**Complementary Exercise**

**Computer Troubleshooting and Issue Resolution**

**Scenario:**

You are an IT support specialist at a company. Employees frequently encounter various computer-related issues. Your task is to troubleshoot and resolve these issues using a systematic approach. You will document each issue and resolution process in Jira.

**Part 1: Identifying Common Computer Issues**

1. **Slow Performance**
   * **Symptoms:** Computer takes a long time to boot, applications are slow to open, and overall system performance is sluggish.
   * **Possible Causes:** Too many startup programs, insufficient RAM, malware, fragmented hard drive, or outdated software.
2. **Internet Connectivity Problems**
   * **Symptoms:** Unable to connect to the internet, frequent disconnections, or slow internet speeds.
   * **Possible Causes:** Router/modem issues, incorrect network settings, outdated network drivers, or ISP problems.
3. **Software Crashes**
   * **Symptoms:** Applications frequently crash or freeze.
   * **Possible Causes:** Software bugs, insufficient system resources, or conflicts with other software.
4. **Hardware Failures**
   * **Symptoms:** Computer won’t turn on, strange noises from the computer, or peripheral devices not working.
   * **Possible Causes:** Faulty power supply, failing hard drive, or defective peripherals.

**Part 2: Troubleshooting Steps**

1. **Slow Performance**
   * **Step 1:** Check for and close unnecessary startup programs.
     + **Action:** Open Task Manager (Ctrl + Shift + Esc) > Startup tab > Disable unnecessary programs.
   * **Step 2:** Run a malware scan.
     + **Action:** Use antivirus software to scan and remove any malware.
   * **Step 3:** Check for sufficient RAM.
     + **Action:** Open Task Manager > Performance tab > Check memory usage. Consider upgrading RAM if usage is consistently high.
   * **Step 4:** Defragment the hard drive (for HDDs).
     + **Action:** Open Disk Defragmenter > Analyze > Defragment.
   * **Step 5:** Update software and drivers.
     + **Action:** Check for updates in Windows Update and update all drivers.
2. **Internet Connectivity Problems**
   * **Step 1:** Restart the router and modem.
     + **Action:** Power off the router and modem, wait 30 seconds, then power them back on.
   * **Step 2:** Check network settings.
     + **Action:** Open Network and Sharing Center > Change adapter settings > Right-click on the network adapter > Diagnose.
   * **Step 3:** Update network drivers.
     + **Action:** Open Device Manager > Network adapters > Right-click on the adapter > Update driver.
   * **Step 4:** Contact ISP if the issue persists.
     + **Action:** Call your Internet Service Provider to check for outages or issues on their end.
3. **Software Crashes**
   * **Step 1:** Check for software updates.
     + **Action:** Open the application > Help > Check for updates.
   * **Step 2:** Reinstall the software.
     + **Action:** Uninstall the application > Restart the computer > Reinstall the application.
   * **Step 3:** Check system resources.
     + **Action:** Open Task Manager > Performance tab > Check CPU and memory usage.
   * **Step 4:** Look for software conflicts.
     + **Action:** Boot into Safe Mode and see if the issue persists. If not, identify and remove conflicting software.
4. **Hardware Failures**
   * **Step 1:** Check power supply.
     + **Action:** Ensure the power cable is securely connected and the power outlet is working.
   * **Step 2:** Listen for unusual noises.
     + **Action:** Identify the source of any strange noises (e.g., hard drive, fans) and replace faulty components.
   * **Step 3:** Test peripheral devices.
     + **Action:** Connect peripherals to another computer to check if they work. Replace if necessary.

**Part 3: Documenting in Jira**

1. **Create a New Ticket**
   * **Action:** Open Jira > Click on “Create” > Fill in the necessary details (Summary, Description, Priority, etc.).
2. **Document the Issue**
   * **Action:** In the Description field, provide a detailed account of the issue, including symptoms and any error messages.
3. **Record Troubleshooting Steps**
   * **Action:** List each troubleshooting step taken, along with the results of each step.
4. **Resolution and Recommendations**
   * **Action:** Document the final resolution of the issue and provide any recommendations for preventing future occurrences.
5. **Close the Ticket**
   * **Action:** Once the issue is resolved, change the ticket status to “Resolved” or “Closed” and add any final comments.

**Jira Ticket**

**Summary:** Slow Computer Performance

**Description:**

* **Symptoms:** Computer takes a long time to boot, applications are slow to open.
* **Possible Causes:** Too many startup programs, insufficient RAM, malware, fragmented hard drive, or outdated software.

**Troubleshooting Steps:**

1. Closed unnecessary startup programs.
2. Ran a malware scan using antivirus software.
3. Checked RAM usage in Task Manager.
4. Defragmented the hard drive.
5. Updated software and drivers.

**Resolution:**

* Disabled unnecessary startup programs.
* Removed malware.
* Recommended upgrading RAM.
* Defragmented the hard drive.
* Updated all software and drivers.

**Recommendations:**

* Regularly check and manage startup programs.
* Perform routine malware scans.
* Consider upgrading RAM for better performance.
* Regularly update software and drivers.

**Status:** Resolved