FOR 240 – Lab 7 Assignment Using Handheld PC to Collect Timber Cruising Data Introduction to Computing in Natural Resources

In this lab, we are going to use the handheld PC to collect timber cruising data. I do not require you to conduct a real timber cruising. However, you do need to select two 1/10-acre square plots on or close to campus and each plot should contain at least 5 trees. What you need to do are as follows:

- 1. Connect your HPC to a desktop PC in the lab, if it was not connected before (see attached connection procedures).
- 2. Build a database that should contain two tables on your HPC by using MS Pocket Access. The formats for the database and tables are exactly the same as you used in your previous labs (Labs 4 and 5).
- 3. Collect data on campus.
- 4. Transfer your data from HPC to desktop PC. I suggest you create a directory called FOR240\Lab6 on the desktop before transferring the data.
- 5. Browse the data and make sure you can summarize them.

Please provide me a typed summary report including Pocket Access database design, your working experience with HPC data collection in the field, and data transfer by the beginning of lab next week.

1. HPC Jornada – Connecting to Your PC

(1) Automatic Synchronization



Figure 1.

Options		×		
Sync Options Sync Mod	le Rules			
■ To synchroni t ■ box. To stop box.	ze a particular type of information, select its check synchronization of that information, clear its check			
Mobile Device	Desktop Computer			
Calendar 🕪	Not Installed			
Contacts	Not Installed			
🖉 Tasks	Not Installed			
🗆 🖳 🖉 Channels	Channel Synchronization			
	Microsoft Databases			
🗌 🔯 Inbox	Microsoft Outlook			
🗆 😂 Files	Synchronized Files			
To find out more about and to customize what gets synchronized, click on that information type in the list and then click Settings. Settings. ✓ Synchronize mobile device clock upon connecting.				
	OK Cancel			

Figure 2.



Figure 3.

(2) Browsing HPC

- Using ActiveSync (Explore icon)
- Windows explorer



Figure 4.

Mobile Device			
File Edit View Eavorites Tos	lc Help		
	ns <u>n</u> eip		
j ← Back → → → 🔂 🐼 Search	Histor	y @ % X ∞ ⊞+	
Address 💾 Mobile Device			▼ 🖓 Go
	Name	Size Type	Modified
	📇 My Handheld PC	System Folder	
Read and a second se	🕵 Calendar	24 bytes Shortcut	12/31/1998 7:00:0
Mobile Device	🕵 Contacts	24 bytes Shortcut	12/31/1998 7:00:0
	🗾 HP quick pad	24 bytes Shortcut	12/31/1998 7:00:0
Select an item to view its	P viewer	23 bytes Shortcut	12/31/1998 7:00:0
description.	🔊 Inbox	21 bytes Shortcut	12/31/1998 7:00:0
	🙀 Internet Explorer	30 bytes Shortcut	12/31/1998 7:00:0
	Microsoft Pocket	23 bytes Shortcut	12/31/1998 7:00:0
	Microsoft Pocket	19 bytes Shortcut	12/31/1998 7:00:0
	🔊 Microsoft Pocket	24 bytes Shortcut	12/31/1998 7:00:0
	Microsoft Pocket	21 bytes Shortcut	12/31/1998 7:00:0
	Microsoft Voice R	24 bytes Shortcut	12/31/1998 7:00:0
	My Documents	18 bytes Shortcut	12/31/1998 7:00:0
	🌮 Tasks	21 bytes Shortcut	12/31/1998 7:00:0
<u> </u>	4		•
14 object(s)		Mobile Device	li.

Figure 5.

(3) Transferring files

- Windows Explorer (Copy, Paste) File conversions --

Options				
Sync Options Sync Mode Rules				
Conflict Resolution				
If there is a conflict (an item has been changed on both the mobile device and desktop computer):				
C Leave the item unresolved. (Click "Resolve items" to choose which item to keep.)				
C Always replace the item on my device				
C Always replace the item on this <u>c</u> omputer				
File Conversion				
Set how files will be converted when they are copied, moved, or synchronized between this computer and your mobile device.				
Conversion <u>S</u> ettings				
☑ Open ActiveSync when my mobile device connects.				
OK Cancel				

Figure 6.

Handheld_PC6801 File Conversion Properties				
General Device to Desktop Desktop to Device				
You can adjust conversion settings for files moved from your mobile device to the desktop computer.				
Mobile device convertible file <u>types:</u>				
Bitmap Image				
Pocket Access Database *.cdb				
Convert to desktop computer files of the type				
Microsoft Access Database *.mdb				
OK Cancel Help				

Figure 7.

2. HP Jornada 720 Handheld PC - Resolving the "Error 678" Message

(Source:

http://h10025.www1.hp.com/ewfrf/wc/genericDocument?docname=bpia2302&lc=en&cc=us&dlc=en&prin table=yes&encodeUrl=true&)

Introduction

The HP Jornada 720 Handheld PC displays the following error message while attempting to synchronize:

Communications Error - Cannot start communications with the desktop computer. Remote Networking could not start due to a critical error (Error 678). Please reconnect your device. If the problem persists, restart your device using the instructions provided by the manufacturer.

Explanation

After connecting the handheld PC to the desktop PC, and starting the Get Connected Wizard by using ActiveSync, the COM ports are polled. The handheld PC polls the ports 6 times. After the sixth attempt to connect the device, the "Error 678" message displays on the handheld PC.

On the desktop, the Connection Wizard reports all the ports polled by ActiveSync and the status of each port. After the Connection Wizard completes the poll report, the device fails, and the "Error 678" message displays.

Error 678 is caused by a timing issue when both the handheld and the desktop try to send a message to connect at the same time. By following the resolutions below, you should be able to bypass this error and start exchanging information between the device and the PC. Once the device has established a partnership, you should not have to follow these steps again.

Solution #1

- 1. Connect the handheld PC to the desktop PC.
- 2. Start ActiveSync from the computer desktop.
- 3. Allow ActiveSync on the desktop to go through the port polling process.
- 4. When ActiveSync fails to connect on the desktop, click the **Next** button to start the port poll process again. The handheld PC will report that it is still attempting to connect to the desktop.
- 5. If the device does not connect and the error message is displayed on the device again, close the error message, restart the ActiveSync Connection Wizard, and then repeat steps three and four until the connection is successful.

Solution #2

- 1. Start Microsoft Active Sync on the desktop computer at the "Get Connected" window.
- 2. With the Jornada disconnected from the cable, soft reset the device by pushing the red reset button next to the letter "Q" with your stylus.
- 3. Now click **Next** on the desktop PC to get connected, and at the same time plug the sync cable into the Jornada.
- 4. If the device does not connect and the error message is displayed on the device again, close the error message, restart the ActiveSync Connection Wizard, and then repeat steps two and three until the connection is successful.

Solution #3

- 1. On the desktop computer, open Microsoft Active Sync and select **File**, then **Get Connected**. (Do not select anything else yet.)
- 2. On the Jornada, click **Start**, then **Programs**, then **Communications**. (Do not select anything else yet.)
- 3. At the same time, click **PCLINK** on the handheld, at the same time that you click **Next** on the desktop to get connected.
- 4. If the device does not connect and the error message is displayed on the device again, close the error message, restart the ActiveSync Connection Wizard, then repeat steps one through three until the connection is successful.