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Pixie Developer Board

Problem Statement

Design and implement a versatile development board using Python and Raspberry Pi Pico that integrates WiFi, and onboard buttons.

Objective

The goal is to create a robust, user-friendly development board that serves as a foundation for various projects involving location-based services, wireless communication, e-mail and sms services, and user interaction.



Project Source

The project is Open Source for all the developers and programmers and It is based on Raspberry pico W which makes it more flexible to use. The program's and Gerber PCB for this project is provided on GitHub for free by our team. Project Link:- https://github.com/Sakib-Dalal/Pixie_Developer_Board

Programming Language Flexibility

The programming language used for Pixie Board is Python. Python is a high-level programming language that lets you work more efficiently and effectively on this board.

From Hardware Side

Pixie Board has built in sensors and Modules such as WiFi, GPS, Ultrasonic LED, Buttons, Temperature, Pressure, Humidity, Charging.

From Software Side

Pixie Board has e-mail service, SMS service, built in API call service which can retrieve data from other servers, web page hosting services. It has easy to use UI.

Future Scope

The future scope for Pixie is with AI capability. In future Pixie can do Edge AI Development, IoT and Smart Devices, Robotics and Automation, Education and Learning Platforms, Healthcare Applications, Natural Language Processing, Security and Surveillance and many more.