

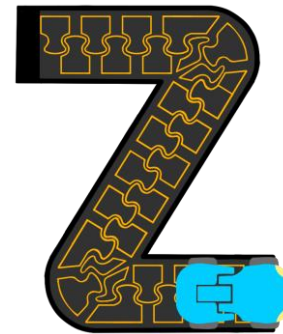
Problem
&
Solution

Product
Overview

Demo 2
Additions

ZippyPark

An optimized automated parking garage.



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Problem



Standard parking garages are...

- Inefficient
- Cost ineffective
- Impersonal
- Difficult to manage

Solution



ZippyPark parking garages provide *customers & owners* with...

- Reservation & walk-in system
- Adjustable pricing scheme
- Point reward system
- Managerial hub

Product Overview

Customer Mobile App

- UC 1, 2, 3 -
Create, Edit, Delete Account.
- UC 4, 5, 6 -
Create, Edit, Cancel Reservation.

- ★ UC 11 - Points Management.
- ★ UC 12 - Payment.

Garage Sensors

- UC 7 - Enter Garage.
- UC 8 - Exit Garage.
- UC 9 - Update Spot Status.

- ★ UC 11 - Points Management.
- ★ UC 12 - Payment.

Manager Website

- UC 1, 2, 3 -
Create, Edit, Delete Account.
- UC 4, 5, 6 -
Create, Edit, Cancel Reservation.

- ★ UC 10 - Display Statistics.
- ★ UC 11 - Points Management.
- ★ UC 12 - Payment.

ZIPPYPARK - DEMO 2

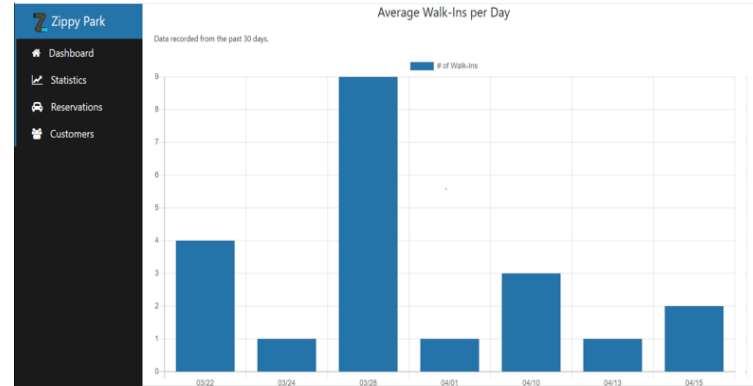
1 shared MySQL database ▪ 3 subsystems ▪ 12 use cases

New Additions



Use Cases

- UC-10: Display Statistics
 - Help make business decisions
 - Tracks parking garage usage
 - Leverages parking garage data to create graphs on website
- UC-11: Points Management
 - Loyalty program
 - Points exchanged for VIP parking
 - Managers set points scheme



Action	Points	Description
Reward	+10	Customer makes a reservation
Reward	+15	Customer makes a reoccurring reservation (for every 30 reservations)
Reward	+5	Customer shows up to reservation within 5 minutes of their start time
Penalty	-5	Customer stays longer than their reserved time
Rectification	-10	Customer cancels a reservation (to reconcile for the 10 points gained from making a reservation)
Exchange	-100	Credit to receive a preferred parking spot (closer to the entrance/exit)

New Additions (cont.)



Use Cases (cont.)

- UC-12: Payment
 - $Payment = Base\ Fee * (\#\ of\ time\ intervals) * Hourly\ Multiplier$
 - Price calculation/notification:
 - In-app after reservation made
 - On scanner after walk-in exits (or reservation overstay)
 - Manager may set pricing scheme (manually or suggested by the data)

Additional Features

- Automatic price suggestion tool for managers
- Manager dashboard cards
- App pop-ups
- Log-out ability

