6.111 Final Project Checklist

DFE

Zhipeng Li, Yan Huang

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Core Functionality

☐ Geometric input generation, to be used as input. Generates a changing picture in two colors.
☐ Simulated ISI channel with fixed FIR coefficients.
☐ DFE to correct for channel ISI.
☐ VGA output to display incoming data with and without DFE correction.

Additional Functionality

☐ Encoder/Decoder, properly corrects for binary noise. Allows for further correction of signal.
☐ Statistical display. Allows for viewing of channel characteristics and data stream distribution.
☐ Demo Mode. Allows real time display of slow-mo tap adjustment.

Time Permitting Bonus

☐ Adjustable channel, changeable FIR coefficients
☐ Reed-Soloman CRC