



Project 1 – Karate Club (Requirements)

Create Relational Schema for the following project:

Here are the database requirements for a Karate Club:

1. Membership Management:

- The system should allow the creation and management of member profiles, including personal information, contact details, emergency contact information, and membership status.
- Member information (Name, Address, ContactInfo, Emergency Contact)
- Each Member can have subscription Periods and each period should have (StartDate, EndDate, Fees, IsPaid).
- Members should be able to enroll in the karate club, renew their memberships, and update their information as needed.
- The system should track membership start and end dates, as well as membership status (active/inactive).

2. Instructor Management:

- The system should allow the creation and management of instructor profiles, including personal information and qualifications.
- Instructor information (Name, Address, ContactInfo, Qualifications).
- Members can have many instructors.
- Multiple instructors should be able to train a single member, and each instructor should be able to train multiple members.



3. Belt Rank and Testing:

- The system should support the management of different belt rank tests in karate.
- Members should be able to participate in belt rank tests to advance their ranks.
- The system should track belt test dates, results, and the instructors who conducted the tests.
- Each member's current belt rank should be recorded and updated as they pass the tests and progress.
- Belt Ranks are fixed in the system as follows:
 1. White Belt
 2. Yellow Belt
 3. Orange Belt
 4. Green Belt
 5. Blue Belt
 6. Purple Belt
 7. Brown Belt
 8. Black Belt (1st Dan)
 9. Black Belt (2nd Dan)
 10. Black Belt (3rd Dan)
 11. Black Belt (4th Dan)
 12. Black Belt (5th Dan)
 13. Black Belt (6th Dan)
 14. Black Belt (7th Dan)
 15. Black Belt (8th Dan)
 16. Black Belt (9th Dan)
 17. Black Belt (10th Dan)
- Each Belt Rank has a different test Fees.

4. Payment and Fee Management:

- The system should support the management of membership fees and payments as well as the test fees payments.
- Members should be able to view their payment history and make payments for membership fees.
- The system should track payment details, such as the amount, date, and payment status.
- Member can pay for subscriptions and for test as well.