

Sanganika

tesla@localhost
















Data Dictionary

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Legend

-  Primary key
-  Primary key disabled
-  User-defined primary key
-  Unique key
-  Unique key disabled
-  User-defined unique key
-  Active trigger
-  Disabled trigger
-  Primary key relation
-  User-defined primary key relation
-  Foreign key relation
-  User-defined foreign key relation
-  Input
-  Output
-  Input/Output

TRIAL

1. tesla@localhost

1.1. Tables

1.1.1. Table: alumni (Alumni Details)

Alumni Table Stores the details of students after they graduate from the college.

Columns

	Name	Data type	Description
🔑	alumni_id	int(10, 0)	Uniquely identifies each Alumni
	name	varchar(64)	Name of Alumni
	dob	date	Date of Birth
	email	varchar(256)	Email address
	contact	varchar(32)	Contact No
	rollno	varchar(16)	Old College Roll No of the Alumni

Unique keys

	Name	Columns	Description
🔑	PRIMARY	alumni_id	

1.1.2. Table: batchinfo (Batch Details)

Stores Batch Related Details like Timetable, etc.

Columns

	Name	Data type	Description
🔑	batch_id	int(10, 0)	Uniquely identifies the Batch
	timetable_file_id	int(10, 0)	Time Table file id of the batch

Links to

	Table	Join	Name / Description
➤	files	batchinfo .timetable_file_id = files.file_id	batchinfo_fk_timetable_file_id: Linking to timetable file of the Batch

Unique keys

	Name	Columns	Description
🔑	PRIMARY	batch_id	

1.1.3. Table: batchsub (Batch-Subject Details)

BatchSub Table Stores different Subject of each batch along with teacher, attendance and result of each subject

Columns

	Name	Data type	Description
🔑	batch_id	int(10, 0)	Uniquely Identifies a batch
🔑	subject_id	int(10, 0)	subject of the batch
	teacher_id	int(10, 0)	teacher of that subject

	Name	Data type	Description
	attendance_file_id	int(10, 0)	attendance of that subject
	result_file_id	int(10, 0)	result of that subject

Links to

	Table	Join	Name / Description
➤	files	batchsub.attendance_file_id = files.file_id	batchsub_fk_attendance_file_id: Linking to attendance file of the Batch
➤	files	batchsub.result_file_id = files.file_id	batchsub_fk_result_file_id: Linking to result file of the Batch
➤	teacher	batchsub.teacher_id = teacher.teacher_id	batchsub_fk_teacher_id: Linked from batchsub Table - A Subject is taught by some teacher

Unique keys

	Name	Columns	Description
🔑	PRIMARY	batch_id, subject_id	

Triggers

	Name	When	Description
⚡	batchsub_AFTER_INSERT	After Insert	Whenever batchsub is modified, make a entry to modificationrecord Table
⚡	batchsub_AFTER_UPDATE	After Update	Whenever batchsub is modified, make a entry to modificationrecord Table

1.1.4. Table: course (Course Details)

Course Table Stores Course ID, Name and other details for each Course

Columns

	Name	Data type	Description
🔑	course_id	int(10, 0)	Unique Course ID
	course_code	varchar(8)	Short Course Code
	course_name	varchar(128)	Course Name
	department_id	int(10, 0)	Department of the Course

Links to

	Table	Join	Name / Description
➤	department	course.department_id = department.department_id	course_fk_department_id: Linking to Department of each Course

Linked from

	Table	Join	Name / Description
➤	semesterinfo	course.course_id = semesterinfo.course_id	semesterinfo_fk_course_id: Linking to a Course
➤	student	course.course_id = student.course_id	student_fk_course_id: A Student MUST belong to a Course, which must be present in the COURSE Table

Unique keys

	Name	Columns	Description
🔑	PRIMARY	course_id	

Triggers

	Name	When	Description
⚡	course_AFTER_INSERT	After Insert	Whenever a new Course is added, insert its six semesters in semesterinfo table

1.1.5. Table: department (Department Details)

Department Table Stores Department ID and Name for each Department

Columns

	Name	Data type	Description
🔑	department_id	int(10, 0)	Unique Department ID
	department_name	varchar(128)	Department Name

Linked from

	Table	Join	Name / Description
↩	course	department .department_id = course.department_id	course_fk_department_id: Linking to Department of each Course
↩	teacher	department .department_id = teacher.department_id	teacher_fk_department_id: Linking to Department of each Teacher

Unique keys

	Name	Columns	Description
🔑	PRIMARY	department_id	

1.1.6. Table: files (File Location Details)

Files Table stores file paths for every file in the schema

Columns

	Name	Data type	Description
🔑	file_id	int(10, 0)	Uniquely identifies each file
	file_name	varchar(64)	Name of the File
	file_path	varchar(256)	Path of the File in System

Linked from

	Table	Join	Name / Description
↩	batchinfo	files .file_id = batchinfo.timetable_file_id	batchinfo_fk_timetable_file_id: Linking to timetable file of the Batch
↩	batchsub	files .file_id = batchsub.attendance_file_id	batchsub_fk_attendance_file_id: Linking to attendance file of the Batch
↩	batchsub	files .file_id = batchsub.result_file_id	batchsub_fk_result_file_id: Linking to result file of the Batch
↩	notice	files .file_id = notice.notice_file_id	notice_fk_notice_file_id: Linking to Notice file in Files table
↩	subject	files .file_id = subject.syllabus_file_id	subject_fk_syllabus_file_id: File_id - Links to the syllabus file recorded in the files table
↩	teacher	files .file_id = teacher.aboutme_file_id	teacher_fk_file_id: Linking to About me File of the Teacher

Unique keys

	Name	Columns	Description
🔑	PRIMARY	file_id	

1.1.7. Table: modificationrecord (Last Modified Date Details)

Modification Record Table stores Last Modified Time of tables

Columns

	Name	Data type	Description
🔑	table_name	varchar(64)	Table Name
	datemodified	timestamp	Last Modified Date of the table

Unique keys

	Name	Columns	Description
🔑	PRIMARY	table_name	UNIQUELY Identify Each table

1.1.8. Table: notice (Notice Details)

Notice Table stores details of all the notices uploaded.

Columns

	Name	Data type	Description
🔑	notice_id	int(10, 0)	Uniquely identifies each Notice ever uploaded.
	notice_name	varchar(64)	Name of the Notice
	notice_file_id	int(10, 0)	File id of the notice
	date_of_upload	timestamp	Upload date of the Notice

Links to

	Table	Join	Name / Description
➤	files	notice.notice_file_id = files.file_id	notice_fk_notice_file_id: Linking to Notice file in Files table

Unique keys

	Name	Columns	Description
🔑	PRIMARY	notice_id	Uniquely identifies each notice

1.1.9. Table: semesterinfo (Semester Details)

A course has six semester. Each Course and its respective semesters uniquely identifies each Batch

Columns

	Name	Data type	Description
	course_id	int(10, 0)	course
	semester	int(10, 0)	semester
	batch_id	int(10, 0)	Course and semester uniquely forms a batch

Links to

	Table	Join	Name / Description
➤	course	semesterinfo .course_id = course.course_id	semesterinfo_fk_course_id: Linking to a Course

Unique keys

	Name	Columns	Description
🔑	PRIMARY	course_id, semester	
🔑	PK	course_id, semester	

Triggers

	Name	When	Description
⚡	semesterinfo_AFTER_DELETE	After Delete	If a batch is deleted, remove it from batchinfo as well.
⚡	semesterinfo_AFTER_INSERT	After Insert	If a batch is inserted, insert it from batchinfo as well.

1.1.10. Table: student (Student Details)

Student Table holds the information of all students

Columns

	Name	Data type	Description
🔑	student_id	int(10, 0)	Unique Student ID
	name	varchar(64)	Name of the Student
	dob	date	Date of Birth
	email	varchar(256)	Email of the Student
	contact	varchar(32)	Contact No of the Student
	doa	date	Date of Admission
	course_id	int(10, 0)	Course of the Student
	rollno	varchar(16)	College Roll No. of the Student
	semester	int(10, 0)	Current Semester of the Student

Links to

	Table	Join	Name / Description
➤	course	student .course_id = course.course_id	student_fk_course_id: A Student MUST belong to a Course, which must be present in the COURSE Table

Unique keys

	Name	Columns	Description
🔑	PRIMARY	student_id	A student ID to uniquely identify students in the database


Triggers

	Name	When	Description
⚡	student_AFTER_UPDATE	After Update	If any Student Passes 6th semester, Make him/her an alumni

1.1.11. Table: subject (Subject Details)

Subject Table holds information regarding unique subjects

Columns

	Name	Data type	Description
	subject_id	int(10, 0)	To uniquely Identify each subject
	subject_code	varchar(32)	Short subject code
	subject_type	varchar(45)	Theory/ Lab
	subject_name	varchar(64)	Name of the subject
	syllabus_file_id	int(10, 0)	File id of the syllabus of subject

Links to

	Table	Join	Name / Description
	files	subject .syllabus_file_id = files.file_id	subject_fk_syllabus_file_id: File_id - Links to the syllabus file recorded in the files table


Unique keys

	Name	Columns	Description
	PRIMARY	subject_id	To uniquely Identify each Theory subject and Lab subject



1.1.12. Table: teacher (Teacher Details)

TEACHER TABLE holds the information of all teachers

Columns

	Name	Data type	Description
	teacher_id	int(10, 0)	Unique Teacher ID
	name	varchar(64)	Name of the Teacher
	email	varchar(256)	Email address
	contact	varchar(32)	Contact
	doj	date	Date of Joining in College
	department_id	int(10, 0)	Department of the teacher
	aboutme_file_id	int(10, 0)	About me file of the teacher

Links to

	Table	Join	Name / Description
	department	teacher .department_id = department.department_id	teacher_fk_department_id: Linking to Department of each Teacher
	files	teacher .aboutme_file_id = files.file_id	teacher_fk_file_id: Linking to About me File of the Teacher

Linked from

	Table	Join	Name / Description
	batchsub	teacher .teacher_id = batchsub.teacher_id	batchsub_fk_teacher_id: Linked from batchsub Table - A Subject is taught by some teacher

Unique keys

	Name	Columns	Description
🔑	PRIMARY	teacher_id	To uniquely identify all teachers

1.1.13. Table: user (User Details)

USER Table holds the Login credetials and priviledge level of all Users

Columns

	Name	Data type	Description
🔑	user_id	int(10, 0)	A user_id to uniquely identify all users
	username	varchar(32)	username for personalized experience of the user
	email	varchar(256)	Email id of the user
	password	varchar(32)	Password of the user
	privilege	varchar(32)	Priviledge level - dev, admin, teacher, student

Unique keys

	Name	Columns	Description
🔑	PRIMARY	user_id	To uniquely identify all users

1.2. Procedures

1.2.1. Procedure: flush_after_semester (Flush - After Semester)

flush_after_semester procedure flushes out the teachers, attendance, and result of every subject of each batch, after a semester is complete. So it can be refilled in the new sem.

1.2.2. Procedure: remove_old_students (Remove - Old Students)

remove_old_Students procedure deletes the students from the student table who have graduated and became an alumni of the college.