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# T-United

Second Presentation

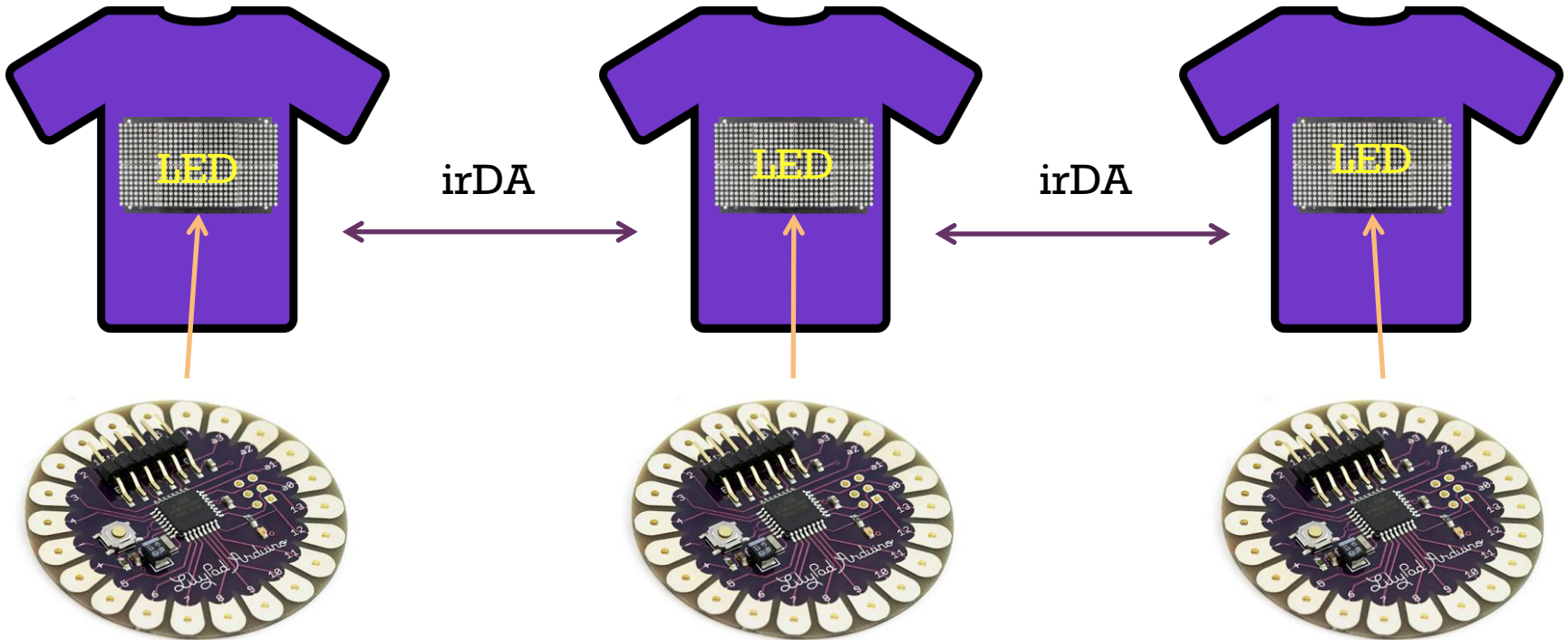
By Nancy Zhang

# + Status Update



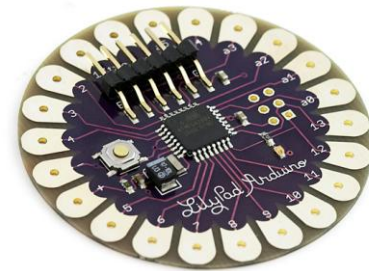
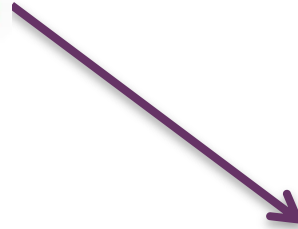
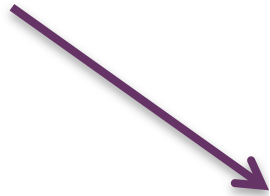
- T-shirts that interact with each other by IrDA transceivers
- LED displays that shows custom messages and graphs
- Parts ordered (total cost \$180 for 3 set)
  - IrDA Transceiver
  - P4 32X16 RG Bicolor LED Dot Matrix Unit Board SPI Like
  - LilyPad Arduino 328 Main Board
  - LilyPad Simple Power
  - FTDI Basic Breakout - 5V

# + Architecture



Net weight of the LED board= 250g / 8.9oz

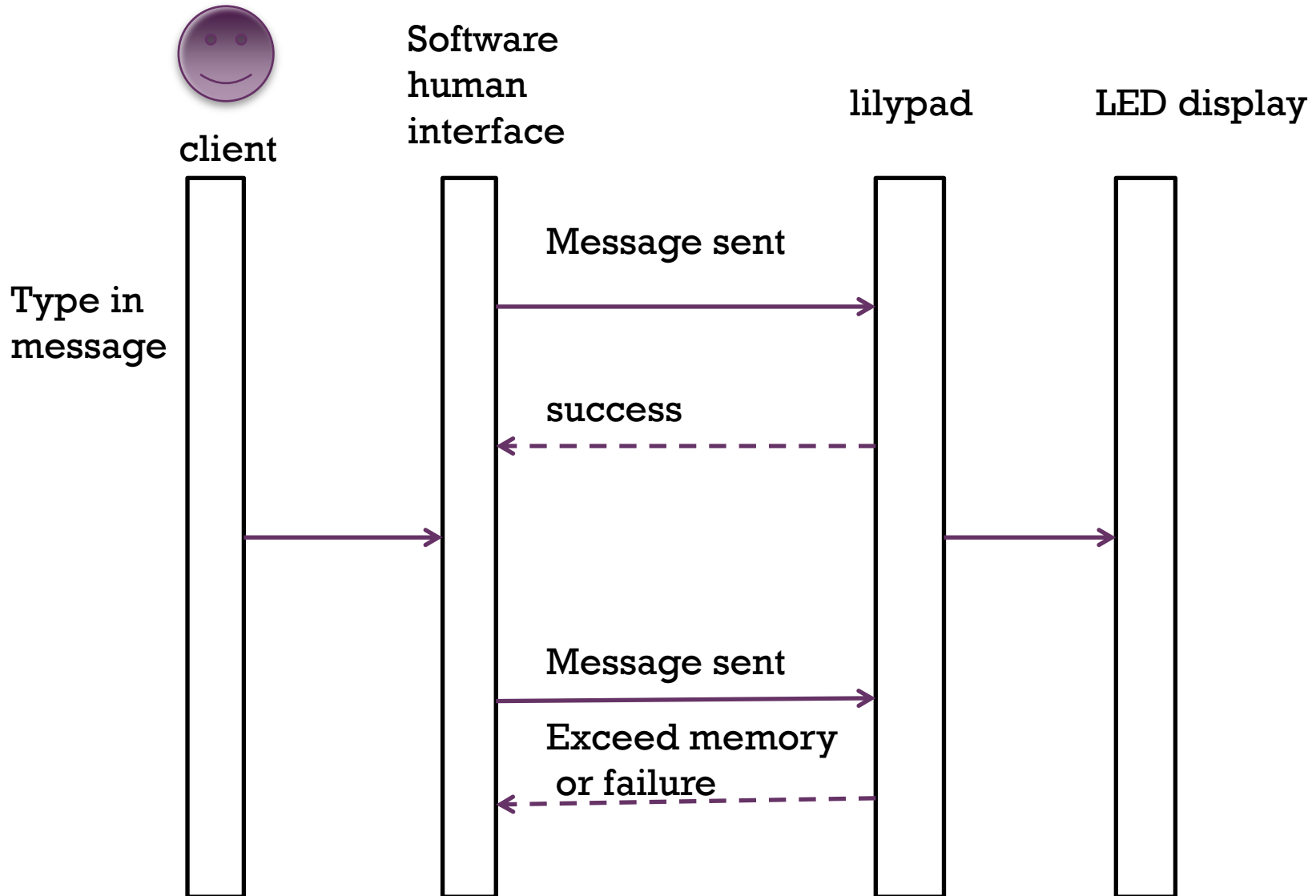
# + Architecture continued for data transfer



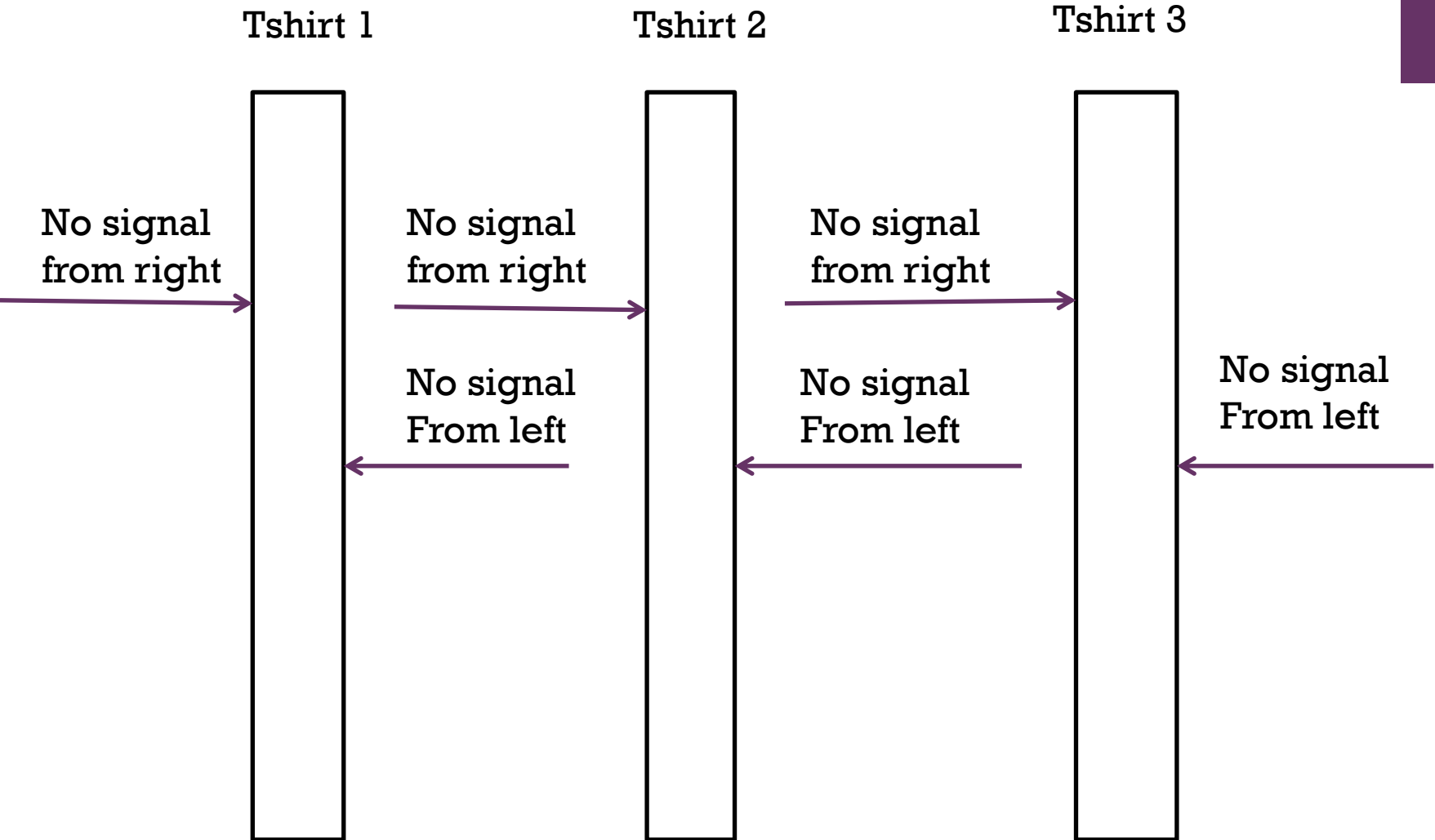
Flash Memory 16 KB  
Input Voltage 2.7-5.5 V  
We'll go for AAA for now



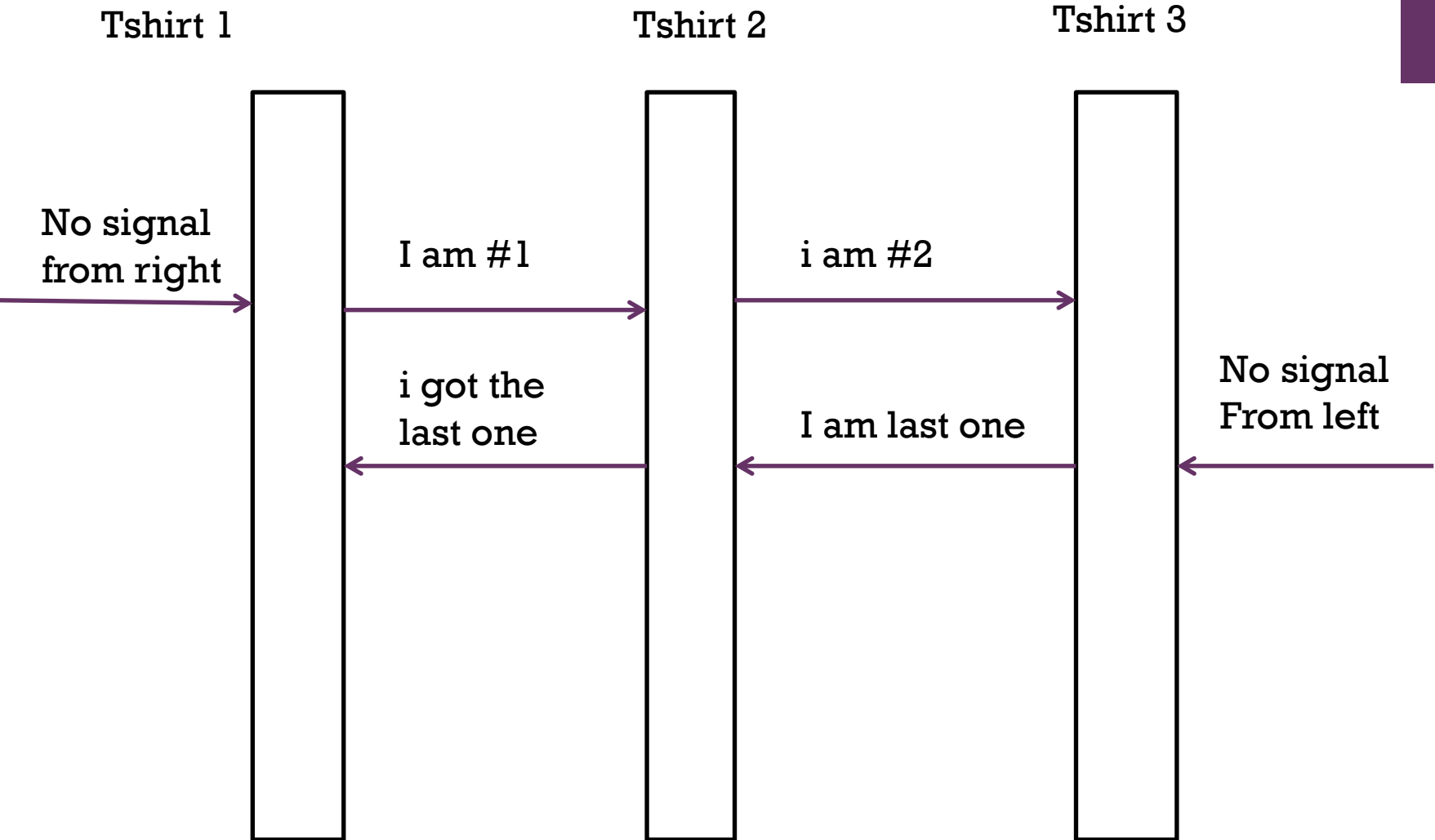
# + Use Cases



# + Use Cases



# + Use Case



# + Risks and mitigation

- The shirt might get too bulky
  - We will first use the AAA battery but later on we might try using two button batteries
- The shirt won't be waterproof
  - We might add a shield to the LED. Lilypad is already washable.
- IR transceiver might not work as we expected
  - This need to be further discussed
- User find it hard to change the text or image
  - Try to design a more user-friendly interface

