Lab Guide – Employee Onboarding Portal

Dataverse-centric Copilot Agent

1 | Scenario Summary

A mid-sized organisation wants to replace its e-mail-driven onboarding with an automated Copilot experience that guides HR and hiring-managers, creates Dataverse records, triggers downstream provisioning and keeps everyone informed.

2 | Learning Objectives

1. Design a Dataverse data model that supports onboarding tasks, asset requests and approvals.

2. Configure a Copilot agent with multi-turn *Conversational Intake* that writes to Dataverse.

3. Build **Power Automate** flows that:
   - provision IT accounts, security badges and training slots
   - chase overdue tasks and re-assign when managers change

4. Generate weekly status dashboards and on-demand PDF summaries.

5. Practise monitoring, troubleshooting and iterative improvement of the agent.

3 | Prerequisites

- Power Platform environment with Dataverse enabled.
- Security role with **Environment Maker** + **System Customiser**.
- Access to Teams and Outlook for notifications.
- Sample users for IT, Security and Training.

## 4	Reference Data Model	
Table	Key Columns	Purpose
Employees	EmployeeID (PK), FirstName, LastName, Email, DepartmentID, RoleID, StartDate, Status	Master record per hire
Departments	DepartmentID, DepartmentName	Lookup for organisational grouping
Roles	RoleID, RoleName, DefaultTaskTemplateID	Maps each role to a task template
OnboardingTaskTemplates	TemplateID, TaskDefinitions (JSON)	Stores task blueprints per role/department

## 4	Reference Data Model	
Table	Key Columns	Purpose
OnboardingTasks	TaskID, EmployeeID, TaskName, DueDate, Status, AssignedTo	Concrete tasks generated from template
Assets	AssetID, AssetName, Category, AssignedToEmployeeID, Status	Hardware / licence requests
TrainingModules	ModuleID, ModuleName, DeliveryMethod	Courses scheduled for new hire
Approvals	ApprovalID, EmployeeID, ApproverID, ApprovalType, Status	Tracks manager or IT sign-off

> **Choice Sets**
> *EmployeeStatus*: Onboarding │ Active │ Terminated
> *TaskStatus*: Not Started │ In Progress │ Completed
> *AssetStatus*: Requested │ Ordered │ Delivered
> *ApprovalStatus*: Pending │ Approved │ Rejected

5 │ Lab Exercises

EX 1 – Environment & Data Setup

1. **Import the solution** file provided by the instructor *or* manually create the eight tables above.
2. Add sample Departments, Roles and TaskTemplates.
3. Create Teams channels `#onboarding-it`, `#onboarding-security`, `#onboarding-training`.

EX 2 – Build the Copilot *Conversational Intake*

1. Open **Copilot Studio → Create → Custom Copilot**.
2. Add a **Topic** "Start Onboarding".
3. Draft system prompt:

```
You are HR Copilot. Collect full name, start date, department,
role and special equipment. Use follow-up questions when data is missing.
```

4. Add Turn 1: Ask "Who are we onboarding and when do they start?" → save to variables.
5. Invoke **Dataverse action** • Create a new *Employees* row • mapping fields.
6. Add a second action **Custom Code** to:
   - fetch the role template
   - parse JSON **TaskDefinitions**
   - bulk-insert rows into *OnboardingTasks*.

EX 3 – Automation Flows

Flow	Trigger	Key Actions
New Hire Kick-off	Employees row where Status = Onboarding	1. Send e-mail to IT, Security, Training. 2. Create approval rows for assets. 3. Post adaptive card in #onboarding-it summarising access needs.
Overdue Task Reminder	Recurrence (08:00 daily)	List *OnboardingTasks* where Status≠Completed & DueDate<Today → for each row send Teams mention to *AssignedTo*.
Manager Re-assignment	Employees row modified (ManagerID change)	Update open tasks' AssignedTo; notify new manager.

EX 4 – Reporting & Insights

1. **Scheduled Cloud Flow** (Mon 07:00) → aggregate tasks by status via Dataverse list rows.
2. Pass statistics to "Draft with Copilot" action → generate friendly e-mail.
3. Use **Word Online (Business)–Populate Template** to create a branded PDF report.

EX 5 – Validation

1. Trigger the topic with "I just hired Jane Doe …".
2. Confirm rows were written to all seven tables.
3. Verify IT e-mail, Teams alerts and approvals.
4. Mark a task overdue → ensure next day reminder.

6 | Cleanup

- Change Employee.Status to **Active** (simulates completed onboarding) → watch emails stop.
- Delete Employee row to remove cascade data if required.

7 | Further Exploration

- Integrate **Azure AD** Graph calls for real account provisioning.
- Add Power BI *Onboarding Dashboard* filtered by Department.
- Extend Approvals with *parallel* approval model for hardware vs. software.