

9 Conclusion

The goal of this diploma thesis was to extend the Java USB API for the Windows operating system.

The goal could not be reached but a part of the jUSB project is working.

The enumeration and monitoring facility of the universal serial bus with the Java USB API is complete and working. Communication to a jUSB device such as interrupt transfer and control transfer are partly implemented and has been successfully tested on USB devices. Bulk transfer and isochronous transfer are not supported at the moment but are subjects of future work. The project, as it is, provides a basic framework for the Java USB API for Windows and developers are welcomed to modify and build a stable jUSB distribution.

The following subjects have put to future work:

- Writing a stable jUSB driver including documentation
- Implement the methods of the *DeviceSPI* interface in the jUSB DLL and in the jUSB driver.
- Implement the *DriverNameToDeviceDesc* function in *devnode.c* with the *SetupDiXxx* function to read registry entries.

The difficulty was to understand what is going on in a driver and how all the requests have to be handled that they correspond to the current Windows Driver Model. The project time was too short to understand completely driver writing and modelling but still a very interesting topic.