

FLORIDA INTERNATIONAL UNIVERSITY



FIU IoTConnect

Mobile Application

Team Introduction



Zipporah Thomas

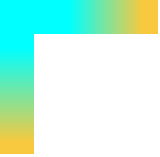


Khaled Khashashneh Salazar



Michael Simon

We are as REAL as it gets.

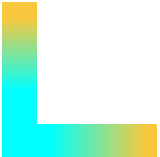


Problem

In our IoT device lab, there is a growing demand for specific devices among different students. The lab has limited resources, and conflicts often arise when multiple students want to use the same devices simultaneously. This leads to inefficiencies and delays.

Task

Create a user-friendly IoT Device Inventory Management System app tailored for students that attend our university. As the goal is to help students and faculty members efficiently manage and track the usage of IoT devices available for academic projects and research.



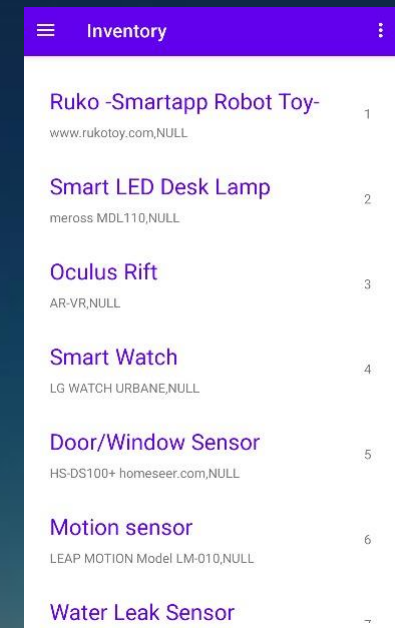
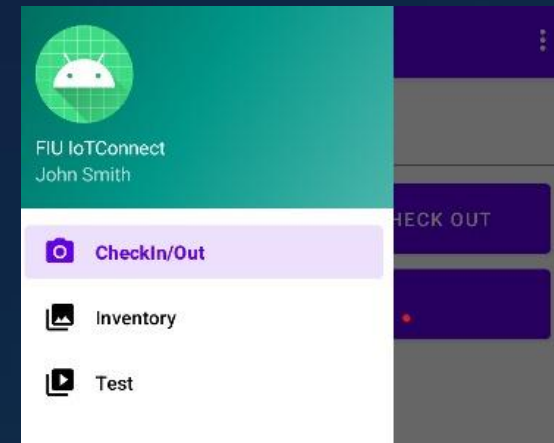
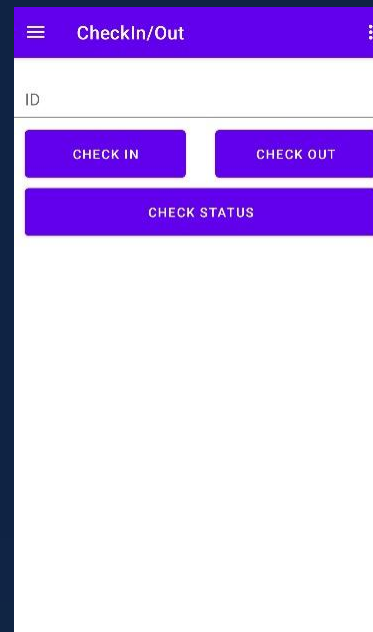
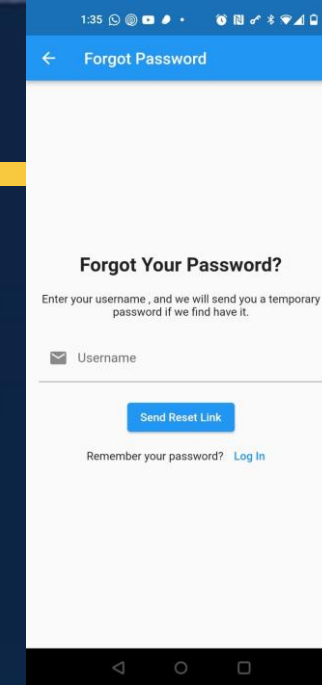
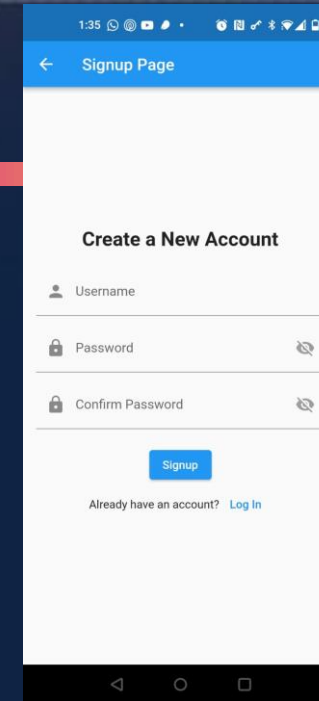
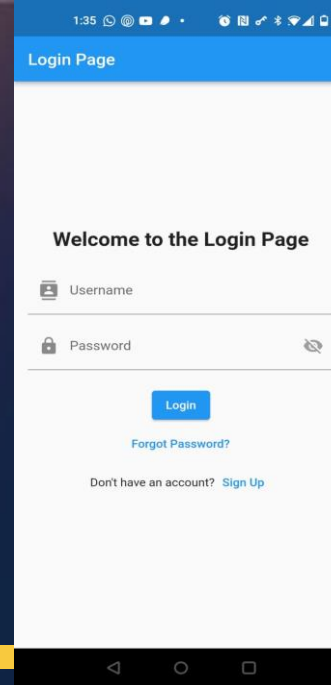


Introducing FIU IoTConnect

FIU IoTConnect

Mobile Application - Streamlined
Check-In and Check-Out:

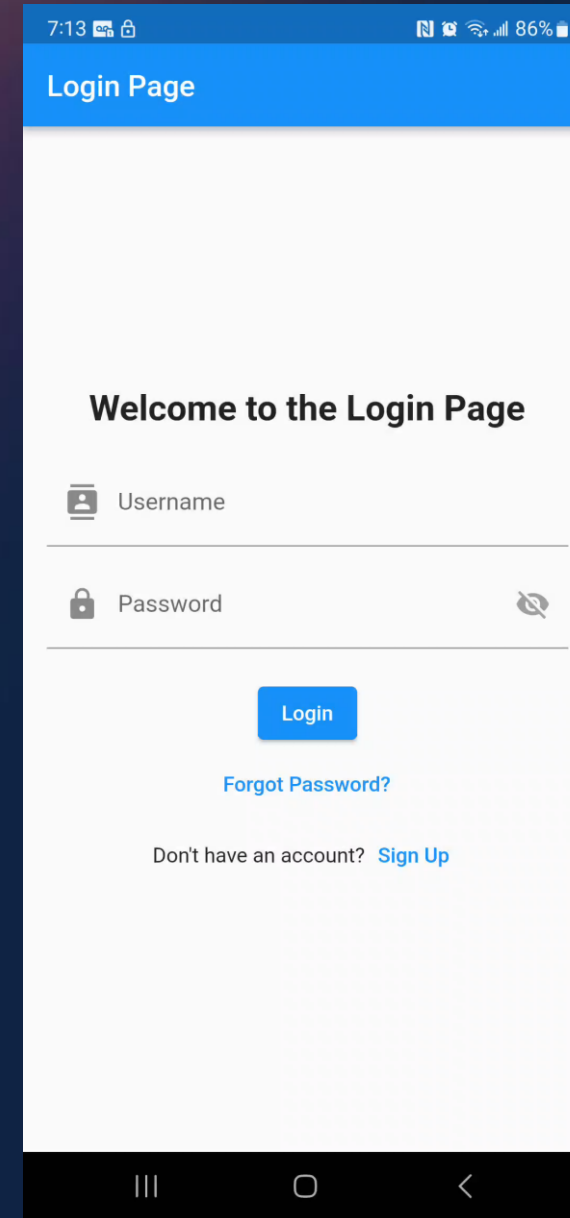
The FIU IoTConnect Mobile Application. Designed with the dynamic academic environment in mind, this app redefines the way students interact with the Internet of Things.



FIU IoTConnect Demo



FLORIDA INTERNATIONAL UNIVERSITY

A screenshot of a mobile application's login page. The page has a blue header with the text 'Login Page'. Below the header, there is a white background with the text 'Welcome to the Login Page'. There are two input fields: 'Username' with a person icon and 'Password' with a lock icon and a toggle eye icon. Below the input fields is a blue 'Login' button. Under the button is a blue link 'Forgot Password?'. At the bottom, there is a link 'Don't have an account? Sign Up'. The page is framed by a dark blue border with four colorful L-shaped corner decorations. At the bottom of the frame is a speaker icon.

7:13 86%

Login Page

Welcome to the Login Page

Username

Password

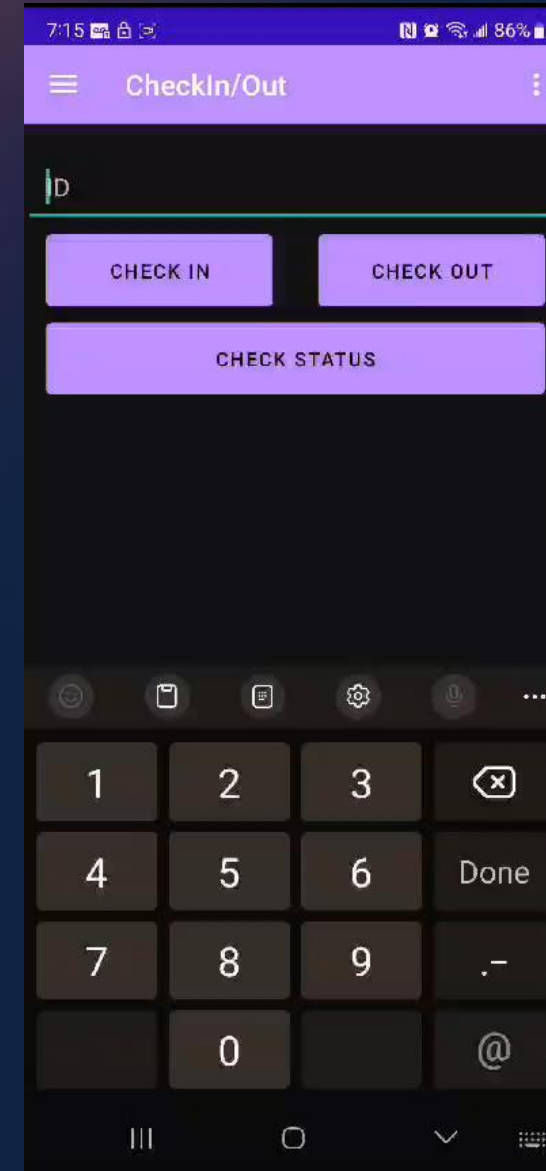
Login

[Forgot Password?](#)

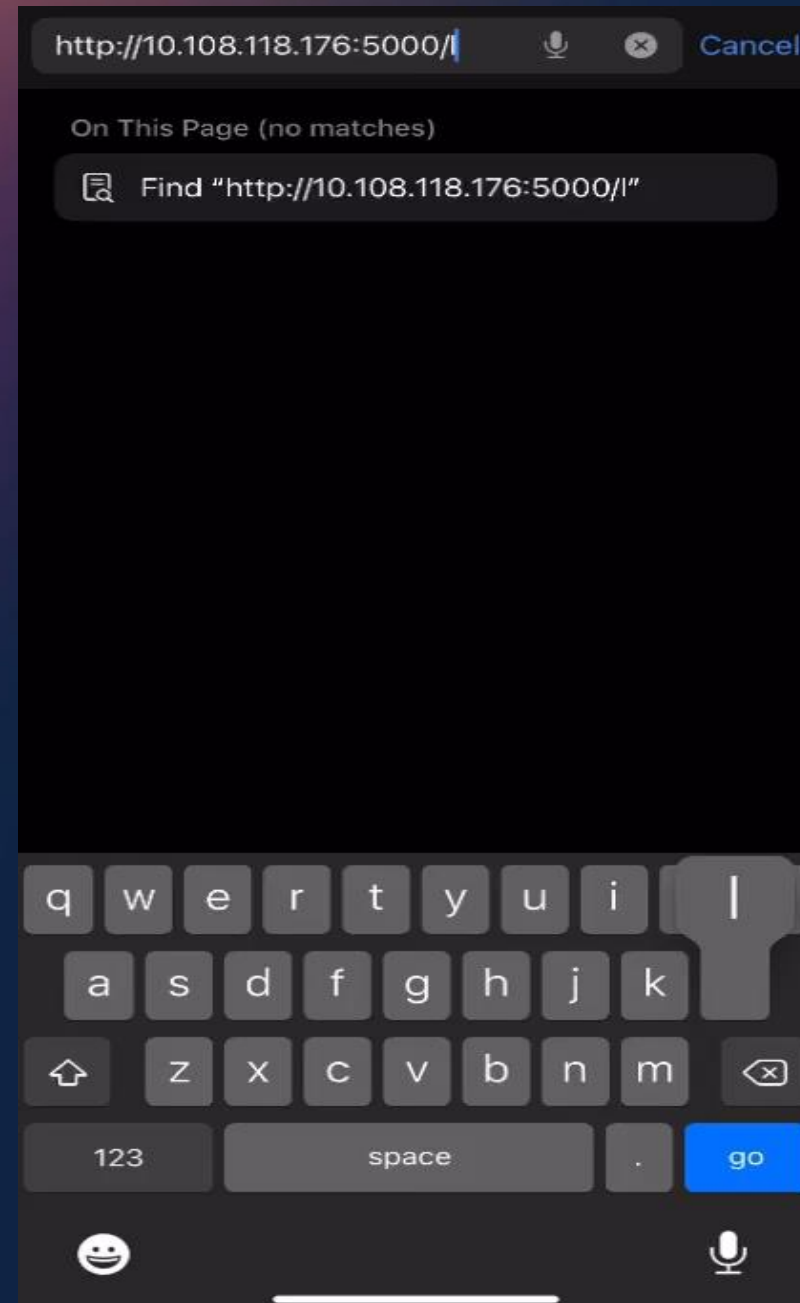
Don't have an account? [Sign Up](#)

COLLEGE OF ENGINEERING AND COMPUTING

FIU IoTConnect Demo



FIU IoTConnect Demo



Prerequisites

- **1.1 Hardware Requirements**
 - Confirm that the server or hosting environment meets the recommended hardware specifications for the FIU IoTConnect app.
- **1.2 Software Requirements**
 - Check for the required software dependencies, including the operating system, web server database server such as MSSQL.
- **1.3 User Permissions**
 - Ensure that the user accounts responsible for the installation have the necessary permissions to configure and manage the required components.

As these Prerequisites are done from the administrative aspect

Maintenance

- **Regular Backups**
 - Set up a routine backup schedule for both the application files and the database.
 - Test the backup restoration process periodically.
- **User Account Management**
 - Regularly review and update user accounts.
 - Ensure proper access levels for faculty, students, and administrators.

Enhancing FIU IoTConnect User Experience

Potential areas for improvement in the next revisions:

- **User Feedback Mechanism**
- **Enhanced Device Catalog**
- **Mobile Platform Optimization**
- **IoT Sensor Integration**
- **Advanced Reporting and Analytics**
- **Geolocation Tracking**
- **Notification Customization**
- **Offline Functionality Expansion**
- **Integration with Campus Systems**
- **Accessibility Features**
- **Scalability Improvements**



Shortcomings/Wishlist

- Limited Device Compatibility
- Dependency on Internet Connectivity
- Limited Reporting and Analytics

Wishlist

- Integration with Campus Systems
- Enhanced User Permissions
- Gamification Elements
- Feedback and Support Mechanism
- Mobile Platform Compatibility
- Enhanced Offline Functionality