



# Fitness Studio CRM

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## Phase 1: Problem Understanding & Industry Analysis

- **Requirement Gathering:** Collect needs like membership registration, renewals, class booking, attendance, trainer allocation.
  - **Stakeholder Analysis:** Manager, Trainers, Members, Front Desk Staff.
  - **Business Process Mapping:** Flow of joining → booking classes → attendance → renewal → performance tracking.
  - **Industry-specific Use Case Analysis:** Compare with fitness CRMs to identify missing features.
  - **AppExchange Exploration:** Check existing apps for gyms (e.g., scheduling tools) to see gaps.
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## Phase 2: Org Setup & Configuration

- **Salesforce Editions:** Choose Enterprise/Developer edition.
  - **Company Profile Setup:** Create profile as “Fitness Studio CRM.”
  - **Business Hours & Holidays:** Add gym timings and weekly holidays.
  - **Fiscal Year Settings:** Align memberships with calendar year.
  - **User Setup & Licenses:** Create users (Manager, Trainer, Staff).
  - **Profiles:** Assign specific permissions (Manager full, Trainer limited).
  - **Roles:** Role hierarchy – Manager > Trainer > Staff.
  - **Permission Sets:** Special access for advanced reports.
  - **OWD:** Restrict member details (private).
  - **Sharing Rules:** Trainers only see their assigned members.
  - **Login Access Policies:** Secure external logins.
  - **Dev Org Setup:** Configure developer org for project.
  - **Sandbox Usage:** Test automations in sandbox.
  - **Deployment Basics:** Plan sandbox → production deployment.
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## Phase 3: Data Modeling & Relationships

- **Standard & Custom Objects:** Member, Trainer, Class, Attendance, Membership Plan.
  - **Fields:** Start date, end date, class type, trainer name, fees.
  - **Record Types:** Membership types (Monthly, Quarterly, Annual).
  - **Page Layouts:** Separate layouts for Manager vs Trainer.
  - **Compact Layouts:** Show key details (Membership Status, Expiry Date).
  - **Schema Builder:** Visualize all relationships.
  - **Lookup vs Master-Detail vs Hierarchical:**
    - Member ↔ Trainer (Lookup).
    - Member ↔ Class (Master-Detail via Attendance).
  - **Junction Objects:** Attendance (links Member and Class).
  - **External Objects:** Import external payment data if required.
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#### **Phase 4: Process Automation (Admin)**

- **Validation Rules:** End date must be after start date.
  - **Workflow Rules:** Send email 7 days before membership expiry.
  - **Process Builder:** Auto-assign new members to trainers.
  - **Approval Process:** Membership cancellation approval by Manager.
  - **Flow Builder:** Auto-update Membership Status (Active/Expired).
  - **Email Alerts:** Send renewal confirmation emails.
  - **Field Updates:** Auto-set status = Expired if date passed.
  - **Tasks:** Create follow-up tasks for trainers.
  - **Custom Notifications:** Notify trainer when new member joins.
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#### **Phase 5: Apex Programming (Developer)**

- **Classes & Objects:** MembershipManager class to handle logic.
- **Apex Triggers:** Trigger on Membership object (before insert/update).
- **Trigger Design Pattern:** Use handler class.
- **SOQL & SOSL:** Fetch upcoming renewals, member search.
- **Collections:** Use List/Map for member-attendance data.
- **Control Statements:** Logic for attendance status.
- **Batch Apex:** Bulk update expired memberships nightly.
- **Queueable Apex:** Assign members to trainers asynchronously.
- **Scheduled Apex:** Send weekly renewal reports.
- **Future Methods:** Send asynchronous follow-up emails.

- **Exception Handling:** Handle missing trainer/member records.
  - **Test Classes:** Write tests for triggers & classes.
  - **Asynchronous Processing:** Bulk updates for large memberships.
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## **Phase 6: User Interface Development**

- **Lightning App Builder:** Create “Fitness Studio CRM App.”
  - **Record Pages:** Custom record pages for Member & Class.
  - **Tabs:** Add Members, Trainers, Classes, Attendance tabs.
  - **Home Page Layouts:** Display membership summary & quick actions.
  - **Utility Bar:** Quick access to Reports & Dashboards.
  - **LWC:** Build “Book a Class” form.
  - **Apex with LWC:** Show available slots from Apex class.
  - **Events in LWC:** Trigger class booking.
  - **Wire Adapters:** Fetch member data dynamically.
  - **Imperative Apex Calls:** Fetch attendance records on-demand.
  - **Navigation Service:** Redirect from booking form to attendance page.
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## **Phase 7: Integration & External Access**

- **Named Credentials:** Configure API credentials for SMS/Email.
  - **External Services:** Connect to free SMS gateway.
  - **Web Services (REST/SOAP):** Callout to send booking confirmations.
  - **Callouts:** Trigger email/SMS after class booking.
  - **Platform Events:** Notify trainer of new booking.
  - **Change Data Capture:** Track updates to Member records.
  - **Salesforce Connect:** Link to external payment system.
  - **API Limits:** Manage SMS/email callout limits.
  - **OAuth & Authentication:** Secure external API usage.
  - **Remote Site Settings:** Add SMS/Email API endpoints.
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## **Phase 8: Data Management & Deployment**

- **Data Import Wizard:** Import initial Member/Trainer data.
- **Data Loader:** Bulk upload attendance records.

- **Duplicate Rules:** Prevent duplicate members.
  - **Data Export & Backup:** Weekly backup of Member/Attendance.
  - **Change Sets:** Move workflows and objects to production.
  - **Unmanaged vs Managed Packages:** Package for reusability.
  - **ANT Migration Tool:** Automate deployment.
  - **VS Code & SFDX:** Source-driven development.
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## **Phase 9: Reporting, Dashboards & Security Review**

- **Reports:** Active members, renewals due, attendance per class.
  - **Report Types:** Member-Classes report, Trainer-Attendance report.
  - **Dashboards:**
    - Manager: Renewal funnel, Trainer performance.
    - Trainer: Attendance records.
  - **Dynamic Dashboards:** Personalized dashboards per trainer.
  - **Sharing Settings:** Trainers only see their assigned members.
  - **Field Level Security:** Hide sensitive fields from trainers.
  - **Session Settings:** Restrict login session time.
  - **Login IP Ranges:** Allow access only from studio network.
  - **Audit Trail:** Track changes in membership records.
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## **Phase 10: Final Presentation & Demo Day**

- **Pitch Presentation:** Show how CRM improves member retention.
- **Demo Walkthrough:** Add new member → Book class → Attendance → Renewal → Dashboard update.
- **Feedback Collection:** Gather trainer/manager feedback.
- **Handoff Documentation:** Provide setup/config docs.
- **LinkedIn/Portfolio Showcase:** Publish project on GitHub/LinkedIn.