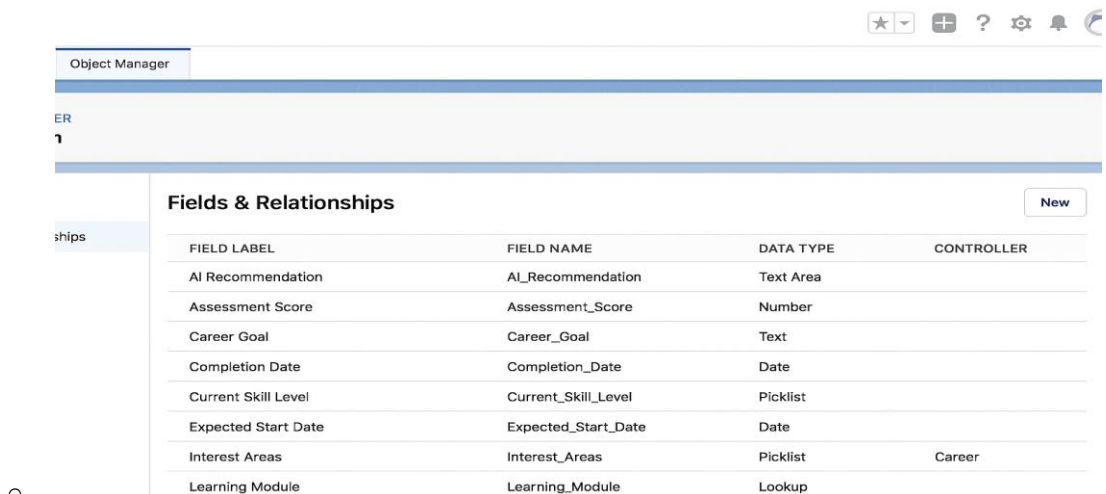# Phase 3: Data Modeling & Relationships for AI Career Coach

1. Standard & Custom Objects

- **Standard Objects:** Use Salesforce standard objects such as **User**, **Account**, **Contact**, and **Task** to manage core information like coaches, students, and interactions.
- **Custom Objects:** Create custom objects to store AI-specific data:
  - **Career Profile** – Stores students' skills, interests, and assessment results.
  - **Learning Module** – Stores course content, videos, and quizzes.
  - **AI Recommendation** – Stores suggestions generated by AI algorithms.
  - **Session Tracking** – Logs coaching sessions, AI interactions, and student feedback.

2. Fields

- Define fields to capture relevant information for each object:
  - Text, picklist, multi-select picklist (for skills or interests)
  - Date/Time (for session scheduling)
  - Lookup or Master-Detail (for relationships)
  - Formula fields to calculate progress percentage or AI recommendation scores.

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3. Record Types

- Use record types to differentiate objects with multiple business processes:
    - **Career Profile**: Undergraduate, Graduate, Working Professional
    - **Learning Module**: Beginner, Intermediate, Advanced
    - Record types help show relevant fields and page layouts for each category.

4. Page Layouts

- Customize page layouts to display important data for each user type:
    - **Coach Page Layout:** Student career profiles, AI recommendations, progress chart
    - **Student Page Layout:** Personal skills, AI suggestions, completed modules, session history

5. Compact Layouts

- Use compact layouts to show key fields on record highlights:
    - Student Name, Current Skill Level, Last AI Recommendation, Upcoming Session.

6. Schema Builder

- Use **Schema Builder** to visually design objects, fields, and relationships:
    - Helps ensure proper linkages between Students, Career Profiles, AI Recommendations, and Learning Modules.

7. Lookup vs Master-Detail vs Hierarchical Relationships

- **Lookup Relationship:**
    - Example: AI Recommendation linked to Career Profile
    - Optional relationship; records can exist independently

- **Master-Detail Relationship:**
    - Example: Session Tracking linked to Career Profile
    - Child records inherit sharing and security from parent

- **Hierarchical Relationship:**
    - Used only for **User object**
    - Example: Coach reports to Senior Coach or Admin

8. Junction Objects

- Use junction objects to create **many-to-many relationships**:
    - Example: A Learning Module can be recommended to multiple Career Profiles, and a Career Profile can have multiple Learning Modules
    - Junction Object: **Career Module Assignment** linking Career Profile and Learning Module

9. External Objects

- Integrate **external AI systems or data sources** using external objects via Salesforce Connect:
    - Example: Fetch AI-generated skill recommendations or assessment scores from external AI platforms
    - Enables real-time data access without storing all AI results in Salesforce.

Object Manager

	Label	API Name
📁	Account	Account
📁	Activity	Activity
📁	Campaign	Campaign
📁	Case	Case
📁	Candidate	ai_career_coach__Candidate
📁	Assessment	ai_career_coach__Assessment
📁	CareerPath	ai_career_coach__CareerPath