Phase 3: Data Modeling & Relationships

Objective:

To design a scalable and maintainable **data model** for ApexHub that supports recipe management, execution logs, and integration with standard objects.

Activities:

1. Custom Objects Design:

- Recipe_c: Stores metadata about each Apex recipe (Name, Type, Description, Category).
- RecipeLog_c: Tracks execution details of recipes (Status, Execution Time, Triggered By).

2. Relationships:

- RecipeLog_c → Lookup to Recipe_c (1-to-many)
- Optional relationships with **Account**, **Contact**, and **Opportunity** for integration examples.

3. Field Definitions:

- Recipe_c: Name, Type, Category, Description, LastModifiedBy
- RecipeLog_c: ExecutionTime, Status, Message, Recipe_c (Lookup)

4. Validation Rules & Picklists:

- Added picklist fields for Recipe Type (Trigger, Batch, LWC, Flow)
- Created validation rules to ensure mandatory fields are populated before execution.

5. ERD (Entity Relationship Diagram):

```
Recipe__c | |---< RecipeLog__c Account / Contact / Opportunity (optional integration)</pre>
```

Deliverables:

- Fully defined custom objects with relationships
- Validation rules for data integrity
- ERD diagram placeholder for documentation