

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