Cloud based Book my parking – using Internet of Things (IoT)

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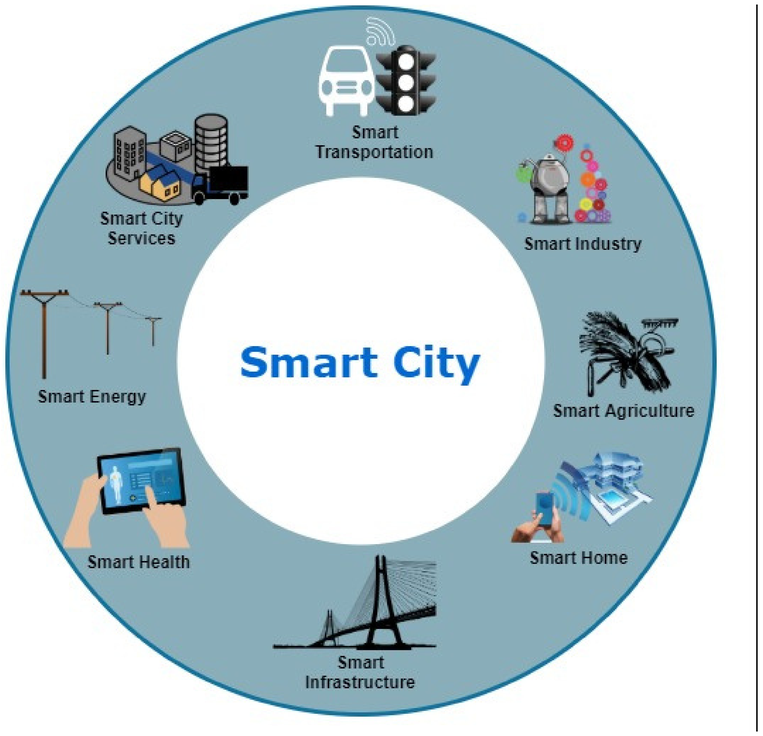
Introduction

The concept of development book my parking application is the standalone-automatic system that provides available parking information to the users. The application was developed to fit the need for parking service improvement at the organization by providing parking activities monitoring and parking information control.

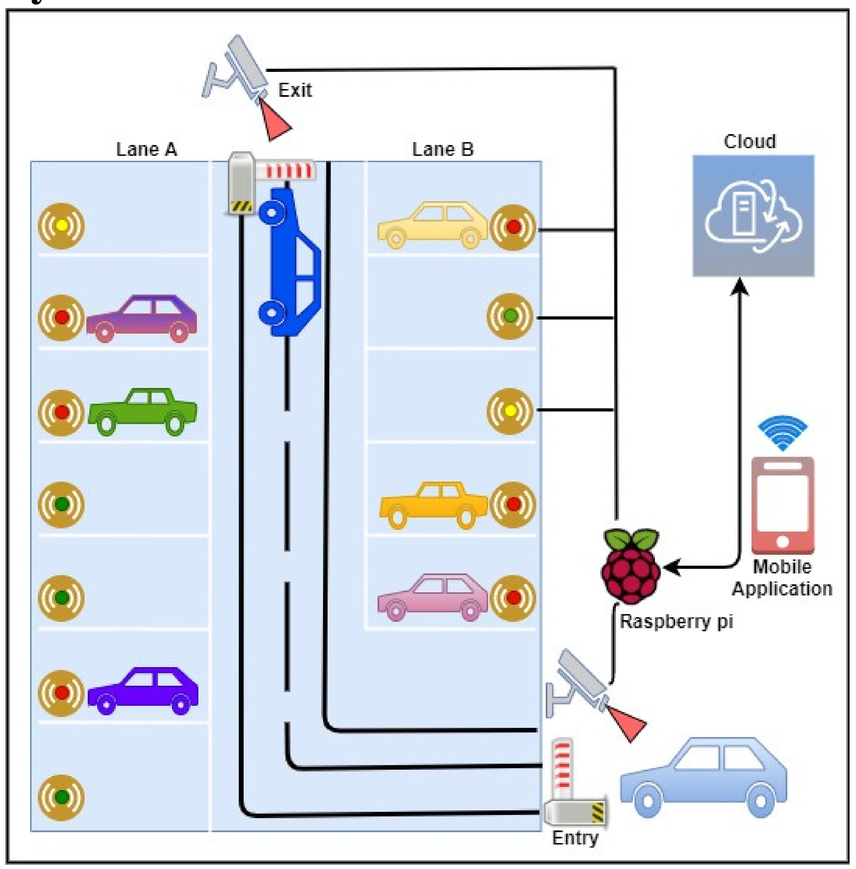
Smart City Components



Objective

- To reserve available parking spots by a user.
- To provide real-time information.
- Sensors to detect available parking space.
- To use RFID as the signal entrance to the parking area.

System Overview



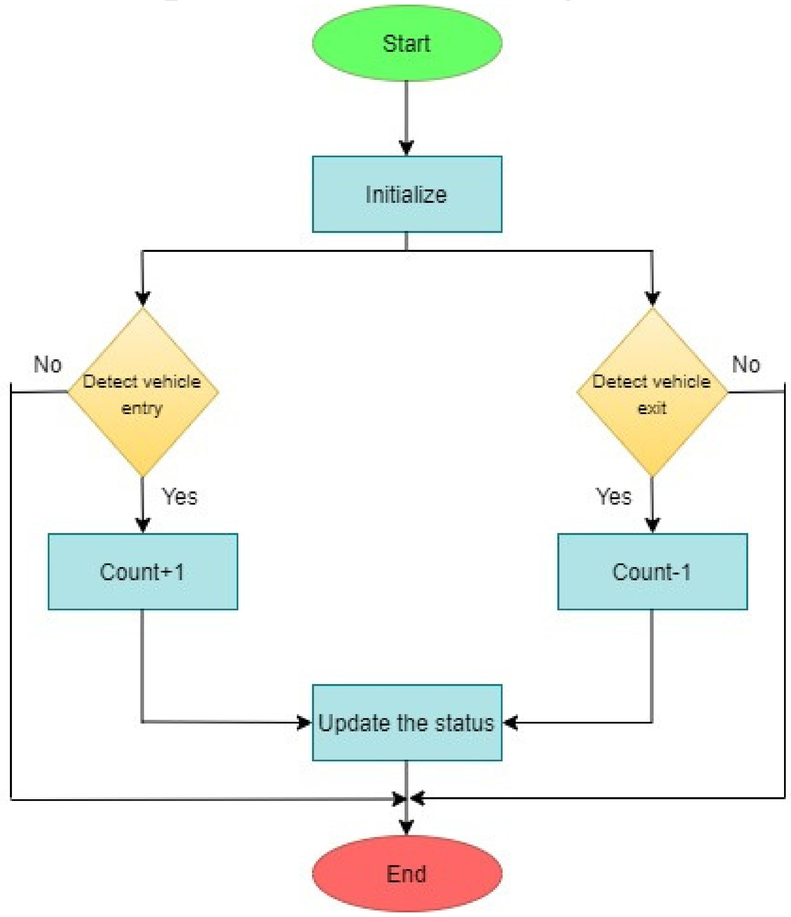
The actors in the parking system are:

- Parking Sensors
- Processing Unit
- Mobile application
- The Cloud

Conclusion

- Minimize implementation costs.
- Improve the quality of the system.
- Increase efficiency, security, and fast processing.
- Smart Cities will benefit most from IoT services.
- Finding available parking spots is easier.
- Users time will be saved.

Status Update of Car Parking Area



- The RFID sensor at the entrance of the car park area.
- When car entry, the application will update by Count= +1.
- When the car leaves, it will update count= -1.
- Change in the counter value, data will be sent to a cloud-based server.

References

[1]https://ieeexplore.ieee.org/document/7247632

[2]https://ieeexplore.ieee.org/document/7562735

[3]https://www.mdpi.com/2624-6511/4/2/24