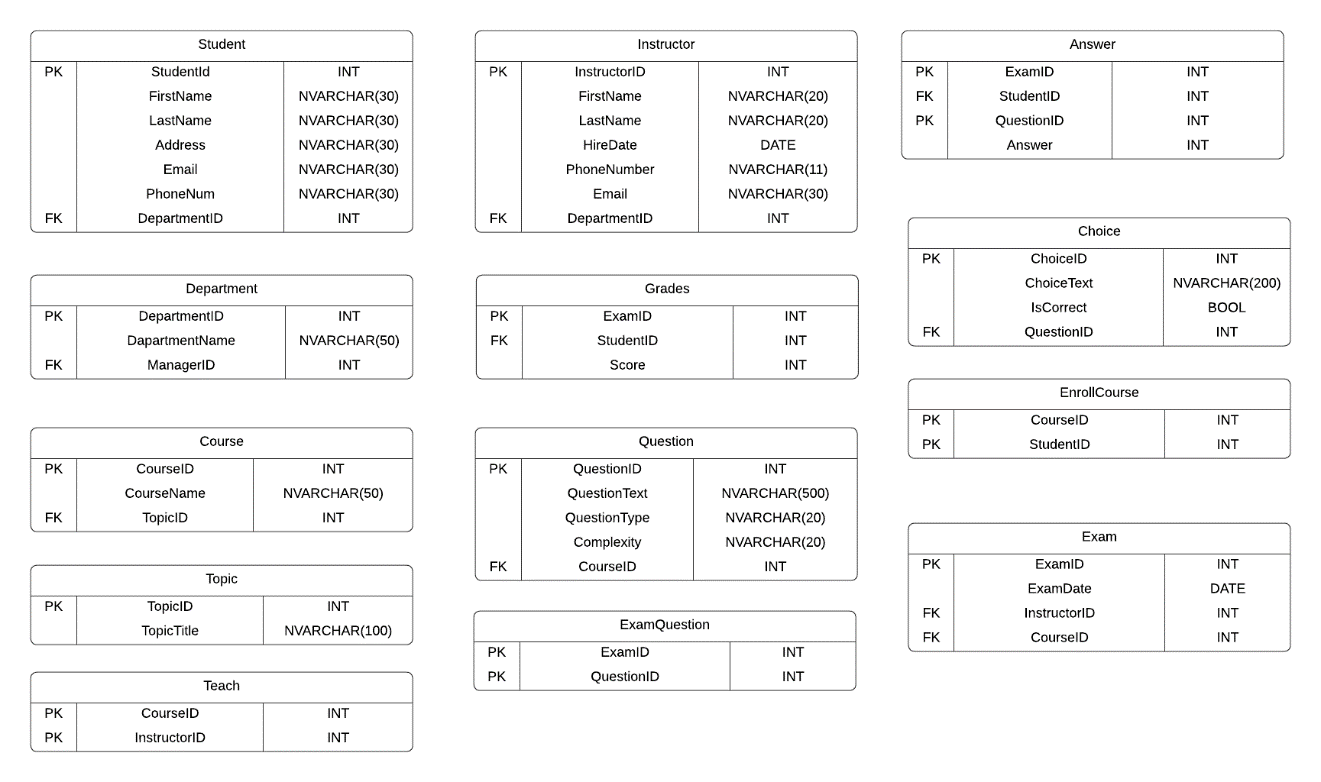
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**DB Tables**



**DB Mapping**

