

IIT Jammu Student Affairs Automation System - Final Extended Database Schema

1. Students

student_id INT PRIMARY KEY
student_name VARCHAR(100)
department_id INT
hostel_id INT
mess_id INT
contact_number VARCHAR(15)
email VARCHAR(100) UNIQUE
date_of_birth DATE
gender ENUM('Male','Female','Other')
address TEXT
admission_year INT
status ENUM('Active','Graduated','On Leave','Withdrawn')
FOREIGN KEY (department_id) REFERENCES Departments(department_id)
FOREIGN KEY (hostel_id) REFERENCES Hostels(hostel_id)
FOREIGN KEY (mess_id) REFERENCES Mess(mess_id)

2. Departments

department_id INT PRIMARY KEY
department_name VARCHAR(100)
department_code VARCHAR(10)

3. Staff

staff_id INT PRIMARY KEY
staff_name VARCHAR(100)
designation VARCHAR(50)
department_id INT
email VARCHAR(100)
contact_number VARCHAR(15)
FOREIGN KEY (department_id) REFERENCES Departments(department_id)

4. Hostels

hostel_id INT PRIMARY KEY
hostel_name VARCHAR(100)
warden_id INT
FOREIGN KEY (warden_id) REFERENCES Staff(staff_id)

5. Rooms & Allocations

```
Rooms(  
  room_id INT PRIMARY KEY,  
  hostel_id INT,  
  room_number VARCHAR(10),  
  capacity INT,  
  FOREIGN KEY (hostel_id) REFERENCES Hostels(hostel_id)  
)
```

```
Room_Allocations(  
  allocation_id INT PRIMARY KEY,  
  student_id INT,  
  room_id INT,  
  start_date DATE,  
  end_date DATE,  
  FOREIGN KEY (student_id) REFERENCES Students(student_id),  
  FOREIGN KEY (room_id) REFERENCES Rooms(room_id)  
)
```

6. Mess & Subscriptions

```
Mess(  
  mess_id INT PRIMARY KEY,  
  mess_name VARCHAR(100),  
  mess_incharge_id INT,  
  FOREIGN KEY (mess_incharge_id) REFERENCES Staff(staff_id)  
)
```

```
Mess_Subscriptions(  
  subscription_id INT PRIMARY KEY,  
  student_id INT,  
  mess_id INT,  
  start_date DATE,  
  end_date DATE,  
  FOREIGN KEY (student_id) REFERENCES Students(student_id),  
  FOREIGN KEY (mess_id) REFERENCES Mess(mess_id)  
)
```

7. Disciplinary Actions

```
action_id INT PRIMARY KEY  
student_id INT  
incident_date DATE  
description TEXT  
action_taken TEXT
```

```

fine_amount DECIMAL(10,2)
severity ENUM('Minor','Major','Severe')
recorded_by INT
status ENUM('Active','Closed')
FOREIGN KEY (student_id) REFERENCES Students(student_id)
FOREIGN KEY (recorded_by) REFERENCES Staff(staff_id)

```

8. Organizations & Memberships

```

Organizations(
  org_id INT PRIMARY KEY,
  org_name VARCHAR(100),
  org_type ENUM('Club','Sports','Society'),
  category ENUM('Technical','Cultural','Social','Sports'),
  faculty_coordinator_id INT,
  coordinator_id INT,
  secretary_id INT,
  head_id INT,
  parent_org_id INT,
  budget DECIMAL(12,2),
  coach_name VARCHAR(100),
  coach_contact VARCHAR(20),
  description TEXT,
  FOREIGN KEY (faculty_coordinator_id) REFERENCES Staff(staff_id),
  FOREIGN KEY (coordinator_id) REFERENCES Students(student_id),
  FOREIGN KEY (secretary_id) REFERENCES Students(student_id),
  FOREIGN KEY (head_id) REFERENCES Staff(staff_id),
  FOREIGN KEY (parent_org_id) REFERENCES Organizations(org_id)
)

```

```

Memberships(
  membership_id INT PRIMARY KEY,
  student_id INT,
  org_id INT,
  role VARCHAR(50),
  join_date DATE,
  end_date DATE,
  FOREIGN KEY (student_id) REFERENCES Students(student_id),
  FOREIGN KEY (org_id) REFERENCES Organizations(org_id)
)

```

9. Events & Participation

```

Events(
  event_id INT PRIMARY KEY,
  event_name VARCHAR(100),

```

```

event_type ENUM('Cultural','Technical','Workshop','Sports'),
organizing_org_id INT,
event_date DATE,
venue VARCHAR(100),
event_level ENUM('Intra-College','Inter-College','National'),
description TEXT,
budget DECIMAL(12,2),
FOREIGN KEY (organizing_org_id) REFERENCES Organizations(org_id)
)

```

```

Event_Participation(
participation_id INT PRIMARY KEY,
event_id INT,
student_id INT,
role ENUM('Participant','Organizer','Volunteer'),
position_secured VARCHAR(50),
medal VARCHAR(20),
certificate_issued BOOLEAN,
FOREIGN KEY (event_id) REFERENCES Events(event_id),
FOREIGN KEY (student_id) REFERENCES Students(student_id)
)

```

10. Placements

```

Placements(
placement_id INT PRIMARY KEY,
student_id INT,
company_name VARCHAR(100),
role_offered VARCHAR(100),
package_offered DECIMAL(12,2),
placement_type ENUM('Internship','Full-Time'),
placement_date DATE,
status ENUM('Placed','Not Placed','Offer Declined'),
FOREIGN KEY (student_id) REFERENCES Students(student_id)
)

```

```

Recruiters(
recruiter_id INT PRIMARY KEY,
company_name VARCHAR(100),
industry_type VARCHAR(100),
contact_person VARCHAR(100),
contact_email VARCHAR(100),
contact_number VARCHAR(15)
)

```

11. Payments

```
payment_id INT PRIMARY KEY
student_id INT
payment_type ENUM('Hostel Fee','Mess Fee','Fine','Event Fee','Other')
amount DECIMAL(10,2)
payment_date DATE
payment_status ENUM('Pending','Completed','Failed')
transaction_id VARCHAR(50)
FOREIGN KEY (student_id) REFERENCES Students(student_id)
```

12. Feedback System

```
feedback_id INT PRIMARY KEY
student_id INT
category ENUM('Hostel','Mess','Event','Course','General')
reference_id INT
feedback_text TEXT
rating INT CHECK (rating BETWEEN 1 AND 5)
feedback_date DATE
FOREIGN KEY (student_id) REFERENCES Students(student_id)
```

13. Alumni & Networking

```
Alumni(
alumni_id INT PRIMARY KEY,
student_id INT,
graduation_year INT,
current_position VARCHAR(100),
company_name VARCHAR(100),
location VARCHAR(100),
linkedin_url VARCHAR(255),
email VARCHAR(100),
FOREIGN KEY (student_id) REFERENCES Students(student_id)
)
```

```
Networking(
connection_id INT PRIMARY KEY,
alumni_id INT,
student_id INT,
connection_type ENUM('Mentorship','Referral','Collaboration'),
initiated_date DATE,
status ENUM('Active','Closed'),
FOREIGN KEY (alumni_id) REFERENCES Alumni(alumni_id),
FOREIGN KEY (student_id) REFERENCES Students(student_id)
)
```