ALLTECH SOLUTIONS

SACRAMENTO STATE

TEAM 06

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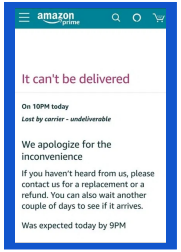
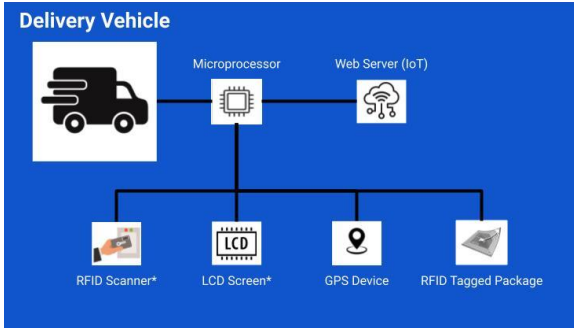
Societal Problem:
Package theft is a growing concern for many, and will only continue to escalate unless there are systems that are used to deter the window of opportunity to commit a criminal act.

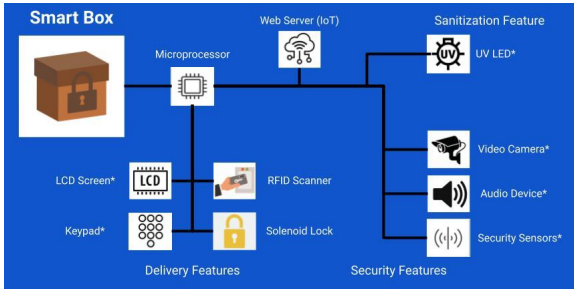
In 2020,

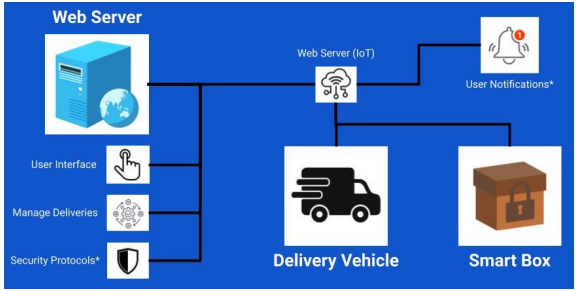
43% of Americans were victims of package theft.

$136 is the average cost of a stolen package

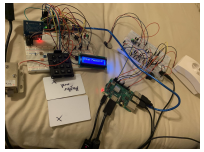




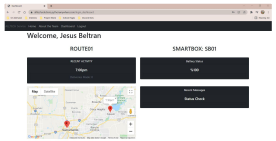




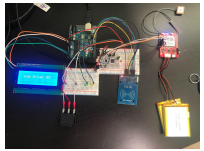
Smartbox Prototype



Web-server Application



Delivery Module Prototype



Our Solution:

Creation of a three part system that will ensure safe package delivery to users by facilitating their ability to monitor their package delivery process - from the shipping center to its final destination, one's home.

Delivery Vehicle Module:

This device is stored in the delivery vehicle to scan and store package inventory. Through communication to the web-server, customers can see updates on the status and location of their package.

Smartbox:

A lockbox with multiple security features to ensure the packages delivered are safe. Only the delivery driver will have limited access to the box while the consumer will have 24/7 access via a keycard or keypad.

Web-server Application:

The web server acts as an information broker for the asset tracker, smart box and user base. The asset tracker and smartbox communicate data to the web server, the web server stores data collected into its database structure. The user can access data collected by using the web application interface, this allows the user to access data collected from the asset tracker and smartbox over the course of delivery route.