



# Demo 2

AUTOMatedPARK

automate your life

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# Problem

- Congestion in garage
  - Process of manually hunting for a spot
  - No option of reserving a space online
  - Paying at exit
  - No secure parking
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- Expensive upkeep
  - Competition

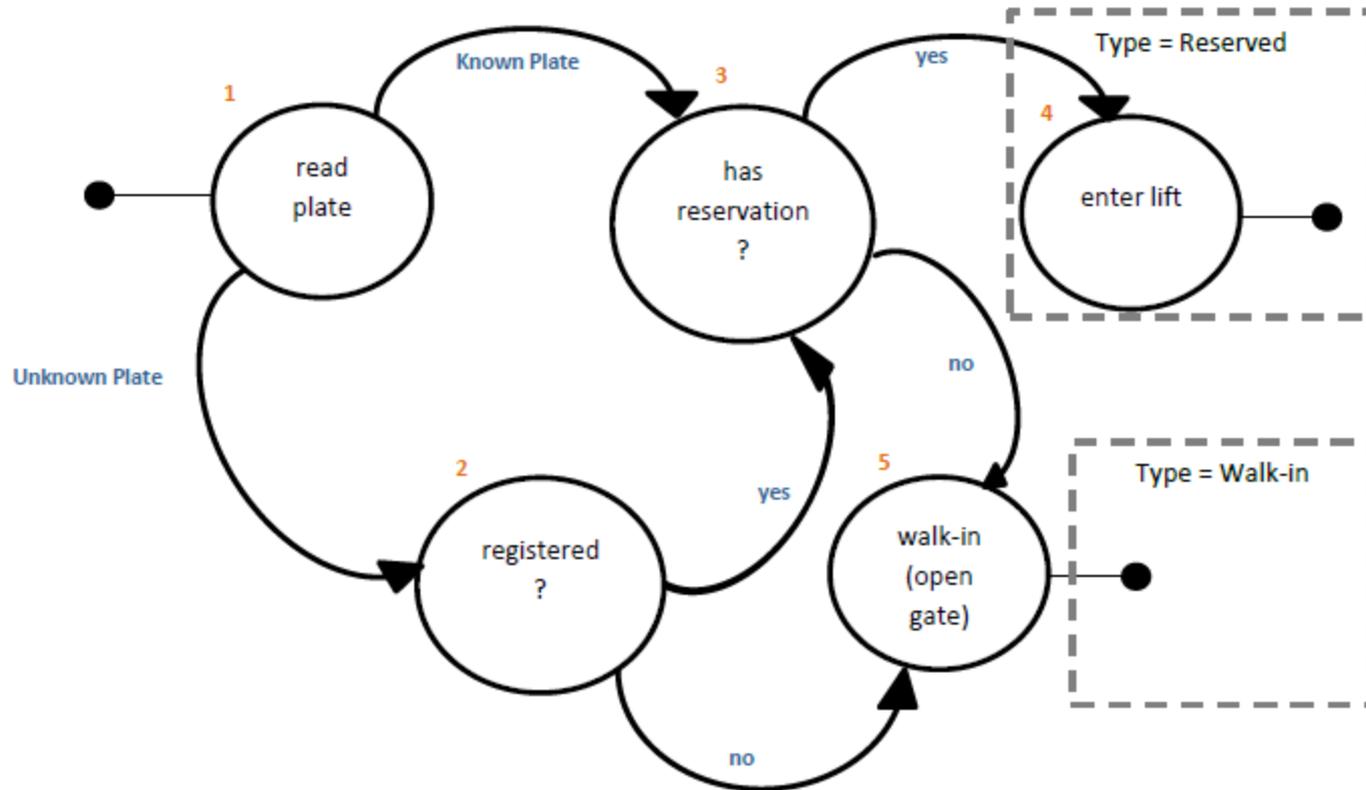
## Input Permutations

Recognized	Registered	Reserved	Customer Type
No	No	No	Walk-in
No	No	Yes	Invalid
No	Yes	No	Walk-in
No	Yes	Yes	Reserved
Yes	No	No	Invalid
Yes	No	Yes	Invalid
Yes	Yes	No	Walk-in
Yes	Yes	yes	Reserved

Note: 1 = Yes, 0 = No

- Walk-in customers will not be recognized and will not be reserved or they will be registered and unreserved.
- Reserved customers will be registered and reserved.
- A valid customer is registered or unrecognized and unreserved.

## State machine: Verify Customer



### States:

1. Verify Plate (Enter camera + DB)
2. Verify Registration (Console + DB)
3. Verify Reservation (DB)
4. Transport to Floor (lift)
5. Entering Gate (gate)

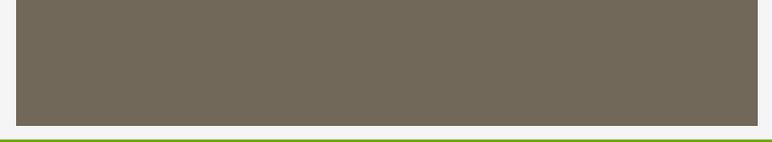
# Implementation

- Implemented an admin view
- More detailed info on floor layout
  - Color coded based on spot status
- Hardware checker
- Customer lookup
- Completed user manage

Demo

# Future

- Bill pay processing via Paypal, etc.
- Tab for setting billing rates in admin view
- Implement more detailed search of customers
- Mathematical model to maximize occupancy
- Generate customer invoices and reports
- Generate hardware checking log



Thank you!