EMC BizQuiz Game

Project Overview:

For EMC Insurance, we developed BizQuiz, a fast-paced, team-based trivia game designed for a convention they were hosting. The game featured two teams of four players, each equipped with a set of four buttons to submit their answers. The experience used two large screens displaying synchronized questions for both teams. Each screen also provided real-time updates, including team scores and points earned per round. Players who answered correctly faster earned more points.

My Role & Contributions:

I created the BizQuiz software and was involved with setting up the hardware (button boxes, screens, and TV) to work together with the software

Technical Overview:

- **Unity-Based Application:** The software was a Unity application. It ran on a single PC, connected to two external displays, a router, and a custom button system.
- **Hardware Integration:** Player buttons were wired to a microcontroller, which communicated with the system over a local network.
- **Real-Time Input Handling:** The microcontroller sent OSC (Open Sound Control) signals over the network, which my app processed to register player responses instantly.
- **LED Feedback System:** The app sends UDP signals back to the microcontroller to control LED lighting effects on the buttons. For example, at the end of each round, button LEDs flashed in a circular pattern to indicate time was up and once a player selected an answer, their button lit up and remained illuminated until the round ended, providing some visual feedback.
- **Dependencies:** The only external asset used was extOSC, a library I frequently utilize for handling OSC signals over local networks.