RFID Reader

Assignment 2

Test Documentation

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Test #	Description	Test	Expected Results	Pass/Fail	Supporting Details
1	Attempting to connect to reader	Ensure the program isn't connected. Ensure the RFID read is connected. Click the connect button at the top of the program. Once connected, attempt to read a tag.	The program will attempt to connect with the RFID reader, and prompt the user with success when connected.	PASS	See figure 1.
2	Read a Tag	Placing a tag on the connected RFID reader while the program is in "connected" mode.	Data about the tag read should be populated to the list view on the program. Including the index of the tag, the name of the tag, and the type.	PASS	See figure 2.
3	Read different type of tags	Placing different tags on the reader, one at a time, on the RFID reader while the program is in "connected" mode.	Data about each tag should show up in the list view as specified above. The list should include different tag names and tag types.	PASS	See figure 3.
4	Attempting to disconnect from reader	Ensure the program is connected. Click the disconnect button at the top of the program. Attempt to read a tag after disconnect, expected not to read.	The program will attempt to disconnect from the RFID reader. The user will be alerted on success.	PASS	See figure 4.
5	Attempting to clear the list view.	Clicking the clear button at the top of the program.	The list view should clear all items populated from within itself.	PASS	See figure 5.
6	Opening the help window.	Clicking the help butting at the top of the program.	A dialog window containing help information should appear for the user.	PASS	See figure 6.
7	Window updates when resizing, minimizing, maximizing, and moving the window	Resizing the window while the program is attempting to read a tag in connected mode. Also maximize, minimize and move the window.	The list should stay populated and the program should continue to read.	PASS	See figure 7.
8	No memory leaks when successive disconnecting/connecting.	Attempt to disconnect and reconnect several times. Monitor memory usage of the program in windows task manager.	The memory should not increase on disconnects and reconnects.	PASS	See figure 8.
9	How efficient is the list view for keeping track of items.	Attempt to populate the list with 100,000 items.	The list should be as responsive as before, and hold all 100,000 items.	PASS	See figure 8-10.

10	Attempt to cycle through connect and disconnect, ensuring the features work completely.	Ensure the program is disconnected. Ensure the RFID reader is connected. Connect by clicking the button at the top of the program. Attempt to read a tag. Attempt to disconnect by clicking disconnect at the top of the program. Attempt to read a tag (expected to be not readable). Attempt to connect again.	The program should be able to read a tag and display its information to the list view when connected, and not display any tag when disconnected. The program should be able to reconnect after the first disconnect.	PASS	See all figures. All figures were taken in the same program instance.

Figure 1 – Connected Prompt

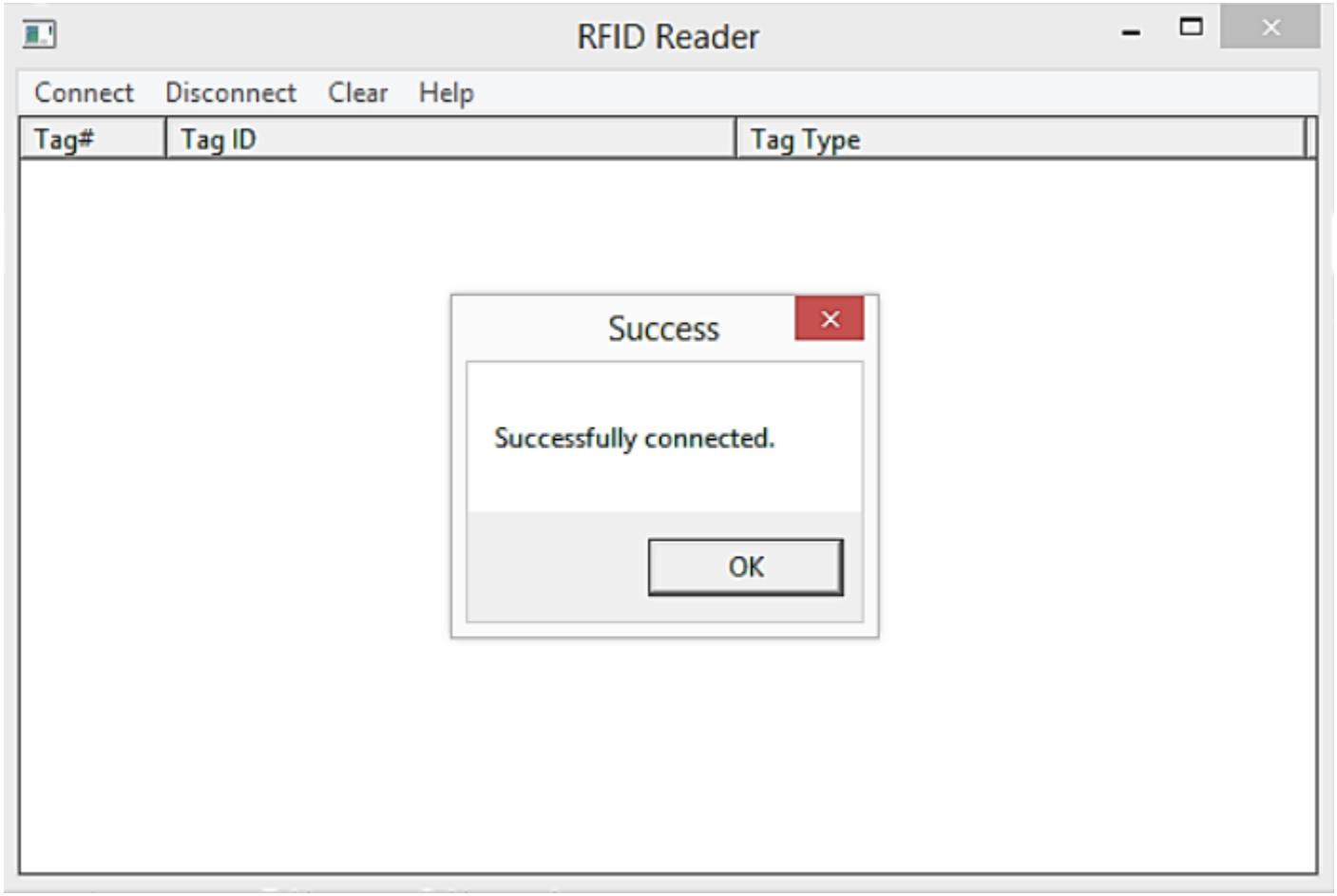

Figure 2 – A Single Tag

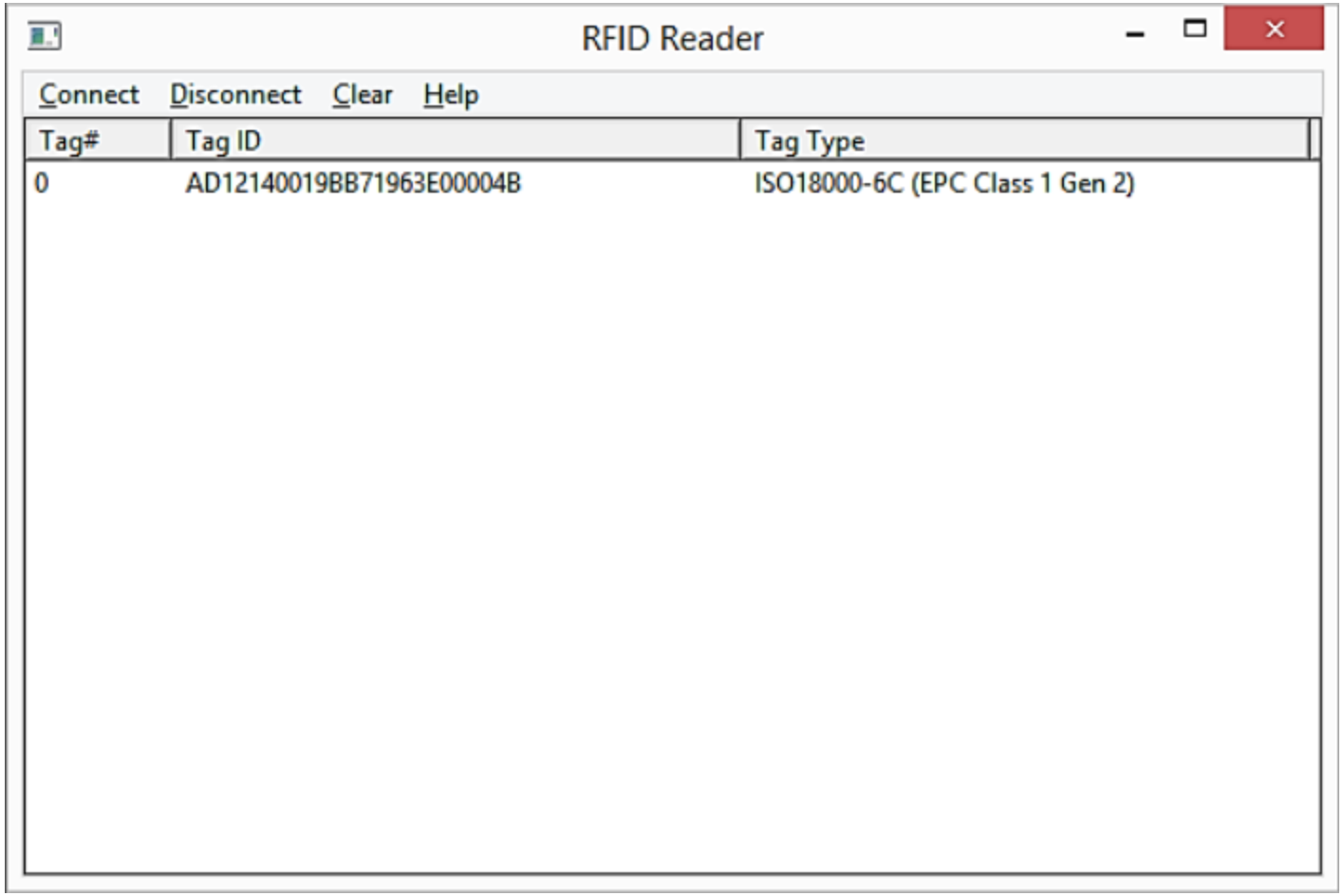

Figure 3 – Several IDs Populated

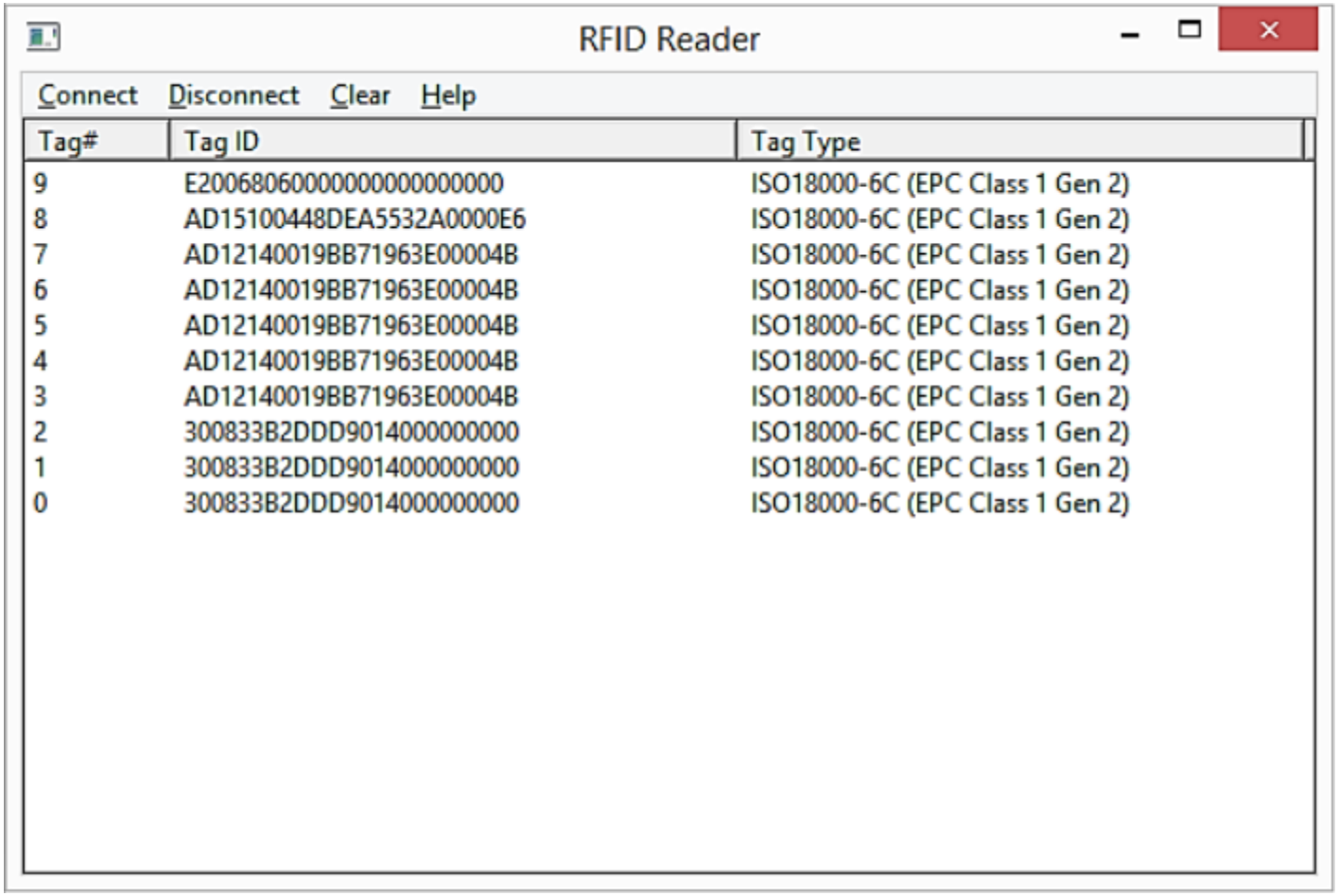

Figure 4 – Disconnected Prompt

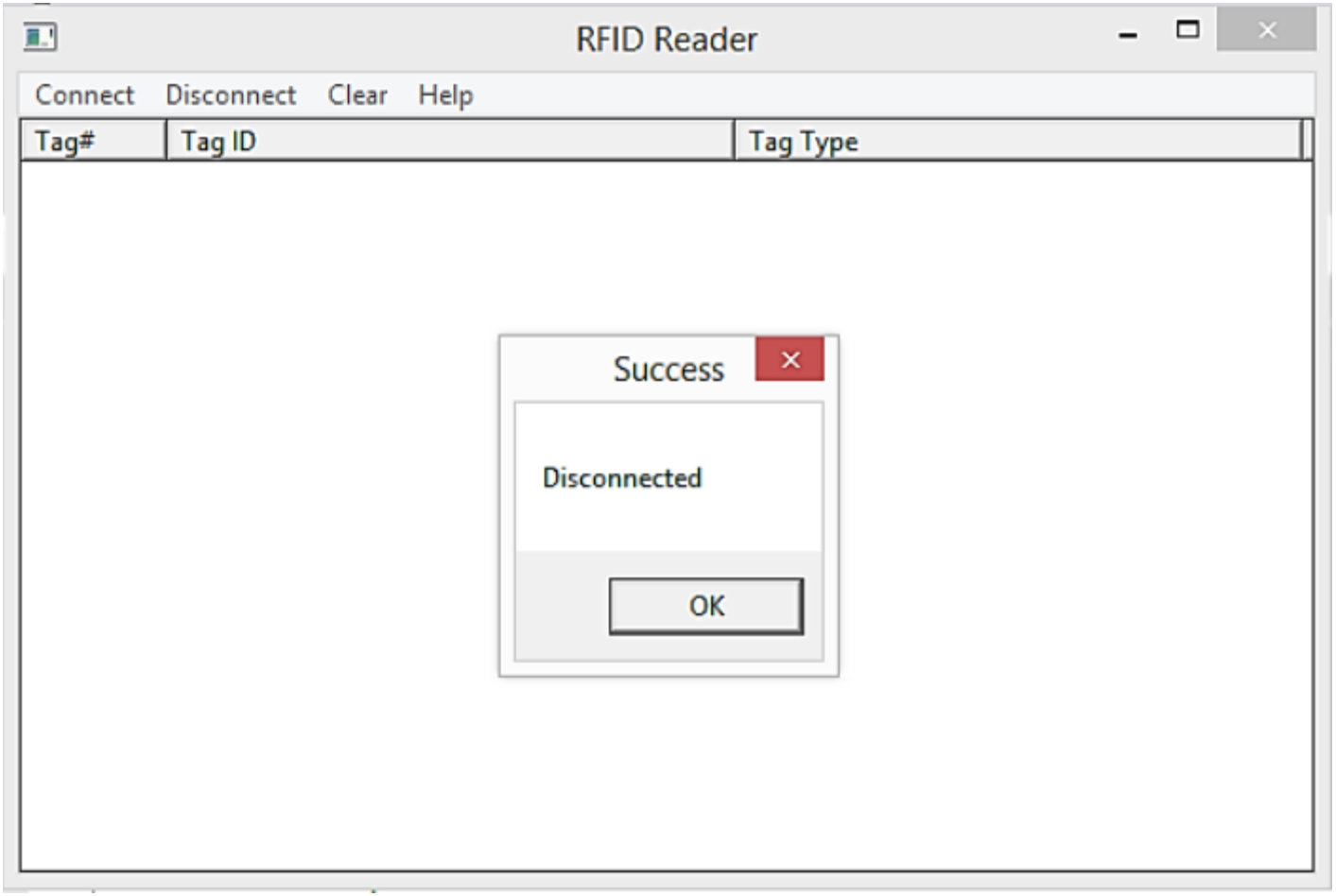

Figure 5 – Cleared List

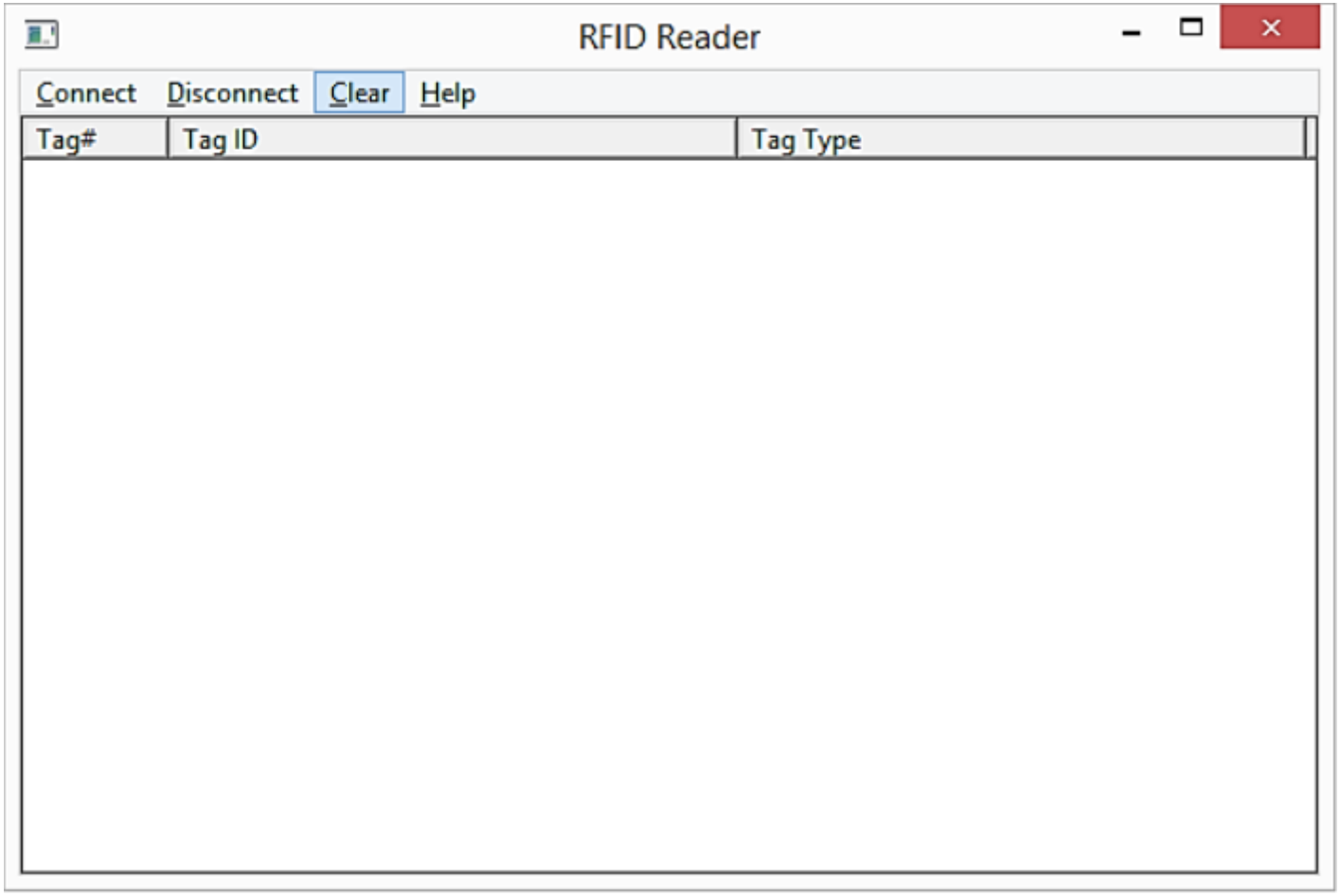

Figure 6 – Help Prompt

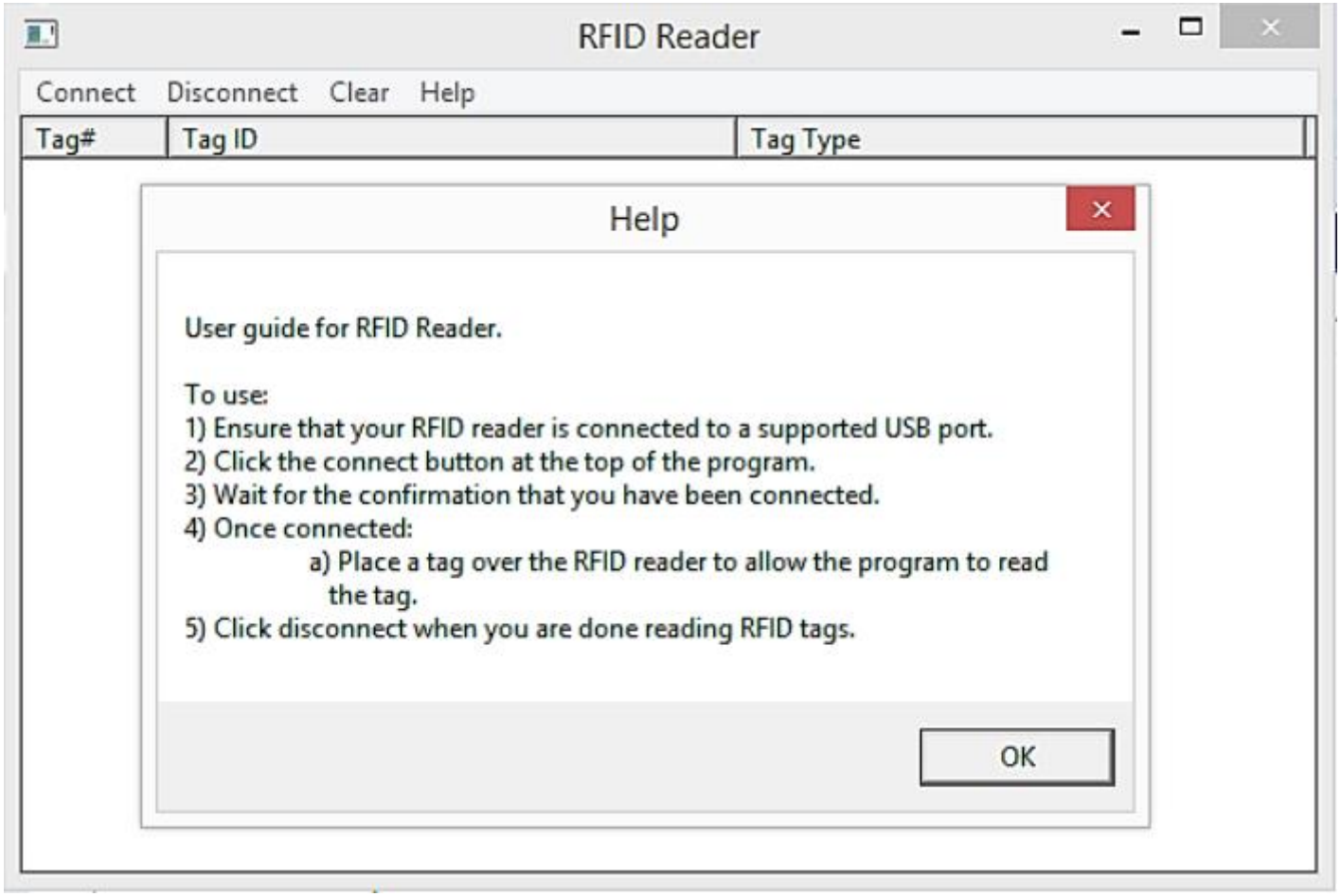

Figure 7 – Resized Window Still Drawn

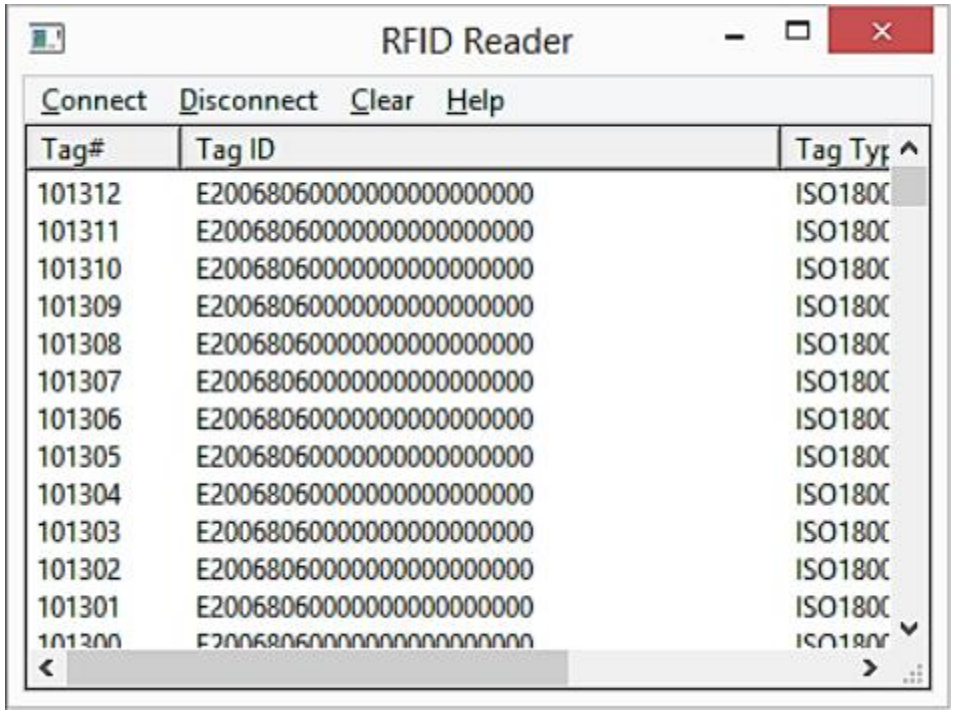

Figure 8 – CPU Usage for Large List

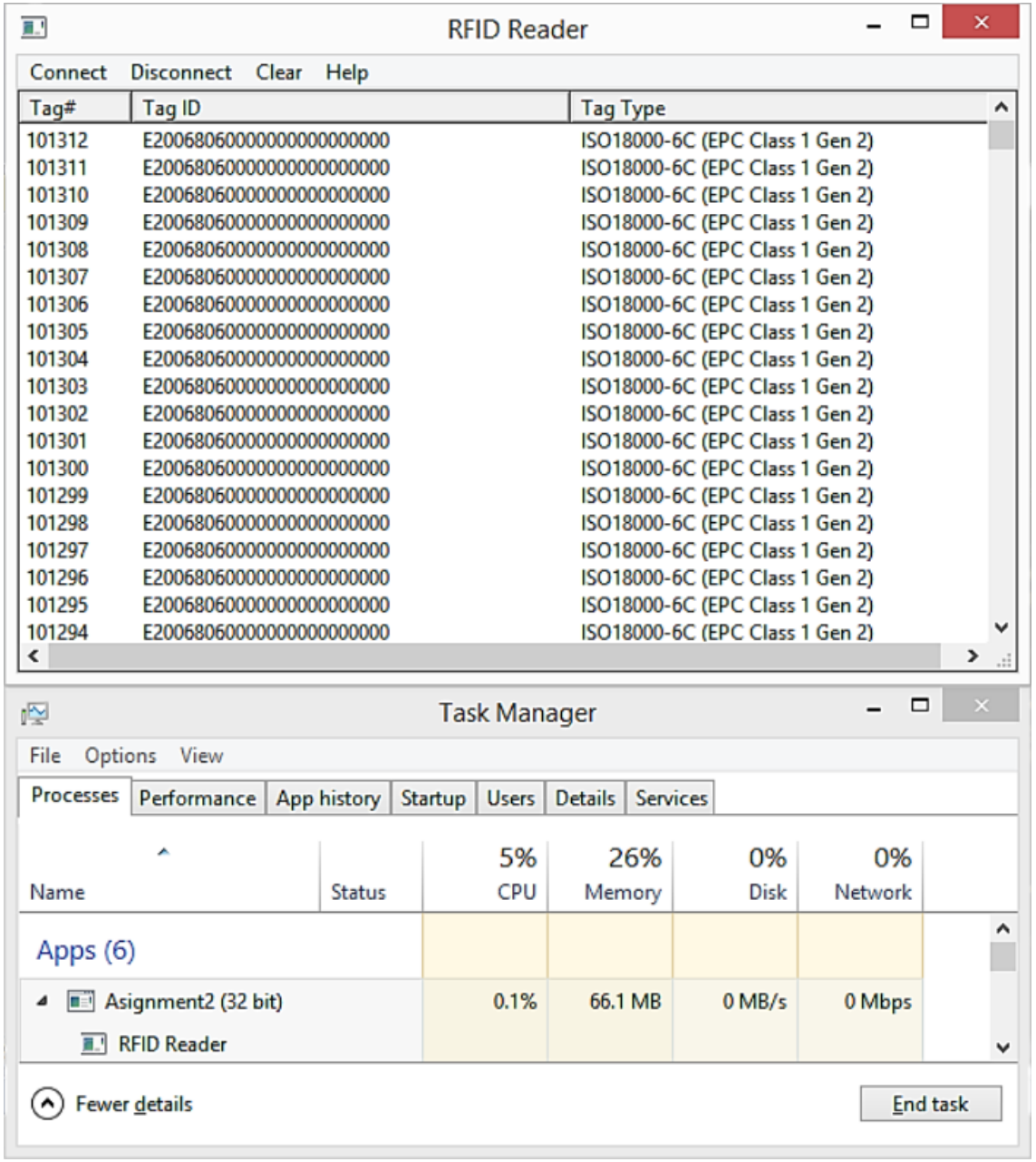

Figure 9 – Large List at the Bottom

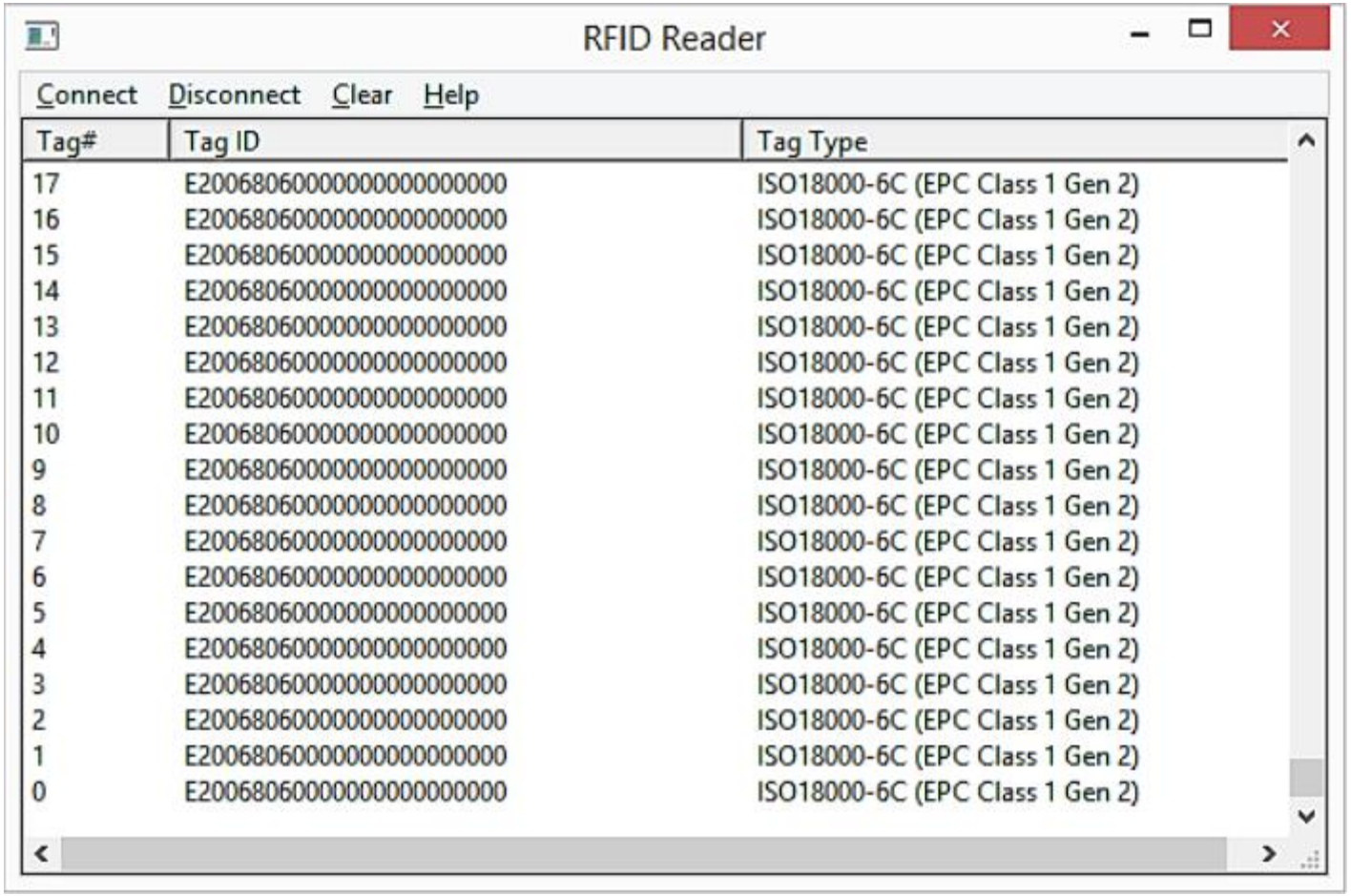

Figure 10 – Large List at the Top