# Custom Hospital Patient Tracker App for Odoo 15

**Project Approach:**

1. **Set up the development environment:**

   o Install Docker and Docker Compose

   o Create a docker-compose.yml file to set up Odoo 15 and PostgreSQL

2. **Create a new Odoo module**:

   o Generate the basic module structure

   o Define the Patient model in Python

   o Create XML views for list and form views

   o Update the **manifest**.py file

3. **Implement the Patient model:**

   o Define fields: reference (char), name (char), age (integer), gender (selection)

   o Use the @api.model_create_multi decorator for creating records

   o Implement a method to generate the auto-incrementing reference

4. **Create views:**

   o Develop a tree view for listing patients

   o Create a form view for adding/editing patients

   o Add menu items and actions

5. **Test the application:**

   o Run the Odoo instance using Docker, Docker Compose & Kubernetes

   o Access the web interface and test patient creation and listing

**Comprehensive Rubric for Hospital Patient App Tracker in Odoo 15**

1. **Functionality and Technical Implementation (50 points)**

   **a. Patient Model (0-15 points)**

   - 15 points: All required fields implemented correctly, including auto-incrementing reference

   - 10 points: Most fields present, minor issues with reference or other fields

   - 5 points: Several fields missing or major issues with implementation

   - 0 points: Model severely incomplete or non-functional

   **b. Views and User Interface (0-15 points)**

   - 15 points: All views (list, form, search) implemented with excellent usability

   - 10 points: Most views present, good usability with minor issues

   - 5 points: Some views missing or significant usability problems

   - 0 points: Views largely non-functional or missing

   **c. CRUD Operations (0-10 points)**

   - 10 points: All operations (Create, Read, Update, Delete) work flawlessly

   - 7 points: Most operations work with minor bugs

   - 3 points: Significant issues with one or more operations

   - 0 points: Multiple operations non-functional

   **d. Docker and PostgreSQL Integration (0-10 points)**

   - 10 points: Perfect setup with Odoo 15, Docker, and PostgreSQL

   - 7 points: Correct setup with minor configuration issues

   - 3 points: Major problems with integration or missing components

   - 0 points: Failure to implement required technologies

2. **Code Quality and Best Practices (25 points)**
   **a. Code Structure and Organization (0-10 points)**

   - o 10 points: Excellent organization, follows Odoo best practices

   - o 7 points: Good structure with minor deviations from best practices

   - o 3 points: Poor organization, significant departures from best practices

   - o 0 points: Chaotic structure, no adherence to best practices

   **b. Comments and Documentation (0-10 points)**

   - o 10 points: Comprehensive, helpful comments and documentation

   - o 7 points: Good comments, some areas lacking detail

   - o 3 points: Minimal or unhelpful comments

   - o 0 points: No comments or documentation

   **c. Security Implementation (0-5 points)**

   - o 5 points: Proper access rights and security measures in place

   - o 3 points: Basic security implemented with some gaps

   - o 1 point: Minimal security considerations

   - o 0 points: No security measures implemented

3.  **Presentation and Documentation (15 points)**

    **a. Loom Video Demonstration (0-5 points)**

    - o   5 points: Clear, concise, under 3 minutes, effectively shows all features
    - o   3 points: Covers most features, minor clarity issues or slightly over time
    - o   1 point: Unclear, missing key features, or significantly over time
    - o   0 points: No video or completely ineffective demonstration

    **b. Project Description (0-5 points)**

    - o   5 points: Well-written, error-free, professional, covers all aspects
    - o   3 points: Good description with minor errors or omissions
    - o   1 point: Poor writing, multiple errors, or missing key information
    - o   0 points: No description or completely inadequate

    **c. README and Installation Instructions (0-5 points)**

    - o   5 points: Comprehensive, clear instructions for setup and use
    - o   3 points: Good instructions with minor omissions
    - o   1 point: Basic instructions, missing critical information
    - o   0 points: No README or instructions provided

4.  **Innovation and Extra Features (10 points)**

    **a. Additional Functionality (0-5 points)**

    - o   5 points: Innovative features that significantly enhance the application
    - o   3 points: Some useful additional features
    - o   1 point: Minor extra features with limited utility
    - o   0 points: No extra features beyond basic requirements

    **b. Performance and Optimization (0-5 points)**

    - o   5 points: Evidence of significant performance optimizations
    - o   3 points: Some optimization attempts
    - o   1 point: Basic performance considerations
    - o   0 points: No consideration for performance

**Total: 100 points**