

Ahsanullah University of Science and Technology

Department of Computer Science and Engineering



Project Name : Primary School Management System

Couse Name: Database Lab

Couse ID: CSE 3104

Semester : Fall 2022

Student ID : Student Name

20200104062 Sakib Shahriar Rafi

20200104063 Sourov Roy

20200104087 Easin Arafat

Database Tables:

Table 01: AdminTable

Field	Type	Constraint
adminUsername	Varchar(100)	Default Admin
adminPassword	Varchar(20)	Default Admin
adminPrimaryKey	Composite key	(adminUsername, adminPassword)

Table 02: StudentTable

Field	Type	Constraint
studentId	Int	Primary key
studentFirstName	Varchar (100)	Not null
studentLastName	Varchar (100)	null
studentAge	Int	Not Null
studentFatherName	Varchar (100)	Not null
studentMotherName	Varchar (100)	Not null
studentParentPhone	Varchar (15)	Not null
studentDOB	Date	Not null
studentBG	Varchar (10)	Null
studentAddress	Varchar (200)	Not null
studentCurentClass	Int	Not null
studentSection	Vatrchar(20)	Not null
studentAdmissionDate	Date	Not null
studentGraduationDate	Date	null
studentUsername	Varchar (100)	null
studentPassword	Varchar (20)	null
isCurrentStudent	BIT	Not null

Table 03: TeacherTable

Field	Type	Constraint
teacherId	Int	Primary key
teacherFirstName	Varchar (100)	Not null
teacherLastName	Varchar (100)	null
teacherAge	Int	Not Null
teacherNID	Varchar (100)	Not null
teacherPhone	Varchar (15)	Not null
teacherAddress	Varchar (200)	Not null
teacherBG	Varchar (10)	null
teacherMainCourse	Varchar (100)	Not null
teacherSalary	Money	Not null
teacherJoinDate	Date	Not null
teacerResignDate	Date	Null
teacherUsername	Varchar (100)	Null
teacherPassword	Varchar (20)	Null
isCurrentTeacher	BIT	Not null

Table 04: StaffTable

Field	Type	Constraint
staffId	Int	Primary key
staffFirstName	Varchar (100)	Not null
staffLastName	Varchar (100)	Null

staffAge	Int	Not null
staffNID	Varchar (100)	Not null
staffPhone	Varchar (15)	Not null
staffAddress	Varchar (200)	Not null
staffBG	Varchar (10)	Null
staffJobDesignation	Varchar (100)	Not null
staffSalary	Money	Not null
staffJoinDate	Date	Not null
staffResignDate	Date	Null
staffUsername	Varchar (100)	Null
staffPassword	Varchar (20)	Null
isCurrentStaff	BIT	Not null

Table 05: GradingSystem

Field	Type	Constraint
studentId	Int	Foreign key
teacherId	Int	Foreign key
courseName	Varchar(20)	Not null
examType	Varchar(20)	Not null
obtainedMark	Decimal(5,2)	Not null
currentClass	Int	Not null
isPassedCourse	BIT	Not null

Table 06: FinalGrade

Field	Type	Constraint
studentId	Int	Foreign key
class1	Varchar(3)	Default null
class2	Varchar(3)	Default null
class3	Varchar(3)	Default null
class4	Varchar(3)	Default null
class5	Varchar(3)	Default null

Table 07: PaymentSystem

Field	Type	Constraint
accountNo	Varchar(20)	Primary key
studentId	Int	Null foreign key
teacherId	Int	Null foreign key
staffId	Int	Null foreign key
paidAmount	Money	Null
restMoney	Money	Null
penaltyAmount	Money	Null
penaltyType	Varchar(100)	Null

Database Relations:

Relation 01: ControlStudent [AdminTable and StudentTable]

Field	Type	Constraint
adminPrimaryKey	Composite key	Foreign key
studentId	int	Foreign key

Relation 02: ControlTeacher [AdminTable and TeacherTable]

Field	Type	Constraint
adminPrimaryKey	Composite key	Foreign key
teacherId	int	Foreign key

Relation 03: ControlStaff [AdminTable and StaffTable]

Field	Type	Constraint
adminPrimaryKey	Composite key	Foreign key
staffId	int	Foreign key

Relation 04: AdminSeeGrade [AdminTable and GradingSystem]

Field	Type	Constraint
adminPrimaryKey	Composite key	Foreign key
studentId	int	Foreign key

Relation 05: AdminSeeFinalGrade [AdminTable and FinalGrade]

Field	Type	Constraint
adminPrimaryKey	Composite key	Foreign key
studentId	int	Foreign key

Relation 06: ControlPayment [AdminTable and PaymentSystem]

Field	Type	Constraint
adminPrimaryKey	Composite key	Foreign key
accountNo	Varchar (50)	Foreign key

Relation 07: Teach [SrudentTable and TeacherTable]

Field	Type	Constraint
studentid	Int	Foreign key
teacherId	Int	Foreign key
courseNameGrading	Varchar(50)	Not Null

Relation 07: StudentSeeFinalGrade [StudentTable and FinalGrade]

Field	Type	Constraint
studentId	Int	Foreign key

Relation 08: StudentPayment [SrudentTable and PaymentSystem]

Field	Type	Constraint
studentid	Int	Foreign key
accountNo	Varchar(50)	Foreign key
studentPaymentDate	Date	Not Null
studentTransactionId	Varchar(50)	Not null
studentTransactionAmmout	Money	Not null
studentTtransactionType	Varchar(100)	Not null
studentPaymentBy	Varchar(20)	Not null

Relation 09: Evaluate [TeacherTable and GradingSystem]

Field	Type	Constraint
teacherId	Int	Foreign key
studentId	Int	Foreign key

Relation 10: TeacherSeeFinalGrade [TeacherTable and FinalGrade]

Field	Type	Constraint
teacherId	Int	Foreign key
studentId	Int	Foreign key

Relation 11: PayTeacher [TeacherTable and PaymentSystem]

Field	Type	Constraint
teacherId	Int	Foreign key
accountNo	Varchar(50)	Foreign key
teacherPaymentDate	Date	Not Null
teacherTransactionId	Varchar(50)	Not null
teacherTransactionAmount	Money	Not null
teacherTransactionType	Varchar(100)	Not null
teacherPaymentBy	Varchar(20)	Not null

Relation 12: PayStaff [TeacherTable and PaymentSystem]

Field	Type	Constraint
staffId	Int	Foreign key
accountNo	Varchar(50)	Foreign key
staffPaymentDate	Date	Not Null
staffTransactionId	Varchar(50)	Not null
staffTransactionAmount	Money	Not null
staffTransactionType	Varchar(100)	Not null
staffPaymentBy	Varchar(20)	Not null

Entity Relationship Diagram:

