

Table Design

Submitted By

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RMCA S4-A

Roll no.01

TABLE DESIGN

Table No : 01

Table Name : application

Primary Key : id

Primary Key : course_id

Table Description : Stores applications from candidates

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	id	Int	Primary Key	Application id
2	name	Varchar	Not Null	Applicant's name
3	dob	Date	Not Null	Date of birth
4	gender	Varchar	Not Null	Applicant's gender
5	address	Varchar	Not Null	Applicant's address
6	phone	Varchar	Not Null	Applicant's phone number
7	email	Varchar	Not Null	Applicant's email id
8	photo	Varchar	Not Null	Applicant's photo
9	course_id	Int	Not Null	Course applied
10	stage	Varchar	Not Null	Application stage
11	score	Varchar	Not Null	Score for rank-list preparation

Table No : 02
Table Name : assignment
Primary Key : id
Primary Key : teacher_id
Table Description : Stores assignment details

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	id	Int	Primary Key	Assignment id
2	subject_number	Varchar	Not Null	Subject
3	title	Date	Not Null	Assignment title
4	problem	Varchar	Not Null	Assignment question
5	teacher_id	Int	Not Null	Teacher who made the assignment
6	fromtime	Varchar	Not Null	Assignment start time
7	totime	Varchar	Not Null	Assignment end time
8	status	Varchar	Not Null	Active/inactive status

Table No : 03

Table Name : attendancepercent

Primary Key : id

Primary Key : student_id

Table Description : Stores calculated attendance

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	id	Int	Primary Key	Attendancepercent id
2	student_id	Int	Not Null	Student admission no
3	fromdate	Date	Not Null	Start date
4	todate	Date	Not Null	End date
5	attendancevalue	Varchar	Not Null	Calculated attendance string

Table No : 04

Table Name : attendance

Primary Key : id

Table Description : stores attendance marked by teacher

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	id	Int	Primary Key	Attendance id
2	student_id	Int	Not Null	Student admission no
3	date	Date	Not Null	Date
4	att_str	Varchar	Not Null	Attendance string
5	day	Varchar	Not Null	Day of week

Table No : 05

Table Name : attstring

Primary Key : id

Table Description : stores attendance string for calculation purposes

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	id	Int	Primary Key	Attstring id
2	batch_id	Int	Not Null	Batch
3	day	Varchar	Not Null	Day of week
4	def_string	Varchar	Not Null	Attendance string for calculation purposes

Table No : 06

Table Name : batch

Primary Key : batch_id

Foreign Key : course_id,meeting_time_id,room_id,subject_id,teacher_id

Table Description : stores batch details

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	batch_id	Int	Primary Key	Batch id
2	num_class_in_week	Int	Not Null	Number of classes a week
3	class_teacher	Int	Not Null	In-charge teacher
4	semester	Int	Not Null	Semester number
5	status	Varchar	Not Null	Active/Inactive status
6	course_id	Int	Foreign Key	Course

7	meeting_time_id	Int	Foreign Key	For timetable generator
8	room_id	Int	Foreign Key	For timetable generator
9	subject_id	Varchar	Foreign Key	For timetable generator
10	teacher_id	Int	Foreign Key	For timetable generator

Table No : 07

Table Name : course

Primary Key : id

Primary Key : dept_id

Table Description : stores course details

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	id	Int	Primary Key	Course id
2	course_name	Varchar	Not Null	Course name
3	duration	Varchar	Not Null	Course duration
4	dept_id	Int	Not Null	Department
5	status	Varchar	Not Null	Active/Inactive status
6	fee	Varchar	Not Null	Course fee

Table No : 08

Table Name : course_subjects

Primary Key : id

Foreign Key : course_id, subject_id

Table Description : stores subjects for course

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	id	Int	Primary Key	Course_subject id
2	course_id	Int	Foreign Key	Course
3	subject_id	Int	Foreign Key	Subject

Table No : 09

Table Name : department

Primary Key : id

Table Description : stores department details

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	id	Int	Primary Key	Department id
2	name	Varchar	Not Null	Department name
3	descrip	Varchar	Not Null	Department description
4	status	Varchar	Not Null	Active/Inactive status

Table No : 10
Table Name : internals
Primary Key : id
Foreign Key : student_id,subject_number
Table Description : stores internal marks of students

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	id	Int	Primary Key	Internals id
2	student_id	Int	Not Null	Student admission no
3	subject_number	Varchar	Not Null	Subject
4	assignment_one	Varchar	Not Null	Marks for assignment one
5	assignment_two	Varchar	Not Null	Marks for assignment two
6	series_one	Varchar	Not Null	Marks for series one
7	series_two	Varchar	Not Null	Marks for series two
8	attendance_mark	Varchar	Not Null	Attendance marks

Table No : 11
Table Name : login
Primary Key : id
Foreign Key : utype_id,
Table Description : stores login details of users

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	id	Int	Primary Key	Login id
2	username	Varchar	Not Null	Username
3	password	Varchar	Not Null	Password
4	utype_id	Int	Not Null	User type
5	status	Varchar	Not Null	Active/Inactive status

Table No : 12
Table Name : meetingtime
Primary Key : pid
Table Description : stores class hours

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	pid	Int	Primary Key	Meeting id
2	time	Varchar	Not Null	Time slot
3	day	Varchar	Not Null	Day of week

Table No : 13

Table Name : parent

Primary Key : id

Foreign Key : app_id,

Table Description : stores students' parents' details

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	id	Int	Primary Key	Parent id
2	fname	Varchar	Not Null	Father's name
3	mname	Varchar	Not Null	Mother's name
4	fmail	Varchar	Not Null	Father's email id
5	mmail	Varchar	Not Null	Mother's email id
6	fjob	Varchar	Foreign Key	Father's occupation
7	mjob	Varchar	Foreign Key	Mother's occupation
8	fphone	Varchar	Foreign Key	Father's phone number
9	mphone	Varchar	Foreign Key	Mother's phone number
10	app_id	Int	Foreign Key	Application id

Table No : 14

Table Name : record

Primary Key : id

Foreign Key : app_id

Table Description : stores academic records of students

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	id	Int	Primary Key	Record id
2	tenth	Varchar	Not Null	Percentage in 10 th std
3	twelfth	Varchar	Not Null	Percentage in 12 th std
4	ug	Varchar	Not Null	Percentage in UG degree
5	certificatetenth	Varchar	Not Null	10 th std certificate
6	certificatetwelfth	Varchar	Not Null	12 th std certificate
7	certificateug	Varchar	Not Null	UG degree certificate
8	App_id	Int	Not Null	Application id

Table No : 15

Table Name : room

Primary Key : id

Table Description : stores classroom details

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	id	Int	Primary Key	Classroom id
2	r_number	Varchar	Not Null	Classroom number
3	Seating_capacity	Int	Not Null	Seating capacity
4	status	Varchar	Not Null	Active/Inactive status

Table No : 16
Table Name : student
Primary Key : id
Foreign Key : app_id, batch_id, login_id
Table Description : stores student details

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	id	Int	Primary Key	Student admission number
2	app_id	Varchar	Not Null	Application id
3	batch_id	Int	Not Null	Batch
4	login_id	Int	Not Null	Login id

Table No : 17
Table Name : studymaterial
Primary Key : id
Foreign Key : subject_number, teacher_id
Table Description : stores studymaterial details

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	id	Int	Primary Key	Study material id
2	subject_number	Varchar	Not Null	Subject code
3	material	Varchar	Not Null	Study material file
4	title	Varchar	Not Null	Title of study material
5	teacher_id	Int	Not Null	Teacher who uploaded the study material

Table No : 18

Table Name : subject

Primary Key : subject_number

Foreign Key : dept_id

Table Description : stores subject details

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	subject_number	Varchar	Primary Key	Subject code
2	subject_name	Varchar	Not Null	Subject name
3	max_numb_students	Varchar	Not Null	For timetable generation
4	subject_type	Varchar	Not Null	Lab or theory
5	dept_id	Int	Not Null	Department

Table No : 19

Table Name : subject_teachers

Primary Key : id

Foreign Key : subject_id, teacher_id

Table Description : stores subject-teacher allocation

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	id	Int	Primary Key	Subject teacher id
2	subject_id	Varchar	Not Null	Subject code
3	teacher_id	Int	Not Null	Teacher id

Table No : 20

Table Name : submission

Primary Key : id

Foreign Key : assignment_id, student_id

Table Description : stores assignment submissions

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	id	Int	Primary Key	Submission id
2	assignment_id	Int	Not Null	Assignment id
3	answer	Varchar	Not Null	Answer file
4	marks	Varchar	Not Null	Marks rewarded
5	student_id	Int	Not Null	Student admission no

Table No : 21

Table Name : teacher

Primary Key : id

Foreign Key : dept_id, login_id

Table Description : stores teacher details

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	id	Int	Primary Key	Teacher id
2	name	Varchar	Not Null	Teacher's name
3	dob	Date	Not Null	Teacher's date of birth
4	gender	Varchar	Not Null	Teacher's gender
5	address	Varchar	Not Null	Teacher's address

6	phone	Varchar	Not Null	Teacher's phone no
7	email	Varchar	Not Null	Teacher's email id
8	dept_id	Int	Not Null	Department
9	photo	Varchar	Not Null	Teacher's photo
10	qualification	Varchar	Not Null	Highest qualification
11	login_id	Int	Not Null	Login id
12	uid	Varchar	Not Null, Unique	Unique teacher id

Table No : 22

Table Name : utype

Primary Key : id

Table Description : stores user types for login purposes

SLNO	FIELD NAME	TYPE	CONSTRAINS	DESCRIPTION
1	id	Int	Primary Key	Utype id
2	name	Varchar	Not Null	User type