



Introduction

The primary goal of this project is to offer users seamless access control to their garage through license plate recognition technology. The system aims to provide a hassle-free method for garage entry, allowing users to input their own license plate numbers into the system. Once registered, the garage door will automatically open upon detection of the registered license plate, providing a convenient and efficient means of access. Furthermore, recognizing the importance of privacy and security, the system will also incorporate de-identification mechanisms for unrecognized license plates. This feature ensures that only authorized vehicles gain access to the garage while safeguarding the privacy of individuals whose vehicles are not registered in the system.

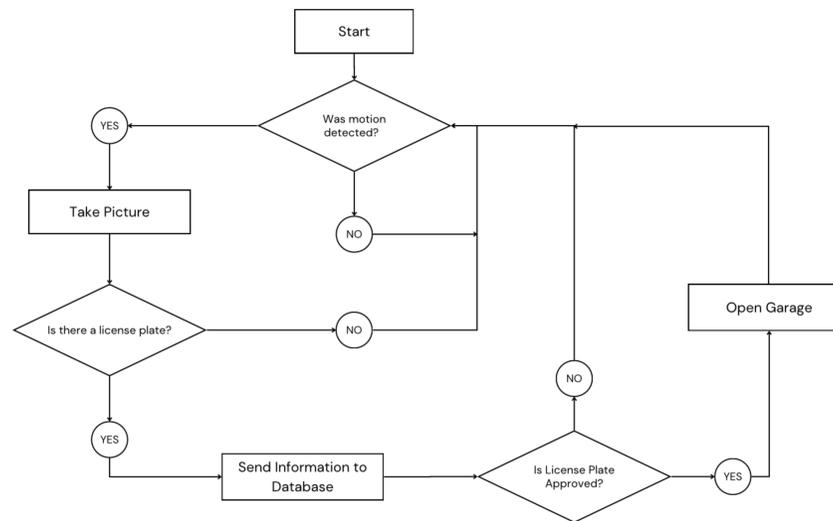
Objectives

- Create a license plate reader to open a garage door when a pre-approved license plate is detected.
- Create a database to store pre-approved license plate information.
- Create a de-identification algorithm to mask license plate data.

Benefits

- Convenience
- Efficiency
- Enhanced Security
- Privacy Protection

Design Details



Data De-identification

The de-identification feature of our Smart Garage system prioritizes user privacy while maintaining security standards. Unrecognized license plates are processed to display only anonymized data, revealing only 'X's and the last two letters of the plates. This ensures that users have access to pertinent information for identification without compromising the privacy of unregistered vehicles. With this thoughtful approach to data handling, users can trust in the integrity and discretion of our system, reinforcing confidence in both security and privacy measures.

Add New License Plate

Plate Number:

Name:

Approved License Plates

Plate Number	Name	Action
ABC1234	Erin	<input type="button" value="Delete"/>
1234ABC	Norma	<input type="button" value="Delete"/>

De-identified License Plate Records

Plate Number	State	Time Stamp
XXXXXSH	XX	2024-03-28T19:43:37.732923Z
XXXXX00	XX	2024-03-28T20:20:27.672344Z