Module Development in Odoo 17: Clinic Management (1)

Module Structure:

1. **Models (8 hours):**
   - **Patient (res.partner):**
     - Inherit from `res.partner` to leverage existing partner functionality (name, address, contact information).
     - Add custom fields (optional):
       - Patient ID (unique identifier)
       - Date of birth
       - Insurance information
       - Emergency contact details
   - **Appointment (clinic.appointment):**
     - Patient (foreign key to `res.partner`)
     - Doctor (foreign key to `res.users`)
     - Appointment date and time
     - Appointment type (consultation, checkup, etc.)
     - Status (pending, confirmed, canceled)
     - Notes (optional)
   - **Doctor (res.users):**
     - Inherit from `res.users` to leverage existing user management.
     - Add custom fields (optional):
       - Specialty
       - Availability (derived based on appointments)
   - **Treatment (clinic.treatment):**
     - Patient (foreign key to `res.partner`)
     - Doctor (foreign key to `res.users`)
     - Appointment (foreign key to `clinic.appointment`) (optional: if treatment directly linked to appointment)
     - Treatment details (diagnosis, prescribed medications, procedures)
     - Notes
   - **Medical Record (clinic.medical_record):**
     - Patient (foreign key to `res.partner`)
     - Treatment references (many2many to `clinic.treatment`)
     - Uploadable files (e.g., scans, reports)
     - Notes
   - **Prescription (clinic.prescription):**
     - Patient (foreign key to `res.partner`)
     - Doctor (foreign key to `res.users`)
     - Treatment (foreign key to `clinic.treatment`) (optional)
     - Medication details (name, dosage, duration)

- Notes
- **Invoice (account.invoice):**
  - Inherit from `account.invoice` for seamless integration with Odoo's accounting system.
  - Patient (foreign key to `res.partner`)
  - Appointment (foreign key to `clinic.appointment`) (optional: if invoice linked to specific appointment)
  - Treatment references (many2many to `clinic.treatment`) (optional)
  - Invoice lines with service or product details
- **Log (clinic.log):**
  - Patient (foreign key to `res.partner`)
  - Appointment (foreign key to `clinic.appointment`) (optional)
  - Entry date and time
  - Notes (e.g., vitals, observations during appointment)

Views (8 hours):

- **Patient Dashboard:**
  - List view: Display basic patient information and upcoming appointments.
  - From view: Edit patient details, medical history (linked to medical records), and prescriptions.
- **Appointment Management:**
  - Calendar view: Visually manage appointments, doctor availability, and scheduling conflicts.
  - Kanban view: Track appointment statuses (pending, confirmed, canceled).
  - From view: Create, edit, and cancel appointments, including selecting doctor and appointment type.
- **Doctor Dashboard:**
  - List view: Display upcoming appointments with patient details.
  - Form view : View patient medical history and treatment details linked to appointments.
- **Treatment Management:**
  - List view: Show patient, doctor, and treatment details.
  - From view: Create, edit, and view treatment information, linking to prescriptions and medical records.
- **Medical Record Management:**
  - List view: Display patients and access their medical records.
  - Form view: View and add notes, upload documents (scans, reports), and link to treatments.
- **Prescription Management:**
  - List view: Show patient, doctor, and prescription details.
  - From view: Create and edit prescriptions, linking to treatments and including medication details.

- **Invoice Management:**
  - List view: Display invoices for patients and appointments or treatments.
  - Form view: View and edit invoice details, including adding or removing invoice lines.
- **Log Management (optional):**
  - List view: Display logs