**Main**schedule**Table**

The schedule table serves as a parent table that holds high-level schedule information.

**Table Structure:**

sql

Copy code

CREATE TABLE schedule ( schedID INT(11) NOT NULL AUTO\_INCREMENT, *-- Primary key for this table* program\_id INT(11) NOT NULL, *-- References the program* section\_id INT(11) NOT NULL, *-- References the section* course\_id INT(11) NOT NULL, *-- References the course* sched\_semester VARCHAR(30) NOT NULL, *-- Semester information* sched\_sy VARCHAR(30) NOT NULL, *-- School year* PRIMARY KEY (schedID), *-- Primary key* FOREIGN KEY (program\_id) REFERENCES programs(id) ON DELETE CASCADE, *-- Program relation* FOREIGN KEY (section\_id) REFERENCES sections(id) ON DELETE CASCADE, *-- Section relation* FOREIGN KEY (course\_id) REFERENCES courses(id) ON DELETE CASCADE *-- Course relation* );

**How the Main Table Works**

The schedule table links to:

* program\_id: Specifies the program offering the schedule.
* section\_id: Specifies the section the schedule is assigned to.
* course\_id: Specifies the course being scheduled.
* sched\_semester**and**sched\_sy: Specify the semester and school year for the schedule.

**Example Data in the Main**schedule**Table (Create Schedule) button sa course nav**

| **schedID** | **program\_id** | **section\_id** | **course\_id** | **sched\_semester** | **sched\_sy (static as of now) input manually)** |
| --- | --- | --- | --- | --- | --- |
| 1 | 1 | 1 | 1 | 1st Semester | 2024-2025 |
| 2 | 2 | 3 | 2 | 2nd Semester | 2024-2025 |

**Child**schedule\_details**Table**

This table will store specific day and time details for each schedule in the schedule table.

**Table Structure:**

sql

Copy code

CREATE TABLE schedule\_details ( detailID INT(11) NOT NULL AUTO\_INCREMENT, *-- Primary key for this table* schedID INT(11) NOT NULL, *-- Foreign key referencing schedule* sched\_day ENUM('Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday') NOT NULL, *-- Day of the schedule* TIME\_FROM TIME NOT NULL, *-- Start time* TIME\_TO TIME NOT NULL, *-- End time* sched\_room VARCHAR(30) NOT NULL, *-- Room* PRIMARY KEY (detailID), *-- Primary key* FOREIGN KEY (schedID) REFERENCES schedule(schedID) ON DELETE CASCADE *-- Relation to schedule* );

**How the Details Table Works**

The schedule\_details table links to the schedule table via schedID and stores:

* Specific **days** (e.g., Monday, Tuesday).
* **Time** ranges (TIME\_FROM and TIME\_TO).
* **Room** information.

**Example Data in**schedule\_details

| **detailID** | **schedID** | **sched\_day** | **TIME\_FROM** | **TIME\_TO** | **sched\_room** | **instructor\_name** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | 1 | Monday | 08:00:00 | 10:00:00 | A101 | Sir romack |
| 2 | 1 | Wednesday | 08:00:00 | 10:00:00 | A101 | Sir romack |
| 3 | 1 | Friday | 08:00:00 | 10:00:00 | A101 | Sir romack |
| 4 | 2 | Tuesday | 10:00:00 | 12:00:00 | B202 | Sir romack |

**KA CLICK NG ADD SCHEDULE ETO LILITAW**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **course\_code** | **title** | **unit** | **sched\_day** | **TIME\_FROM** | **TIME\_TO** | **sched\_room** | **Action** |
| **RLW** | **Rizal Life** | **3.0** |  |  |  |  | **Edit** |

**Adding a New Schedule**

**Adding to**schedule**Table:**

For a new schedule for:

* Program: Computer Science (program\_id = 1)
* Section: CS1A (section\_id = 1)
* Course: CS101 (course\_id = 1)
* Semester: 1st Semester
* School Year: 2024-2025

sql

Copy code

INSERT INTO schedule (program\_id, section\_id, course\_id, sched\_semester, sched\_sy) VALUES (1, 1, 1, '1st Semester', '2024-2025');

**Adding to**schedule\_details**Table:**

For the schedule above (schedID = 1), on Monday, Wednesday, and Friday, 8:00 AM–10:00 AM in room A101:

sql

Copy code

INSERT INTO schedule\_details (schedID, sched\_day, TIME\_FROM, TIME\_TO, sched\_room) VALUES (1, 'Monday', '08:00:00', '10:00:00', 'A101'), (1, 'Wednesday', '08:00:00', '10:00:00', 'A101'), (1, 'Friday', '08:00:00', '10:00:00', 'A101');

**Updating a Schedule**

**Updating Semester or School Year:**

To update the semester for a schedule in schedule:

sql

Copy code

UPDATE schedule SET sched\_semester = '2nd Semester' WHERE schedID = 1;

**Updating Days or Times:**

To update the time for all days of a schedule in schedule\_details:

sql

Copy code

UPDATE schedule\_details SET TIME\_FROM = '09:00:00', TIME\_TO = '11:00:00' WHERE schedID = 1;

**Updating Specific Day:**

To update the room for the Monday schedule only:

sql

Copy code

UPDATE schedule\_details SET sched\_room = 'B201' WHERE schedID = 1 AND sched\_day = 'Monday';

**Deleting a Schedule**

**Deleting Entire Schedule:**

To delete a schedule and its associated details:

sql

Copy code

DELETE FROM schedule WHERE schedID = 1;

**Deleting Specific Day:**

To delete the Monday schedule for schedID = 1:

sql

Copy code

DELETE FROM schedule\_details WHERE schedID = 1 AND sched\_day = 'Monday';

**Advantages of This Structure**

1. **Normalization**: No redundant data—course, program, and section are stored only once.
2. **Flexibility**: Supports multiple days and times for the same schedule.
3. **Ease of Updates**: Update the main schedule or specific days independently.
4. **Cascade Deletes**: Deleting a schedule automatically deletes its details.