

Relational Model

Relation: College

College (college_name : string, college_id : string, college_address : string)

Attribute Name	Data Type	Constraints	Description
College_name	String	NOT NULL	Name of the college.
College_id	String	PRIMARY KEY	ID number of the college.
College_address	String	NOT NULL	Address of the college.

Relation: Fest Organising Committee

Fest_organising_committee (member_name : string, student_id : long integer, programme : string, gender : string, designation : string)

Attribute Name	Data Type	Constraints	Description
Member_name	String	NOT NULL	Name of fest organising committee member.
Student_id	Long integer	PRIMARY KEY	ID number of the member.
Programme	String	NOT NULL	Enrolled programme of the fest organising committee member.
Gender	String	NOT NULL	Gender of the member.
Designation	String	NOT NULL	Designation of the Fest organising committee member.

Relation: Sponsors

Sponsors (name : string, sponsor_id : long integer, Budget : integer)

Attribute Name	Data Type	Constraints	Description
Name	String	NOT NULL	Name of the sponsors.
Sponsor_id	Long integer	PRIMARY KEY	ID number of the sponsor.
Budget	Integer	NOT NULL	Budget of the sponsors.

Relation: Co-ordinators

Coordinators (student_id : integer, student_name : string, student_role : string)

Attribute Name	Data Type	Constraints	Description
Student_id	Integer	PRIMARY KEY	ID number of the student.
Student_name	String	NOT NULL	Name of the student.
Student_role	String	NOT NULL	Role of the student as co-ordinator.

Relation: Fest

Fest (fest_name : string, schedule : date_time, fest_id : string, theme : string, venue : string)

Attribute Name	Data Type	Constraints	Description
Fest_name	String	NOT NULL	Name of the college fest.
Schedule	Date Time	NOT NULL	Schedule of the fest.
Fest_id	String	PRIMARY KEY	ID number of the college fest.
Theme	String	NOT NULL	Theme of the college fest.
Venue	String	NOT NULL	Venue details of the college fest.

Relation: Event Management Committee

Event_management_committee (member_name : string, student_email : string, member_id : string, student_id : integer, event_id : string)

Attribute Name	Data Type	Constraints	Description
Member_name	String	NOT NULL	Name of the member.
Student_email	String	NOT NULL	Email address of the student member.
Member_id	String	NOT NULL	ID number of the student member.
Student_id	Integer	PRIMARY_KEY	Student ID of the member.
Event_id	String	NUT NULL	Event ID of the event managed by the student member.

Relation: Events

Events (event_name : String, event_id : string, event_description : String, event_venue : String, event_type : String)

Attribute Name	Data Type	Constraints	Description
Event_name	String	NOT NULL	Name of the event being organised.
Event_id	String	PRIMARY KEY	ID of the event being organised.
Event_description	String	NOT NULL	Description of the event being organised.
Event_venue	String	NOT NULL	Venue of the event being organised.
Event_type	String	NOT NULL	The category of the event being organised.

Relation: Results

Results (student_id : Integer, student_name : String, event_id : String, event_name : String)

Attribute Name	Data Type	Constraints	Description
Student_id	Integer	PRIMARY KEY	ID number of the student.
Student_name	String	NOT NULL	Name of the student.
Event_id	String	NOT NULL	ID of the event.
Event_name	String	NOT NULL	Name of the event.

Relation: Participants

Participants (registration_id : Integer, Name : String, Branch : String, Student_id : Integer, Student_email : String)

Attribute Name	Data Type	Constraints	Description
Registration_id	Integer	PRIMARY KEY	Registration ID of the participant.
Name	String	NOT NULL	Name of the participant.
Branch	String	NOT NULL	Course branch of the participants.
Student_id	Integer	NOT NULL	ID number of the students.
Student_email	String	NOT NULL	Email address of the students.

Relation: Volunteer

Volunteer (student_id : Integer, student_name : String, gender : Character)

Attribute Name	Data Type	Constraints	Description
Student_id	Integer	PARTIAL KEY	ID number of the student volunteer.
Student_name	String	NOT NULL	Name of the student volunteer.
Gender	Character	NOT NULL	Gender of the student volunteer.

Relation: Security

Security (security_id : Integer, name : String)

Attribute Name	Data Type	Constraints	Description
Security_id	Integer	PRIMARY KEY	ID number of the security members.
Name	String	NOT NULL	Name of the security members.

DDL Statements

1. DDL for creating Schema:

CREATE SCHEMA College-Fest-DB

2. DDL for creating tables:

College:

```
CREATE TABLE College (  
    College_name CHAR(20) NOT NULL,  
    College_id CHAR(10) NOT NULL,  
    College_address CHAR(50) NOT NULL,  
    PRIMARY KEY (College_id)  
);
```

Fest Organising Committee:

```
CREATE TABLE Fest_organising_committee (  
    Member_name CHAR(20) NOT NULL,  
    Student_id CHAR(10) NOT NULL,  
    Programme CHAR(10) NOT NULL,  
    Gender CHAR(6) NOT NULL,  
    Designation CHAR(10) NOT NULL,  
    PRIMARY KEY (Student_id)  
);
```

Sponsors:

```
CREATE TABLE Sponsors (  
    Name CHAR(20) NOT NULL,  
    Sponsor_id CHAR(10) NOT NULL,  
    Budget INT  
    PRIMARY KEY (Sponsor_id)  
);
```

Coordinators:

```
CREATE TABLE Coordinators (  
    Student_id CHAR(10) NOT NULL,  
    Student_name CHAR(50) NOT NULL,  
    Student_role CHAR(10) NOT NULL  
    PRIMARY KEY (Student_id)  
);
```

Fest:

```
CREATE TABLE Fest (  
    Fest_name CHAR(15) NOT NULL,  
    Schedule DATE NOT NULL,  
    Fest_id CHAR(10) NOT NULL,  
    Theme CHAR(15) NOT NULL,  
    Venue CHAR(10) NOT NULL  
    PRIMARY KEY (Fest_id)  
);
```

Event Management Committee:

```
CREATE TABLE Event_management_committee (  
    Member_name CHAR(15) NOT NULL,  
    Student_email CHAR(30) NOT NULL,  
    Member_id CHAR(10) NOT NULL,  
    Student_id CHAR(10) NOT NULL,  
    Event_id CHAR(10) NOT NULL,  
    PRIMARY KEY (Member_id)  
);
```

Event:

```
CREATE TABLE Event (  
    Event_name CHAR(15) NOT NULL,  
    Event_id CHAR(10) NOT NULL,  
    Event_description CHAR(50) NOT NULL,  
    Event_venue CHAR(20) NOT NULL,  
    Event_type CHAR(15) NOT NULL,  
    PRIMARY KEY (Event_id)  
);
```

Result:

```
CREATE TABLE Result (  
    Student_id CHAR(15) NOT NULL,  
    Student_name CHAR(20) NOT NULL,  
    Event_id CHAR(10) NOT NULL,  
    Event_name CHAR(15) NOT NULL  
    PRIMARY KEY (Student_id)  
);
```

Participants:

```
CREATE TABLE Participants (  
    Registration_id CHAR(10) NOT NULL,  
    Name CHAR(15) NOT NULL,  
    Branch CHAR(15) NOT NULL,  
    Student_id CHAR(10) NOT NULL,  
    Student_email CHAR(30) NOT NULL  
    PRIMARY KEY (Registration_id)  
);
```