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6.111 Final Project Checklist

## **Checkoff Demonstration**

- Overview: Show that our communications link works, by running two independent labkits that communicate over bidirectional analog channel. Most of our modules will be demonstrated holistically; that is, by the proper functioning of the communication link. The demo will focus on the application module(s).
- Analog components: composed of LED, DAC, Photodiode, ADC, etc. No plans for a specific demonstration.
- FFT/Encoder/Shifter: Interface analog and digital components, by performing appropriate frequency/time computations. These will be verified by the logic analyzer.
- Packet Engine: Encode application data packets as a stream of fixed-length frames. Decode stream of data frames into application data packets. Perform rudimentary error-detection. No plans for a specific demonstration.
- Voice: Record and playback digitized voice samples, by creating and receiving data packets. Demonstrated by speaking into either microphone, and observing playback on other station.

## **Potential Directions**

- Whiteboard module: in concert with Voice module, a video application that implements a basic distributed painting application. Demonstrated by painting on one station, and observing change on other.
- Visualizer module: calculate and display Packet Engine statistics on video terminals.