

Operating System Bonus Assignment

Muhammad Shafeen
Roll-No: 22P-9278

1 Grub Interface : showing all three Operating Systems



Figure 1: Triple Boot

2 Ubuntu Installation

2.1 Step 1: GRUB Menu



Figure 2: GRUB menu offers options to try or install Ubuntu, alongside other useful choices.

2.2 Step 2: Booting into the Installer

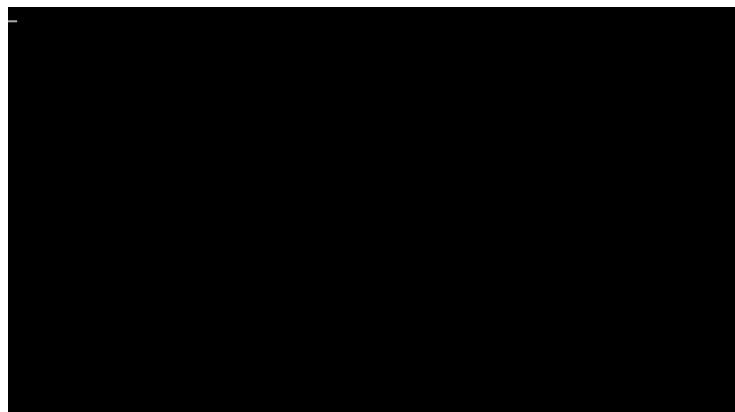


Figure 3: The system begins loading the Ubuntu installer.

2.3 Step 3: Ubuntu Splash Screen

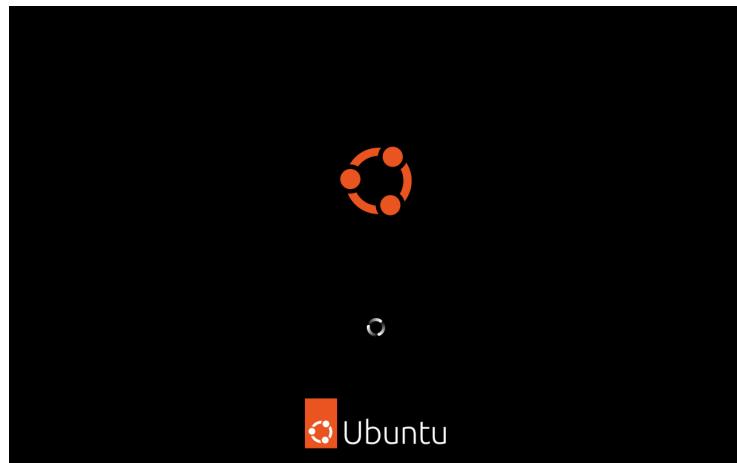


Figure 4: The Ubuntu splash screen with the logo indicates that components are loading.

2.4 Step 4: Verifying Installation Configuration

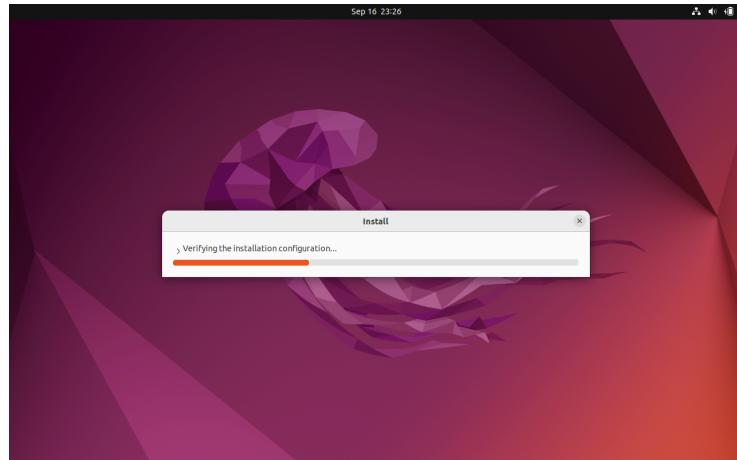


Figure 5: The installer verifies the system configuration to proceed.

2.5 Step 5: Installation Logs

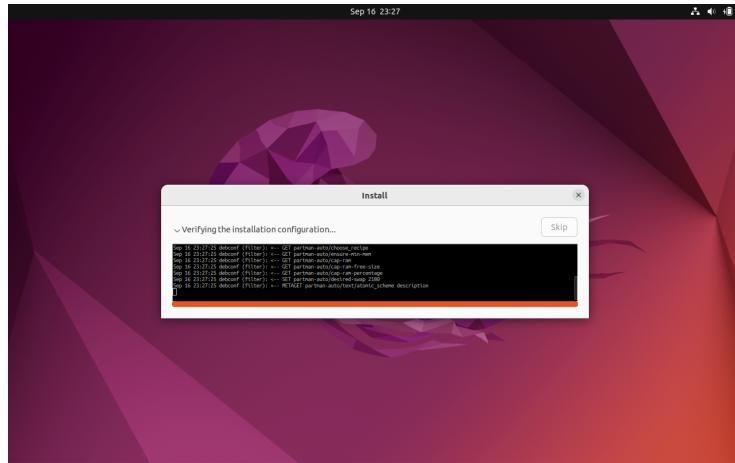


Figure 6: Detailed output logs during the installation process.

2.6 Step 6: User Creation

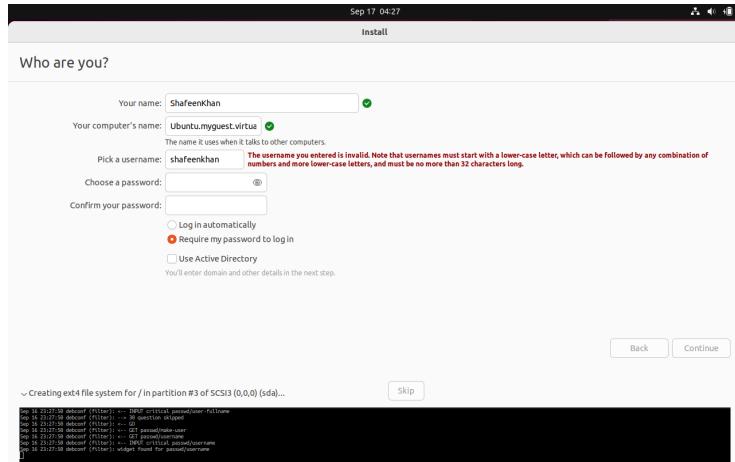


Figure 7: Prompt to create a user account with a username and password.

2.7 Step 7: Copying Files

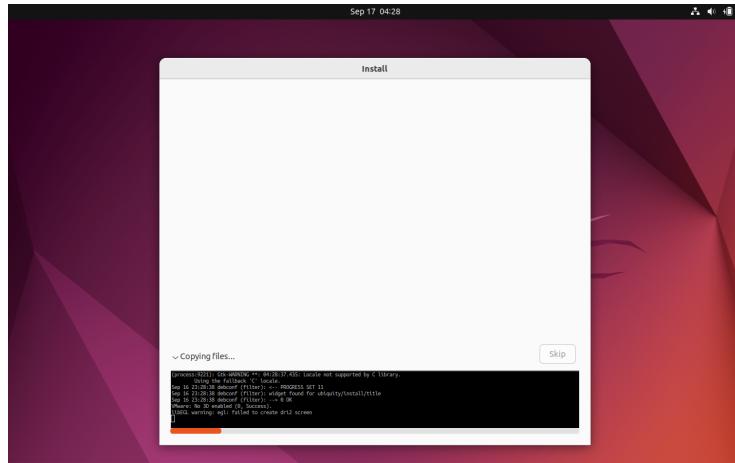


Figure 8: The installer begins copying files to the hard drive.

2.8 Step 8: Installing Additional Software

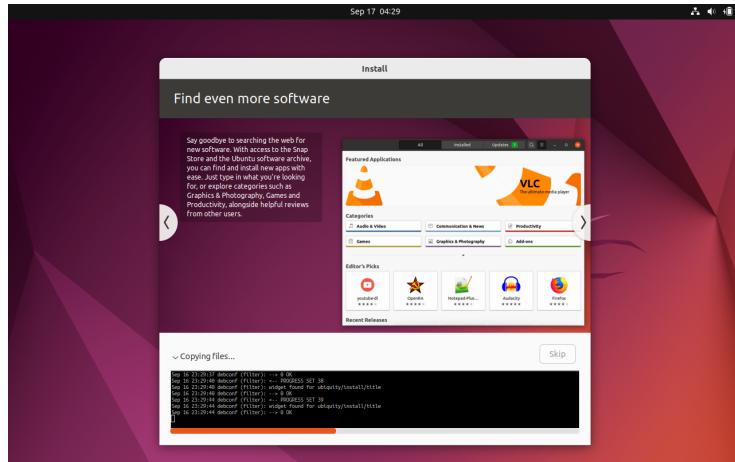


Figure 9: The installer showcases software available in the Ubuntu Software Center.

2.9 Step 9: Application Showcase



Figure 10: Showcase of Shotwell Photo Manager and other applications during installation.

2.10 Step 10: Web Browsing Tools

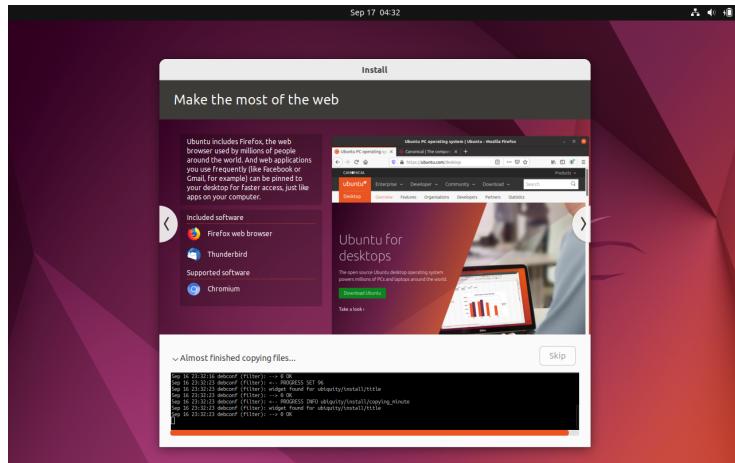


Figure 11: Showcase of web browsers like Firefox and Thunderbird.

2.11 Step 11: Accessibility Options

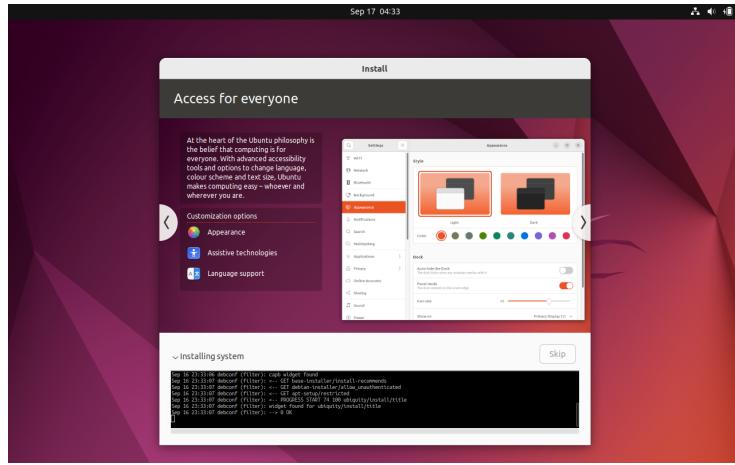


Figure 12: Ubuntu highlights accessibility options such as appearance, assistive technologies, and language support.

2.12 Step 12: Help and Support

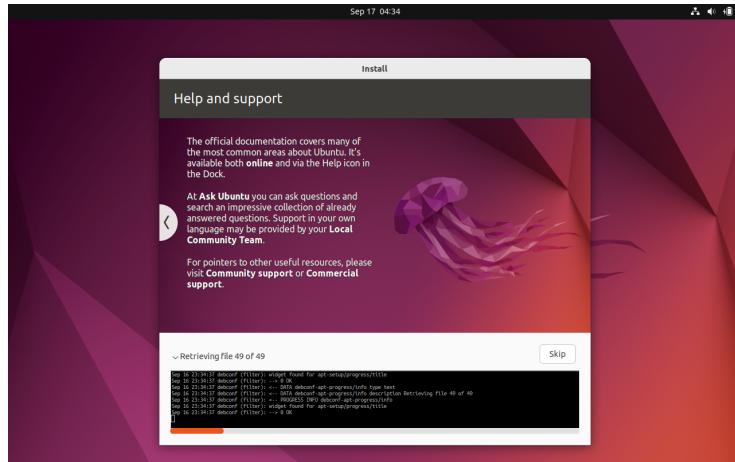


Figure 13: Ubuntu provides help and support channels, including the "Ask Ubuntu" community.

2.13 Step 13: Loading USB Storage Modules

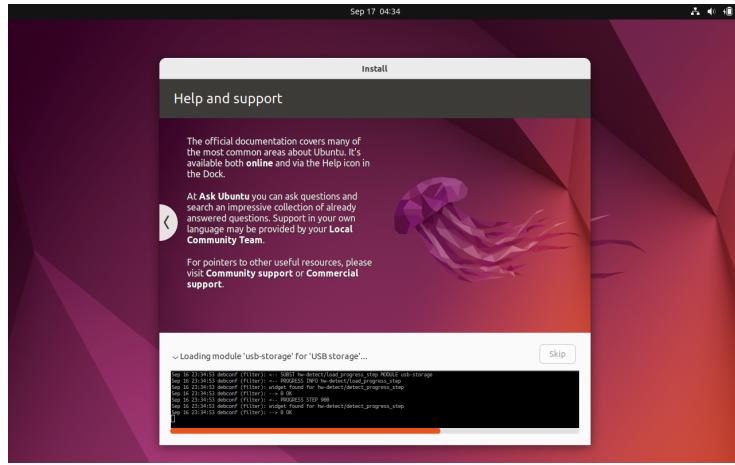


Figure 14: The installer loads modules for USB storage as part of the final installation process.

2.14 Step 14: GRUB Installation

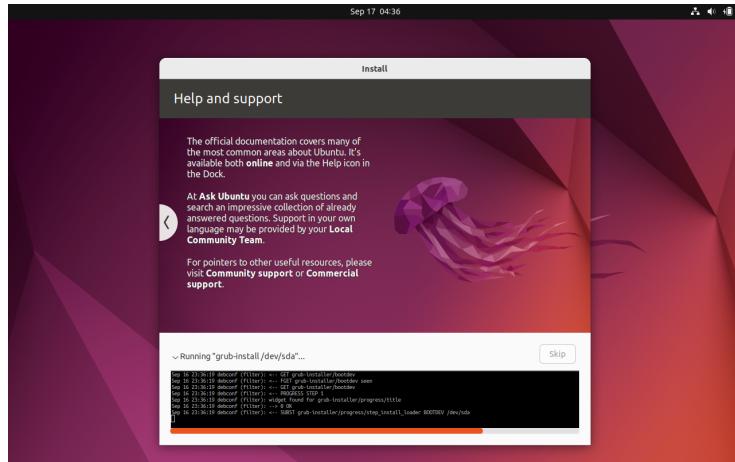


Figure 15: The system installs GRUB, the bootloader, onto the main storage device.

2.15 Step 15: Running dpkg

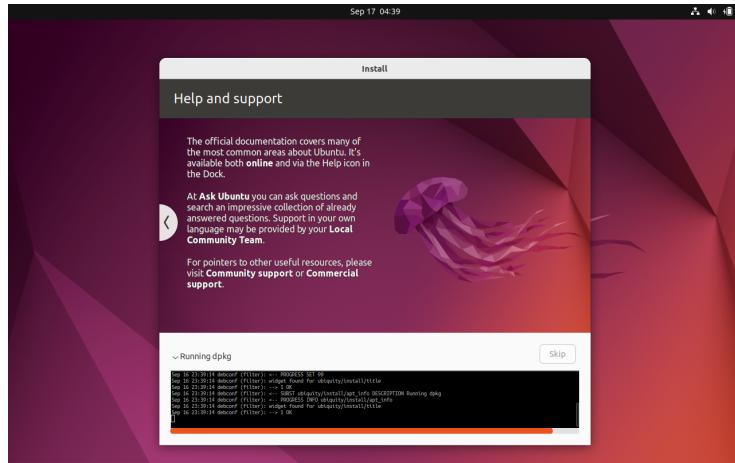


Figure 16: The system runs `dpkg` to manage and configure packages.

2.16 Step 16: Copying Installation Logs

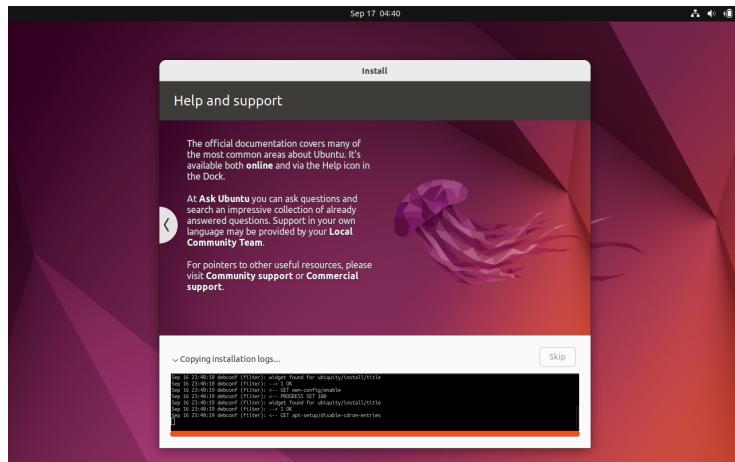


Figure 17: The installer copies logs as the installation process nears completion.

2.17 Step 17: Rebooting

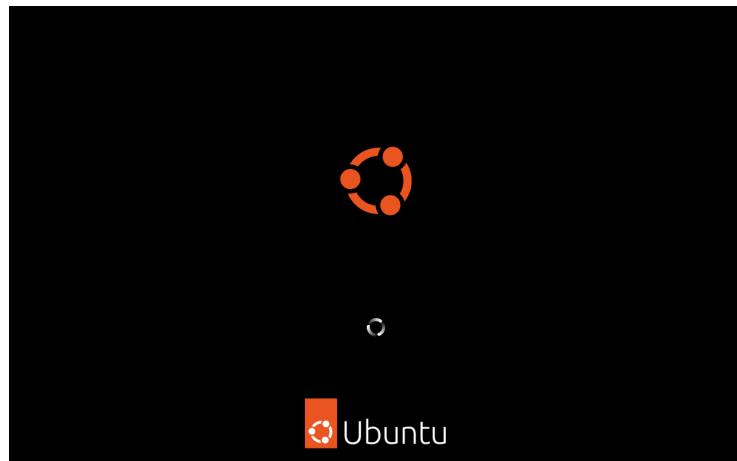


Figure 18: The Ubuntu splash screen reappears as the system reboots after installation.

2.18 Step 18: Final Desktop

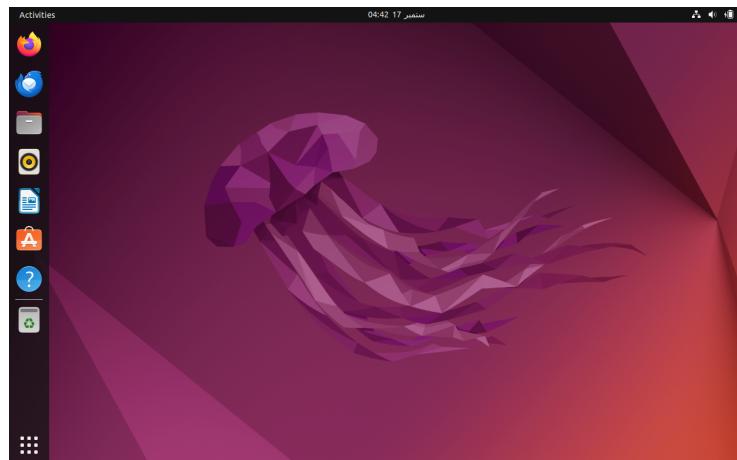


Figure 19: The Ubuntu desktop is displayed after successful installation, with key applications visible in the sidebar.

3 Windows Installation

3.1 Step 1: Booting from CD/DVD



Figure 20: The installation process begins by booting from the CD or DVD.

3.2 Step 2: Setup Initialization

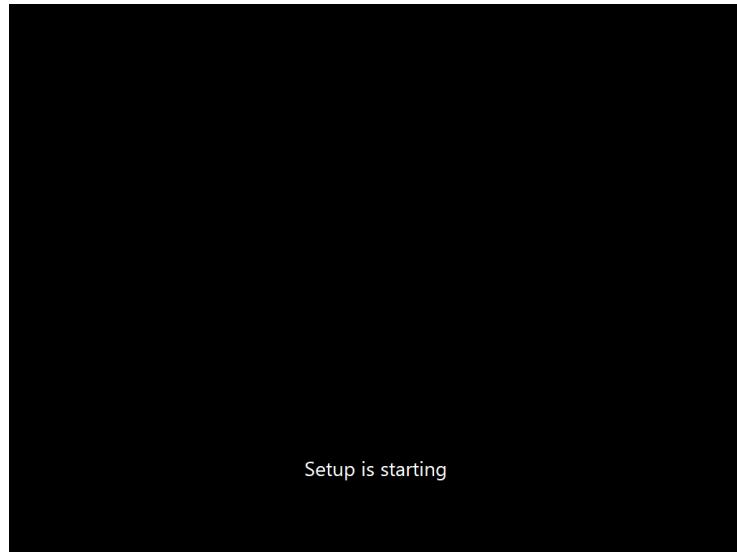


Figure 21: Windows setup is starting.

3.3 Step 3: Language and Preferences Selection

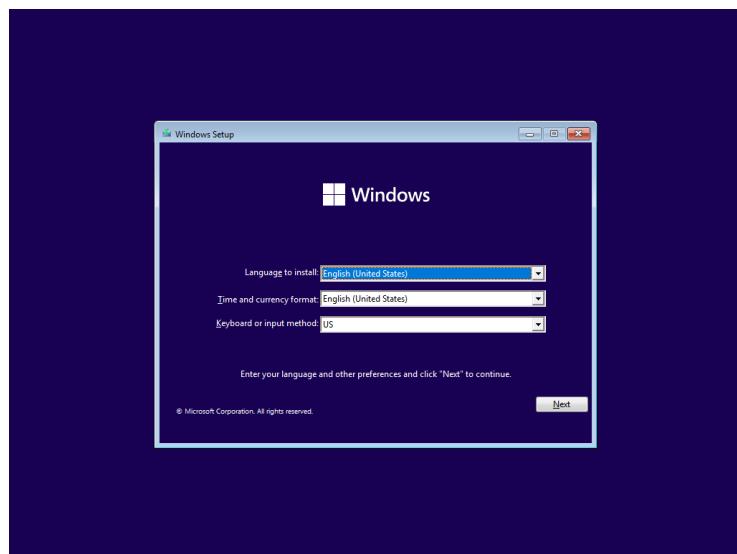


Figure 22: The Windows setup asks for language, time, and keyboard preferences.

3.4 Step 4: Installation or Repair Options



Figure 23: The user can either install Windows or access repair tools.

3.5 Step 5: Product Key Activation

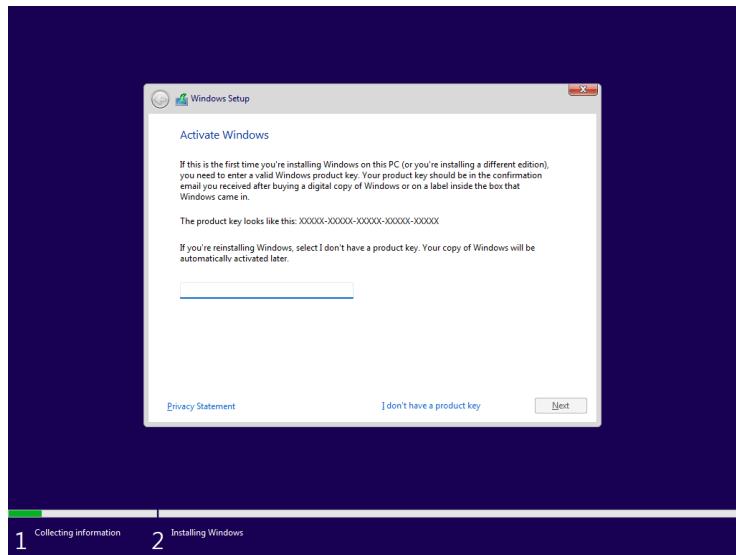


Figure 24: The product key entry screen for activating Windows.

3.6 Step 6: Skipping Product Key Entry

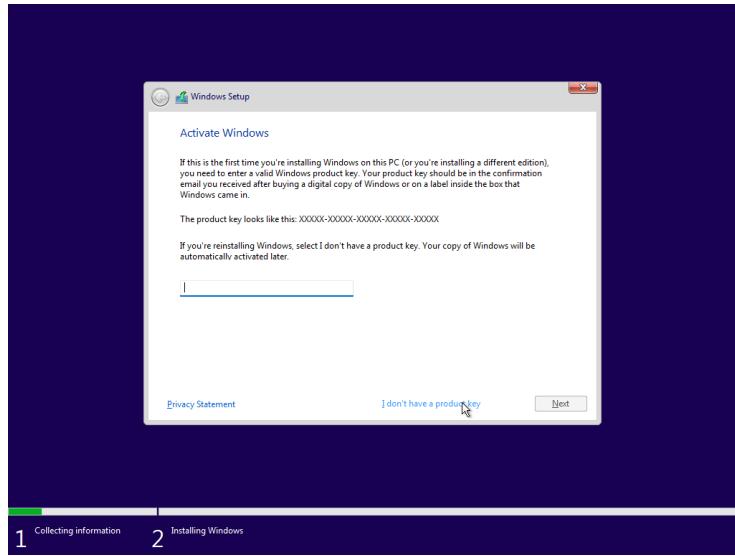


Figure 25: The user opts to continue without entering a product key.

3.7 Step 7: Windows Edition Selection

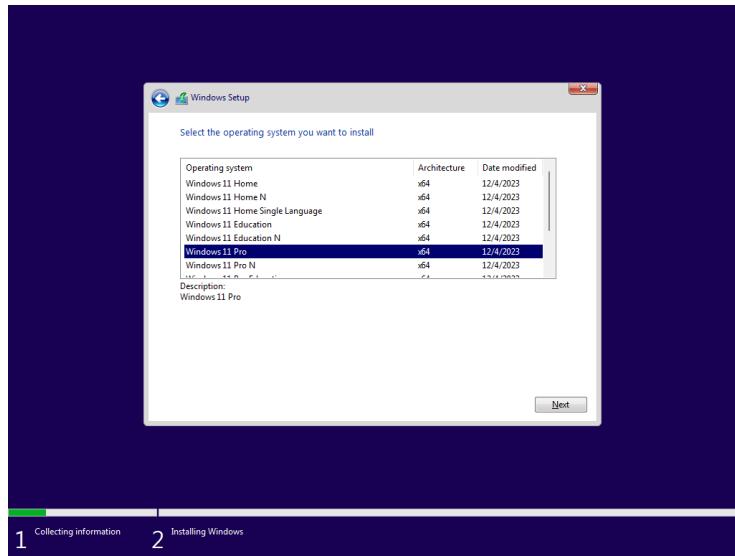


Figure 26: The user selects the edition of Windows to install, such as Windows 11 Pro.

3.8 Step 8: License Agreement

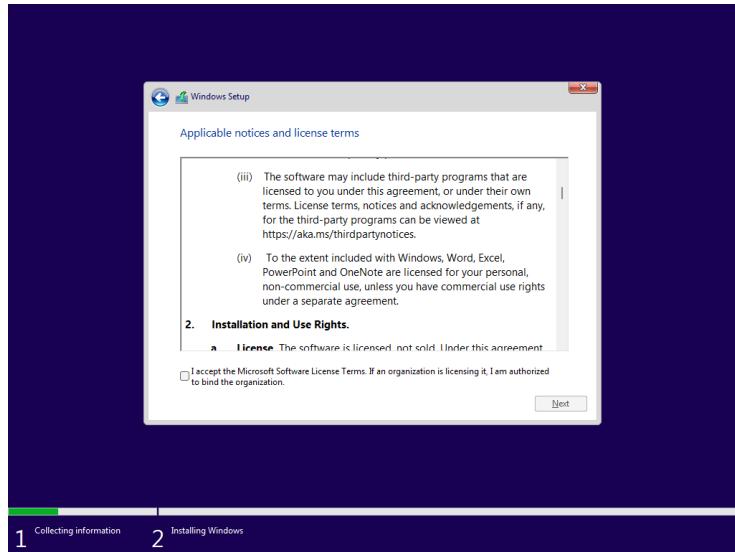


Figure 27: The Windows license terms, which the user must accept to proceed.

3.9 Step 9: Installation Type Selection

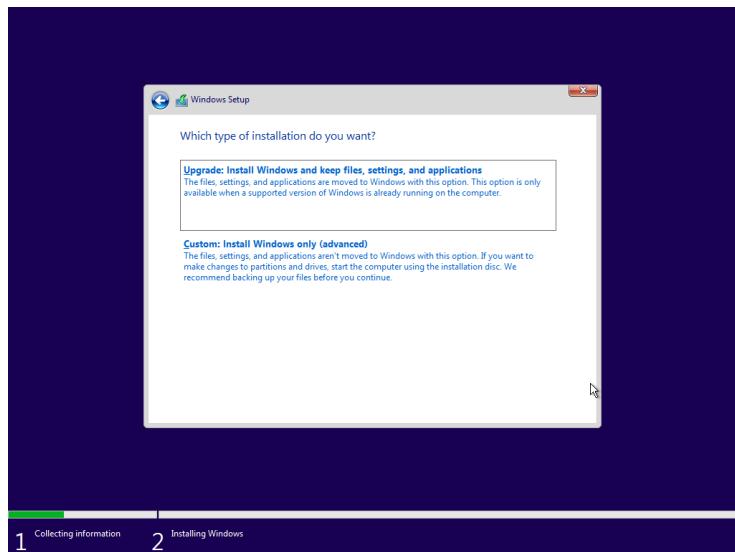


Figure 28: The user is given the choice to upgrade or perform a custom installation.

3.10 Step 10: Disk Selection for Installation

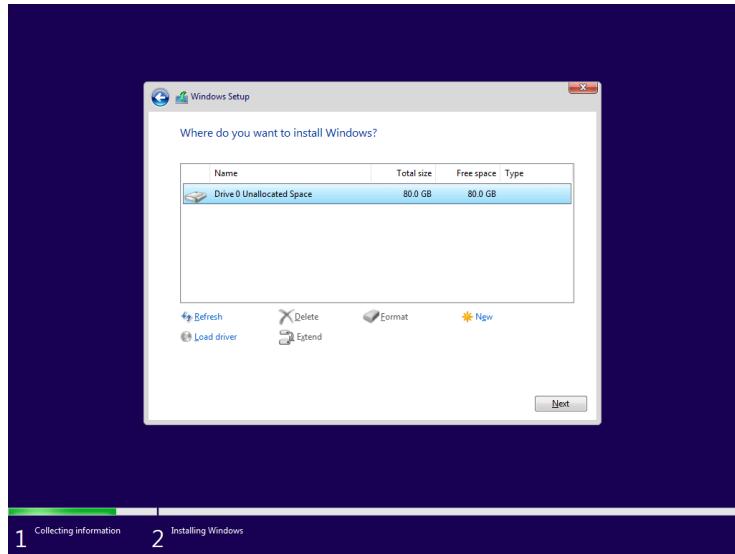


Figure 29: The user selects the disk or partition where Windows will be installed.

Step 11: Windows Setup Partition Selection

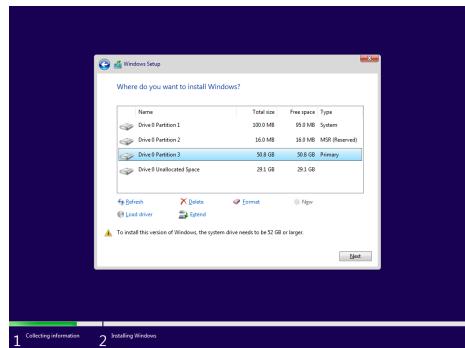


Figure 30: Partition selection screen showing available drives for Windows installation. The user selects a 50.8 GB partition.

Step 12: Installing Windows - Progress

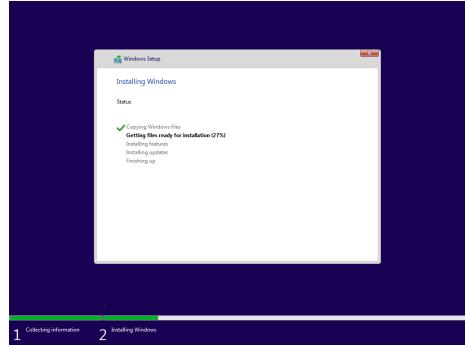


Figure 31: Windows installation progress: Files are being prepared for installation (27% complete).

Step 13: Windows Setup Restart Screen

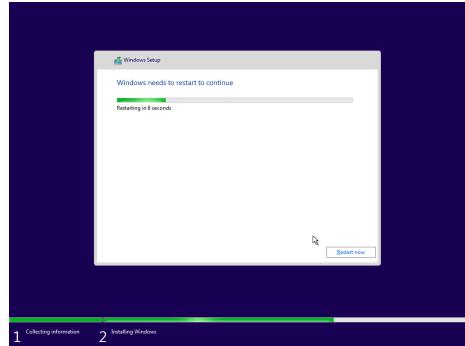


Figure 32: Windows setup requires a restart to continue installation. A countdown to automatic restart is shown.

Step 14: Windows Regional Settings

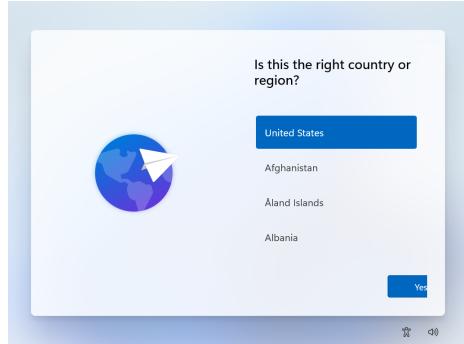


Figure 33: The user is asked to select the country or region. The default option is United States.

Step 15: Windows Keyboard Layout Selection

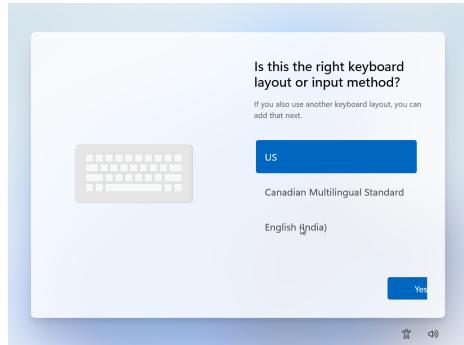


Figure 34: Keyboard layout selection screen with default option set to US. Other layouts like Canadian Multilingual Standard are available.

Step 16: Windows Update Check

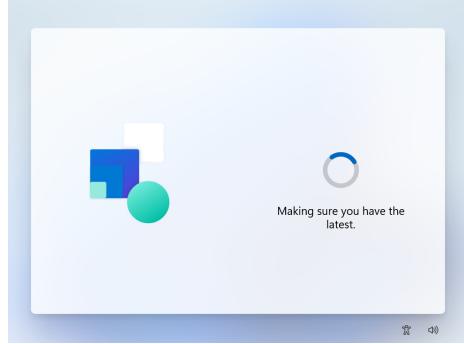


Figure 35: The system is checking for updates to ensure the latest version is installed.

Step 17: Device Name Input

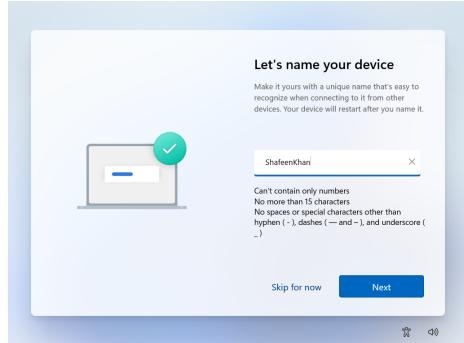


Figure 36: The user is prompted to name their device. The entered name is ShafeenKhan.

Step 18: Microsoft Account Setup



Figure 37: Option to sign in with a Microsoft account to unlock full features like syncing and security settings.

Step 19: Microsoft Account Login

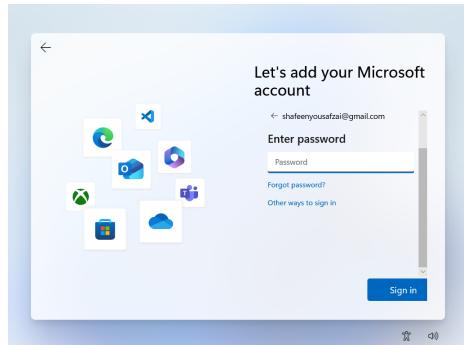


Figure 38: Prompt to enter the password for the Microsoft account (shafeenyousafzai@gmail.com).

Step 20: Microsoft Account Finalization

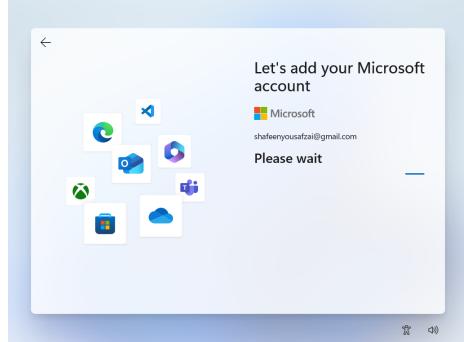


Figure 39: The system is finalizing the login to the Microsoft account.

Step 21: Welcome Back Screen

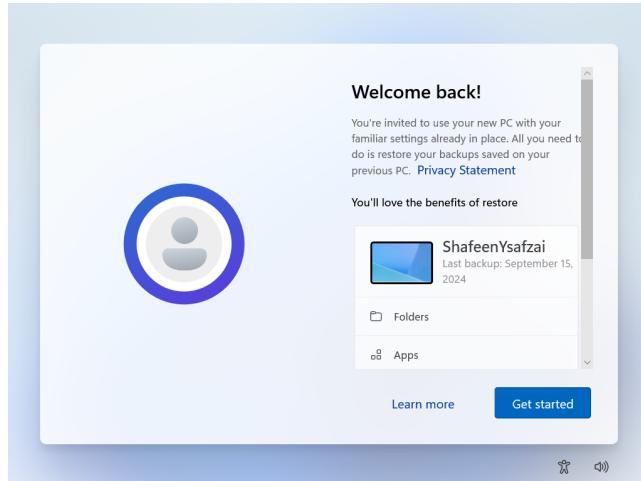


Figure 40: Welcome back screen with the option to restore settings and backups.

Step 22: Choose Privacy Settings

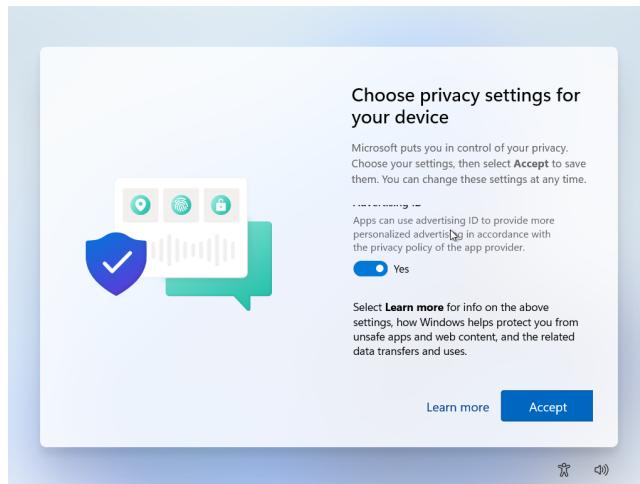


Figure 41: Privacy settings screen for selecting personalized advertising preferences.

Step 23: Recent Browsing Data Access

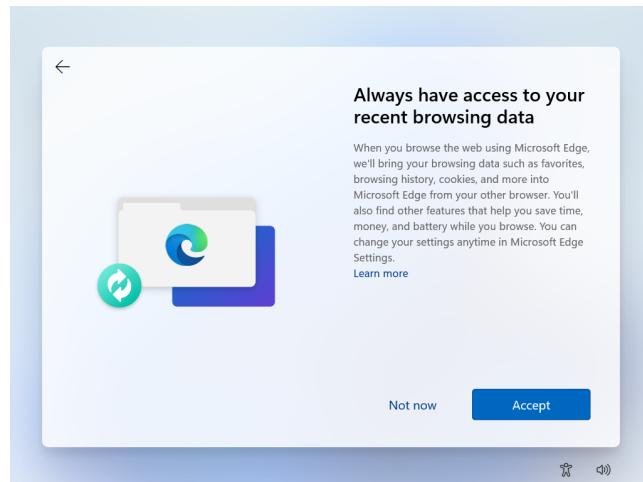


Figure 42: Option to allow access to recent browsing data in Microsoft Edge.

Step 24: Confirm Subscription

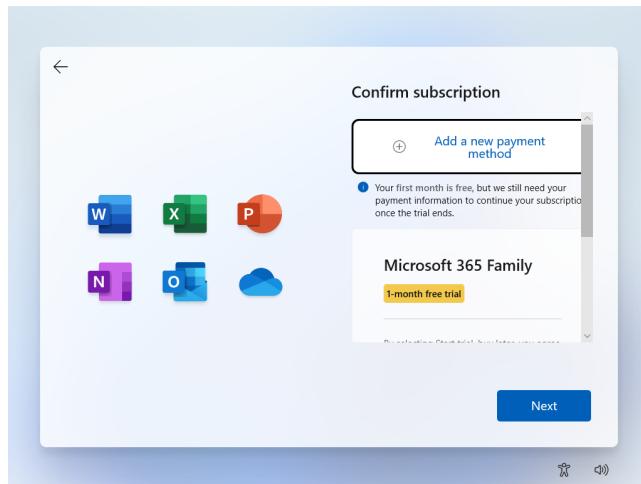


Figure 43: Microsoft 365 Family subscription confirmation screen.

Step 25: Tools for Focus

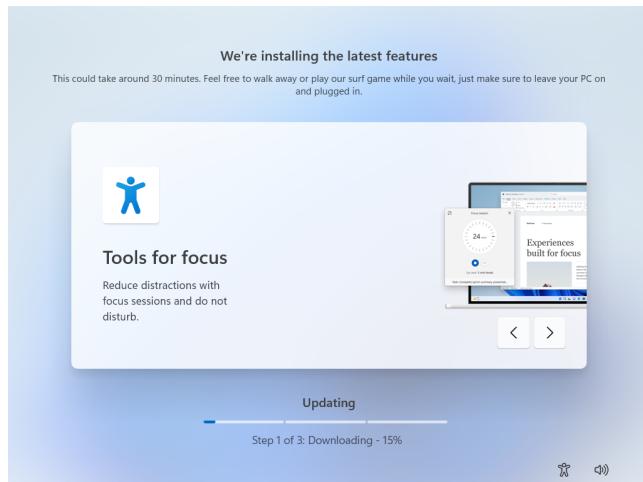


Figure 44: Installing features screen with tools for focus.

Step 26: Installing Update in Progress

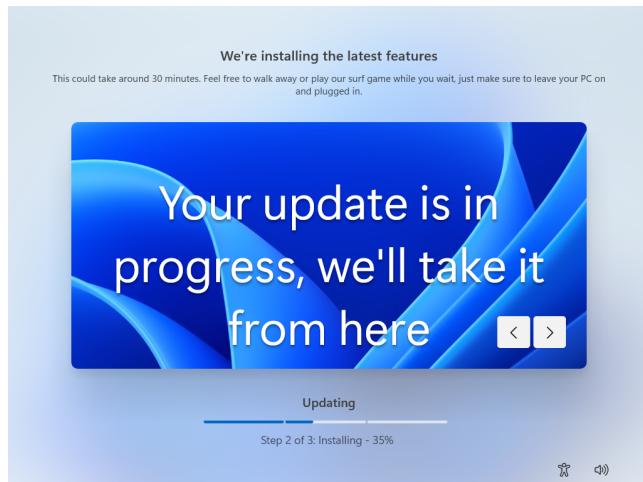


Figure 45: Update installation in progress screen.

Step 27: Preparing to Restart

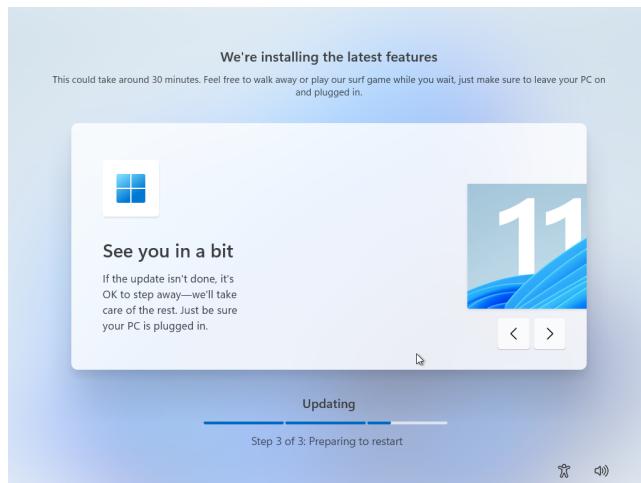


Figure 46: Preparing to restart after update installation.

Step 28: Updates Underway

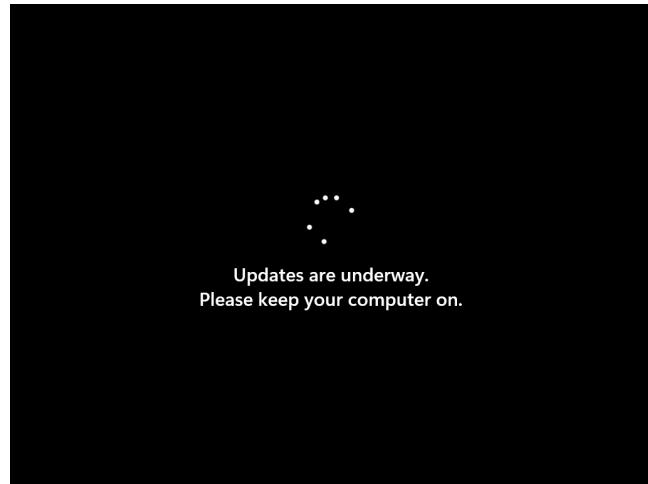


Figure 47: Updates underway screen with instructions to keep the computer on.

Step 29: Login Screen

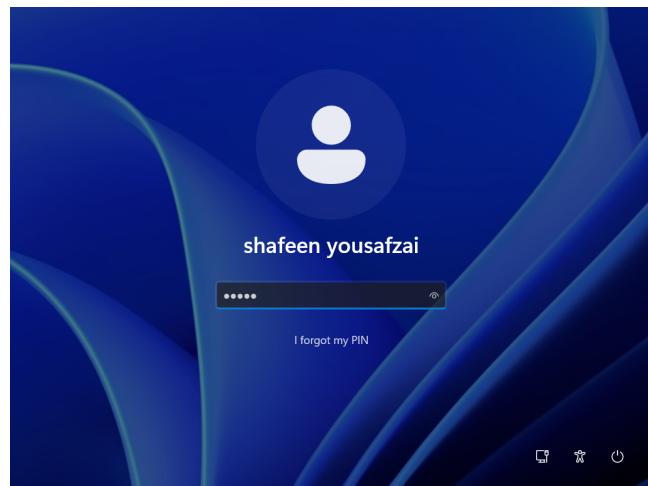


Figure 48: Login screen for user Shafeen Yousafzai.

Step 30: Desktop Screen

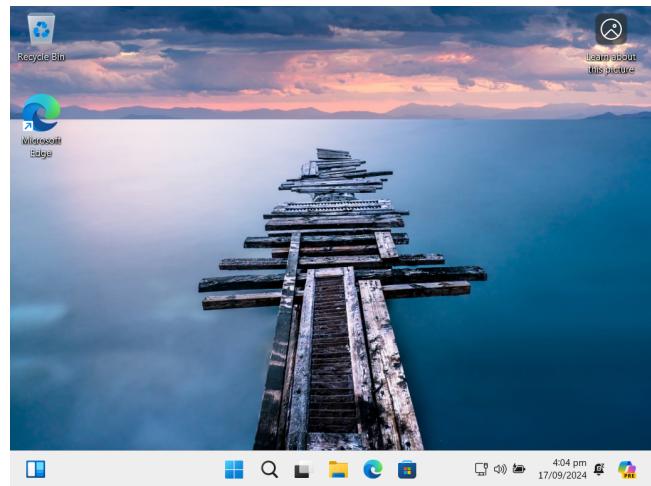


Figure 49: Windows desktop screen with default icons and a scenic wallpaper.