

RamHacksTelegramBot

Federal Reserve Bank of Richmond
Parking Slots Challenge

RamHacks 2019

Paolo Cachi
Jose Moyano

Challenge

— — —

- **Parking** space with N **slots**
 - Some reserved to employees
 - But many of them are not used every day
 - The rest for clients
-
- Parking is **not fully exploited**

Objectives

— — —

- Provide employees an easy way to modify or cancel reservations and release parking slots for clients.
 - Employees have slot priority.
- Reduce the number of unused parking slots.
 - Increase satisfaction of clients.
 - Bank can better exploit their parking.

Solution

— — —

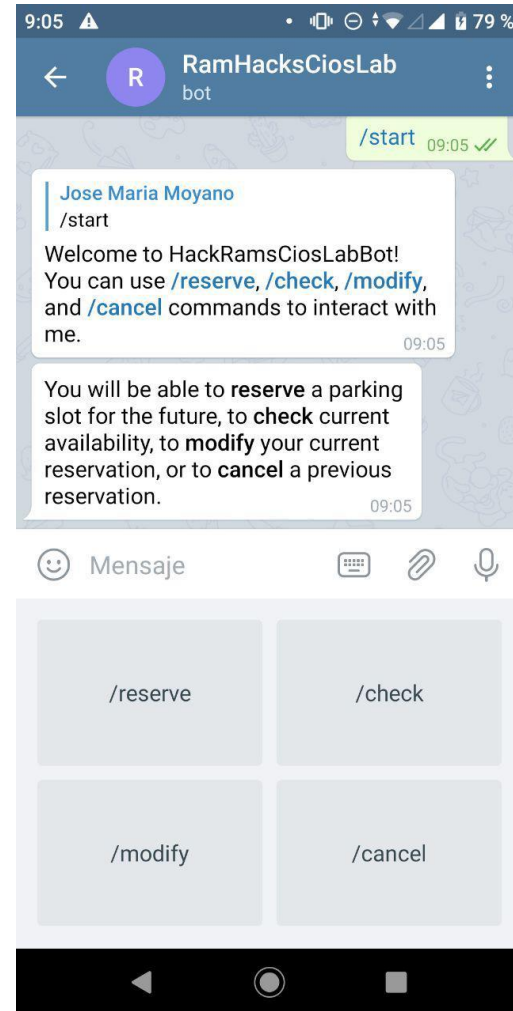
- **Bot in Telegram**
 - No need of having extra app installed
- **Bot implements **easy reservation system****
 - Employees reserved by default
 - Clients can reserve a slot
 - All of them can modify or cancel reservations

-

Solution

- **Menu**

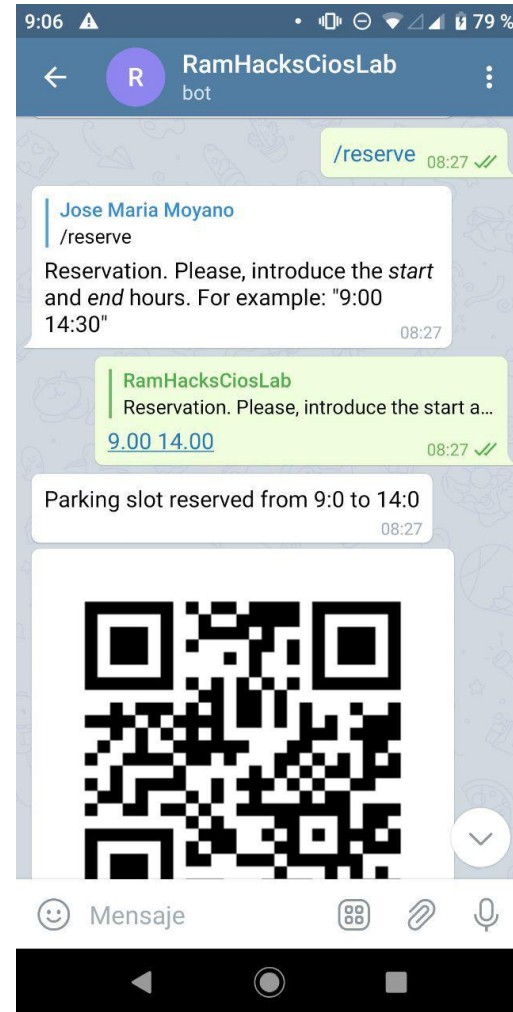
- Shows all options with buttons.



Solution

- **Reserve**

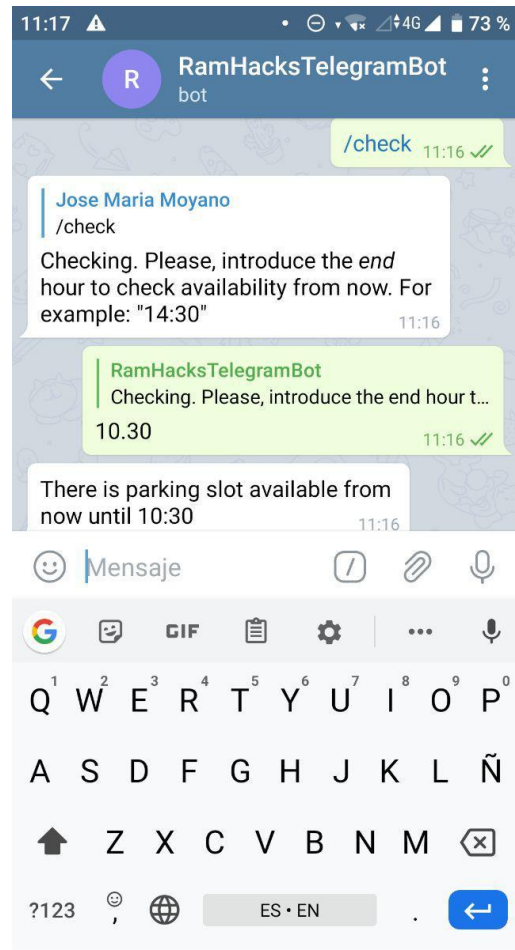
- Reserve slot between given hours if available.
- QR code to enter and exit from the parking.



Solution

- **Check**

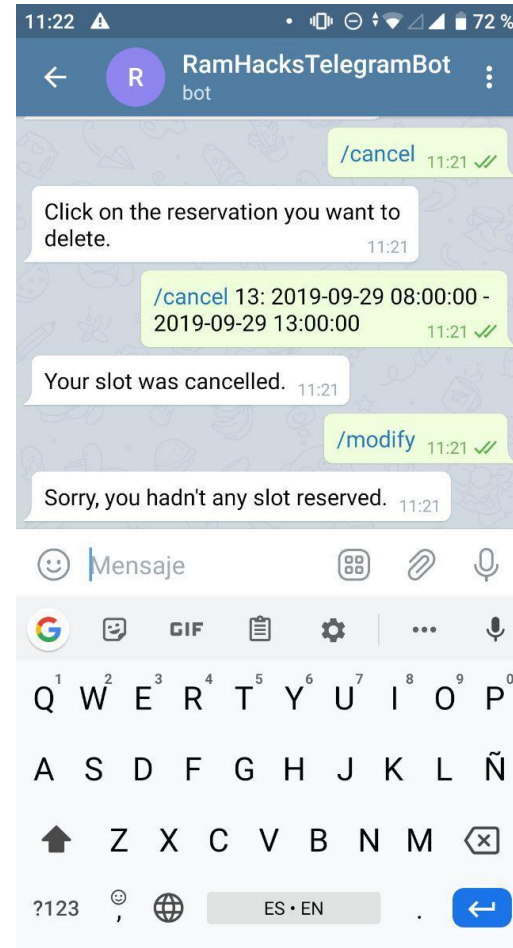
- Checks if there are available slots from now to a given hour.



Solution

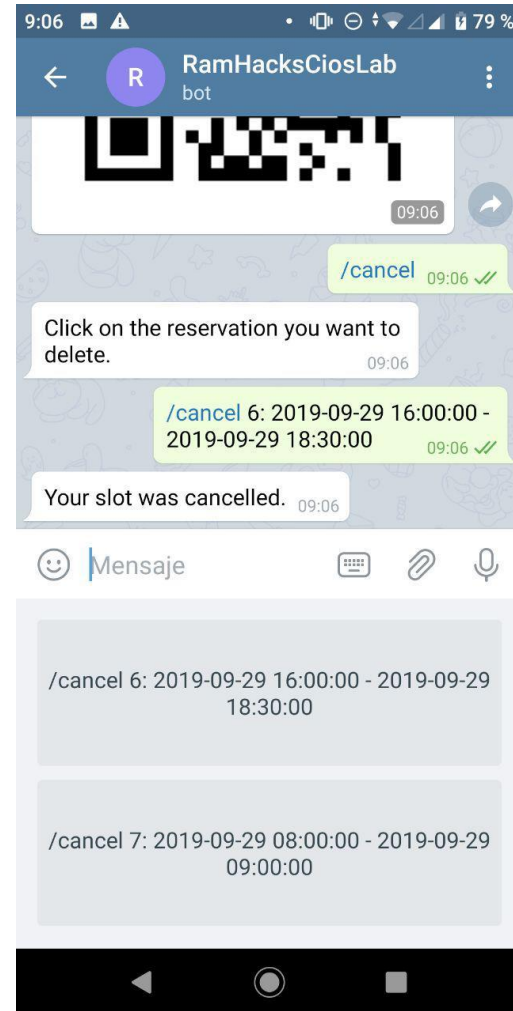
- **Modify**

- Modify the hours of a selected reservation.



Solution

- **Cancel**
 - Cancel a selected reservation.



Bot: Python

Database: Google Cloud Platform

GitHub:

[github.com/i02momuj/
RamHacksTelegramBot](https://github.com/i02momuj/RamHacksTelegramBot)

Telegram:

[@RamHacksCiosLabBot](https://t.me/RamHacksCiosLabBot)

