Scoreboard

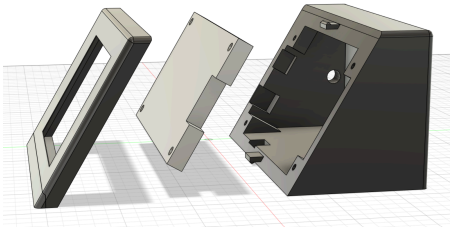
Overview

The Scoreboard is a desk-friendly digital clock with a hidden touch interface that displays live Yankees game data on demand. Tapping the screen queries the MLB StatsAPI to show scores, inning status, and base runners; long-pressing opens settings for screen flipping, clock toggle, and Wi-Fi reset. Supports quick Wi-Fi setup via a captive portal and stores data for offline viewing. Measures 98 × 60 × 57 mm (124 g). Built around an ESP32 CYD touchscreen with a custom 3D-printed enclosure modeled in Fusion 360.

Photos

Finished Build

Enclosure Design (Designed in Fusion 360)



Code

- Plug in the 2.4" CYD with a micro-USB to USB-A cable, then open Arduino IDE
- Select 'ESP32 Dev Module' and the relevant USB port
- Upload the 'ScoreboardPrototype.ino' in the project files here to the ESP32 embedded in the CYD module (If team other than NYY is desired, change two lines of code)
- Watch serial monitor for errors, then test functionality on the board to confirm all went well

Build Steps

- Configure WiFi access via the Captive portal
- Print the bezel and base from the 'Scoreboard.stl' file in this project
- Route the power and ground leads from a USB-A cable through the port on back, tie a knot into the USB cable for strain relief, then wire into the JST port
- Screw the CYD onto the base the snap fit the bezel onto the front

Lessons Learned

- Making enclosure adjustments in Fusion 360 is brutal when the front plane is at a 60 deg angle
- Some games end with no bottom of 9th — failsafe needed for final detection.
- Display spacing and font choices are tricky on this module - tune for clarity.

Full build log, code, and files: https://github.com/ChandlerEx/Projects