

Fitness Club Advanced Excel Analysis

Assignment Questions



Fitness Club Advanced Excel Analysis

- **Dataset Link:** [Fitness Club Advanced Excel](#)
- **Rows:** 35
- **Columns:** 11

Column Details

Here's a breakdown of the dataset columns, designed to mimic real-life complexity:

Column Name	Description
Member_ID	Unique ID for each member (e.g., M001, M002, etc.)
Full_Name	Full names (Indian names: e.g., Priya Sharma, Arjun Mehta)
Age	Age in years (ranging from 19 to 60)
Gender	Male or Female
Membership_Type	Basic, Standard, Premium, or Family
Start_Date	Membership start date
End_Date	Membership end date
Monthly_Fee	Fee charged per month (in ₹)
Attendance	Number of days visited this month (1-30)
City	City of residence (e.g., Mumbai, Bengaluru, Delhi, Pune, etc.)
Referred_By	Name of the member who referred them (optional; can be blank or a name)

🧠 Problem Statement (Challenging – Student-Level)

You've been hired by the manager of "PowerFit India" to perform a deep analysis of their membership base. The manager wants you to **analyze retention, revenue, referral performance, and attendance behavior using Excel**.

Follow the steps below carefully. Apply appropriate formulas, conditional formatting, and visualizations wherever needed.

TASKS

1. Membership Duration in Months

- Add a column **Membership_Duration_Months** to calculate how many full months a member has been active.
 - Assume 1 month = 30 days.
 - Use **Start_Date** and **End_Date**.

2. Referral Impact

- Create a new column **Referred**:
 - Mark as **Yes** if **Referred_By** is not blank.
 - Mark as **No** if it's blank.
- Then use a **Pivot Table** to compare **average Monthly_Fee** for referred vs. non-referred members.

3. Revenue Calculation

- Add a column **Total_Revenue**:
 - Formula = **Monthly_Fee × Membership_Duration_Months**
- Then calculate the **total revenue** earned from:
 - Premium members
 - Family memberships
 - City-wise breakdown using **Pivot Table**

4. Identify Low Engagement Members

- Use **Conditional Formatting** to highlight:
 - Members with **Attendance < 8**
 - AND whose **Membership_Duration_Months >= 6**
- These are long-term but inactive users—flag them.

5. Segment Profitability Dashboard

The management at PowerFit India wants deeper insights into which **combinations of member traits** (like city, membership type, and referral status) bring in the most revenue.

Your task is to create a **Segment Profitability Dashboard** using **Pivot Tables, Calculated Fields, and Pivot Charts** that can answer:

1. Which **City + Membership Type + Referral** combinations are most profitable?
2. What is the **average revenue per member** across different segments?
3. Where should PowerFit focus its **marketing or referral programs**?
 - Make your dashboard **interactive** using **Slicers** and add a **visual chart** for quick insights.

6. Gender & Age Distribution

- Create two Pivot Tables:
 - Gender-wise count of members per city
 - Age distribution across Membership Types:
 - 18–30 = Youth
 - 31–45 = Adults
 - 46+ = Seniors