

# Requirements Gathering

**Using a computer running the Linux  
operating system**

Unit 2 Seminar

# Usage of a computer running the Linux operating system – Scenario 1

Feature: Software Package Installation

Scenario: Administrator installs software packages

**Given** the administrator is logged into the system

**When** the administrator runs the command "sudo apt install nginx"

**And** the administrator enters the password

**Then** the software should be installed successfully

**And** the administrator should see "Setting up nginx"

**And** the administrator should see a confirmation message

Explanation:

This scenario describes the process of an administrator installing software using the package manager to add new applications to the system.

User Story:

**As a** system administrator

**I want to** install software packages using the command line

**So that** new applications are available on the system for users

# Usage of a computer running the Linux operating system - 2

Feature: Python Virtual Environment Management

Scenario: Developer creates and activates a Python virtual environment

**Given** the developer is logged into the system

**And** Python is installed

**And** the developer is in the projects directory

**When** the developer runs the command "python3 -m venv venv"

**And** the developer runs the command "source venv/bin/activate"

**Then** the terminal prompt should show "(venv)"

**And** the virtual environment should be active

Explanation:

This scenario shows a developer setting up an isolated Python environment for project dependencies, which is a good practice in software development.

User Story:

**As a** developer

**I want to** create and activate a Python virtual environment

**So that** I can manage project dependencies in isolation

# Usage of a computer running the Linux operating system - 3

Features: System Resource Monitoring

Scenario: Administrator monitors system resources

**Given** the administrator is logged into the system

**And** the administrator has a terminal window open

**When** the administrator runs the command "df -h"

**Then** the administrator should see disk space usage in human-readable format

Explanation:

This scenario demonstrates an administrator checking system resources such as disk space usage for monitoring and maintenance purposes.

User Story:

**As a** system administrator

**I want to** monitor system resources using command-line tools

**So that** I can ensure the system has adequate resources and prevent issues