**Event Management MAX FIT**

**Phase 1 Development: Object Setup, Validation, Duplicate Rules, and Security Model**

**Overview**

Phase 1 establishes the foundation of the system by creating the necessary Salesforce data model, enforcing data integrity and validation, preventing duplicates, and setting up the security/access control structure. This phase ensures clean and secure data collection for event management operations.

**Phase 1 Components**

**1. Object Structure Setup**

* Create custom Salesforce objects representing core entities such as:
  + Location with attributes like Address, City, State, Country, Verified Checkbox to mark validated addresses.
  + Event Organizer tracking organizer details including emails, phone numbers, and linked address.
  + Event with fields such as Auto Number for ID, Name, Status (Created, Published, In Progress, etc.), Start and End DateTime, Max Seats, Remaining Seats (formula), Location, Event Type (In-Person / Virtual), Recurring, Frequency.
  + Attendee recording event participants with fields like Name, Email, Phone, Company, Address.
  + Speaker capturing speaker details associated with events.
  + Junction objects for many-to-many relationships such as Event-Attendee and Event-Speaker.

Each field must have a valid data type and description/help text for clarity. The objects and fields are created in Salesforce setup, possibly supported by metadata deployment tools.

**2. Validation Rules**

Validation rules enforce business constraints to prevent incorrect or inconsistent data entries:

* If the "Recurring?" checkbox on Event is selected, the "Frequency" field becomes mandatory.
* If the Event Type is "Virtual", the Location field should not be selectable; if "In-Person", Location selection is mandatory.
* The "End DateTime" field (if provided) must be at least one day after the "Start DateTime" value.
* The Attendee can only be assigned to Events which are live (End Date in future, Live checkbox true, Seats available).
* Similarly, Speakers can only be linked to live Events.

**3. Duplicate Rules Setup**

To maintain uniqueness in the system, duplicate prevention rules are set for:

* Speaker object: prevent creation of duplicates based on Email and Phone.
* Attendee object: prevent duplicates by Name, Email, and Phone combination.
* Event Organizer object: similar duplicate prevention based on Email and Phone.

**4. Security Model (Profiles, Roles, Sharing)**

Setup Salesforce security to restrict and grant access as per business needs:

* Profiles: Create three profiles cloned from Standard User, named Event Organizer, Event Attendee, and Speaker with respective object-level field permissions.
* Roles: Create roles reflecting user types (Organizer, Attendee, Speaker), with a CEO role as the top of the hierarchy. Organize roles so organizers have visibility and control over speakers and attendees.
* Organization-Wide Defaults (OWD): Set default record access levels (e.g., Event Public Read Only, Speaker Private).
* Sharing Rules: Share Speaker and Attendee records with Organizer roles granting Read/Edit access, ensuring organizers can manage associated records.
* Field-level security settings applied to protect sensitive fields appropriately.

**Deliverables for Phase 1**

* Salesforce objects with fields deployed following the described data model.
* Validation rules ensuring data integrity as per business logic.
* Duplicate management rules implemented for key objects.
* Profiles and roles created and assigned maintaining security principle of least privilege.
* Sharing rules configured for collaboration between roles.
* Documentation of object schema, validation, and security settings.

**Importance of Phase 1**

Phase 1 lays the groundwork for the entire application by guaranteeing that the incoming data is clean, valid, and secure. It reduces errors in downstream logic and provides a controlled environment for event management activities and subsequent automation.

This explanation captures the scope, tasks, and significance of the first development phase for the Event Management MAX FIT project. Further phases build on this foundation with Apex development, Lightning components, and integrations.