

Problem Statement

User Interfaces are one of the most expensive and time-consuming part of product development and have a steep learning curve.

System Requirements

- Two wire user interface
- Touchscreen Display
- Interchangeable tactile buttons, knobs, and sliders
- Protective enclosure
- Wide MCU compatibility
- Custom PCB for Main Board and Peripherals
- Cost ~ \$100

Design Challenges

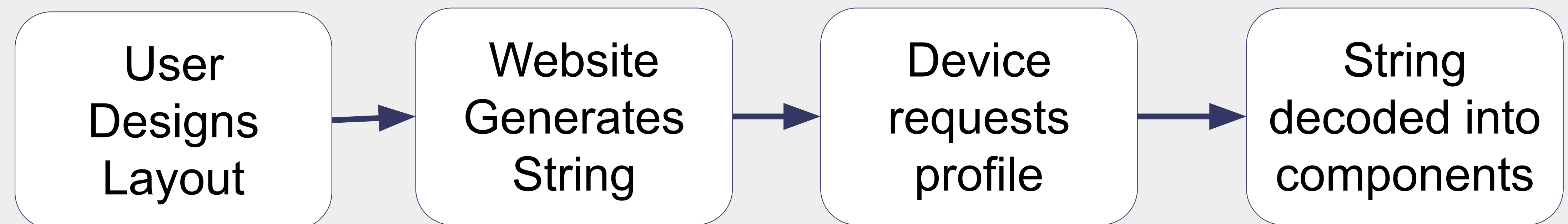
- Dynamic Code Structure
- Customizability
- Sharing Profile over Wifi
- Refreshing Profiles on Touchscreen
- Minimal/Intuitive Coding for User
- Hot Swapability of I2C Components
- Compatibility of Arduino Libraries
- Pogo Pin Enclosure

PRO-X-O CONTROL

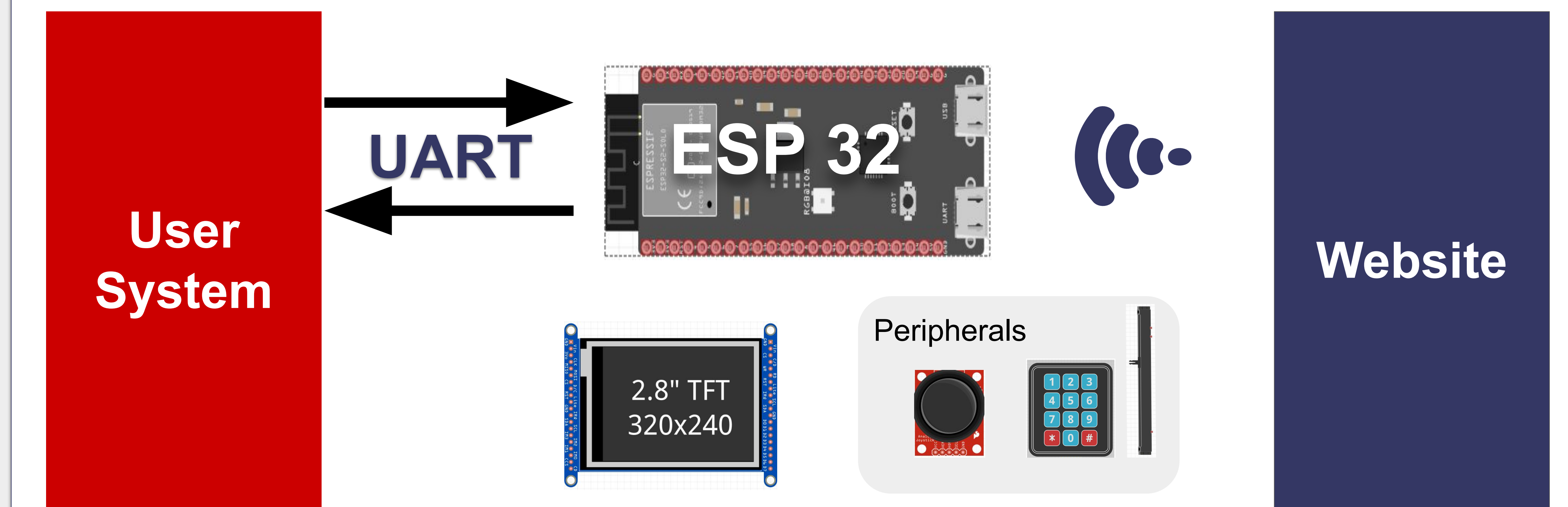
A plug and play panel with a start-to-finish user interface development experience

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User Flow



System Architecture Diagram



Embedded System

