

Share-park Decentralized Parking Management

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Blockchain & Cryptocurrency
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Why ?

- Parking Management Industry has grown at Rate of 12.3% worldwide.
- In developing countries rate expected to increase sharply.
- Current Evaluation :
 - 7.43 Billion USD,
 - By 2023 : 16 billion USD
- Many Big players are reaping benefits.

***Aim : Distribute benefits among the real actors
: Owner and User!!***

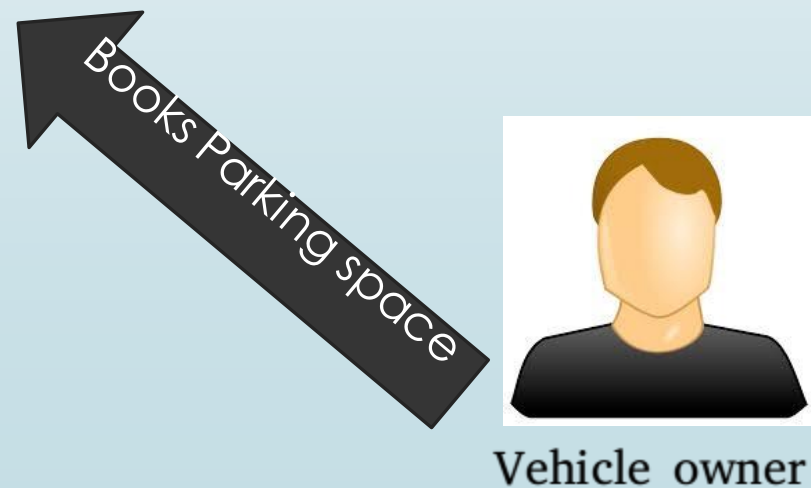
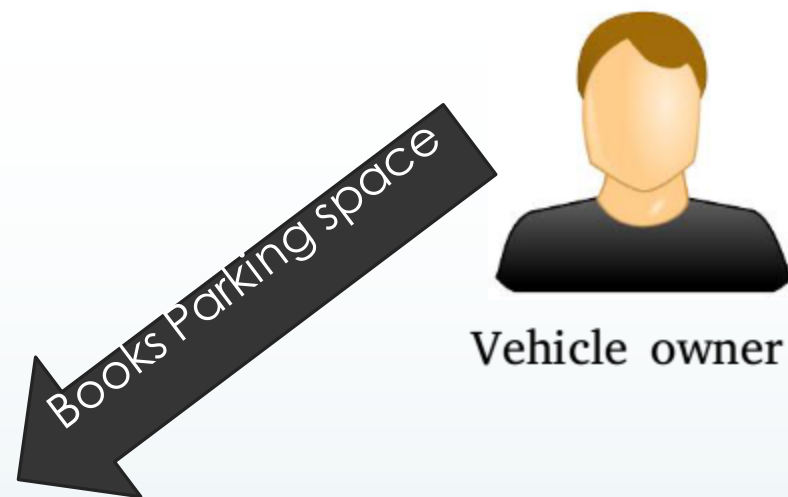
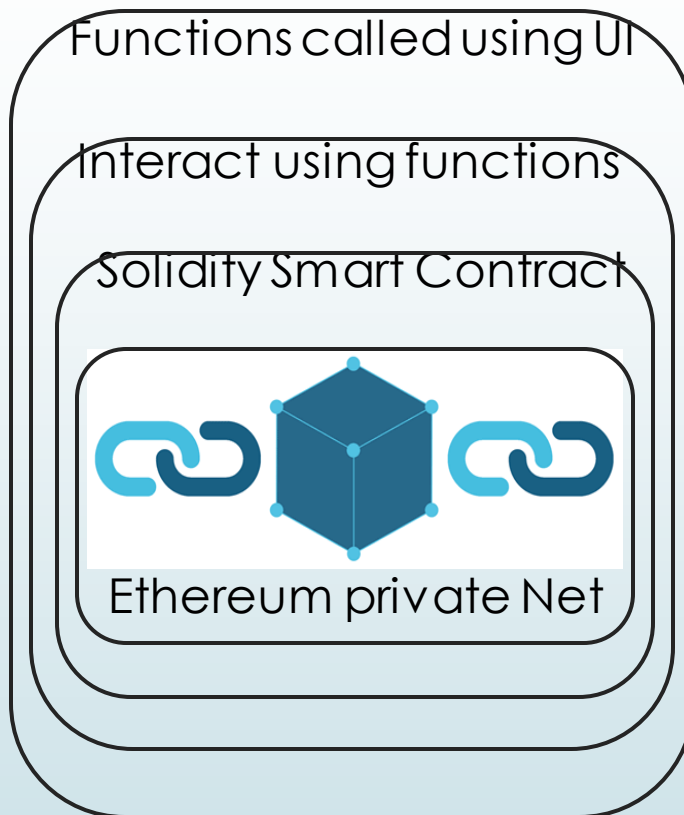


Architecture



Parking Space owner

Lists Parking Spaces



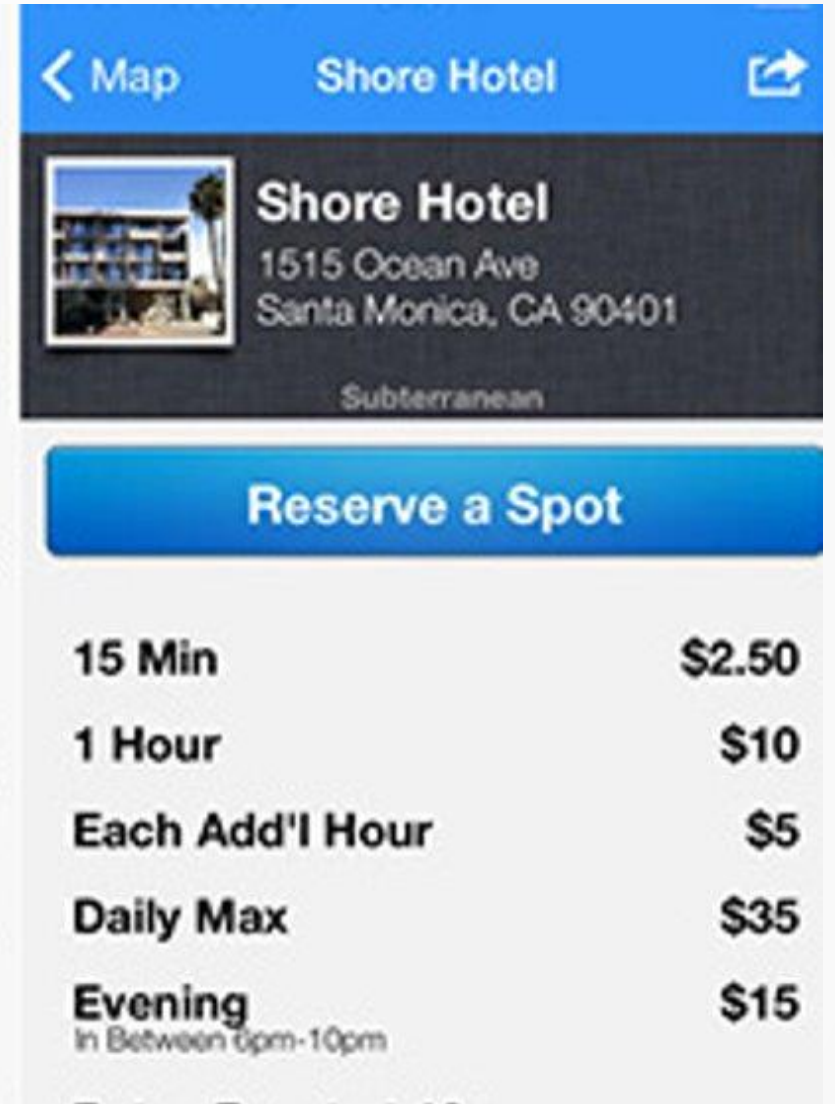
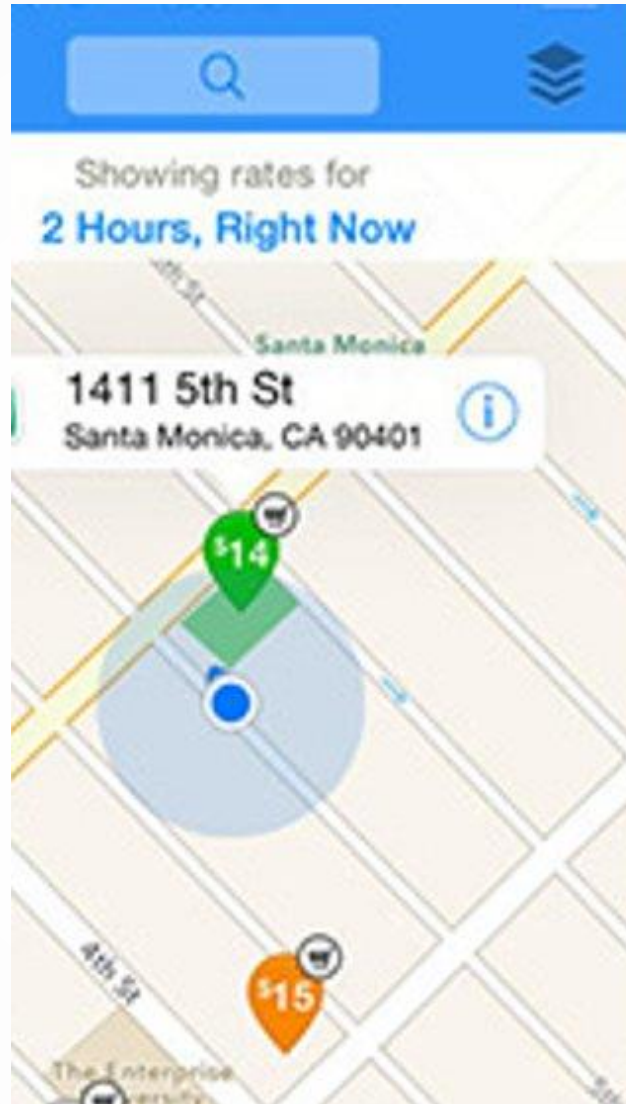
User Requirements

Vehicle Owner

- Easily find a parking lot
- Hassle free booking
- Secure payment

Land Owner

- Publish their lands
- Regulate land status
- Instant secure remittance



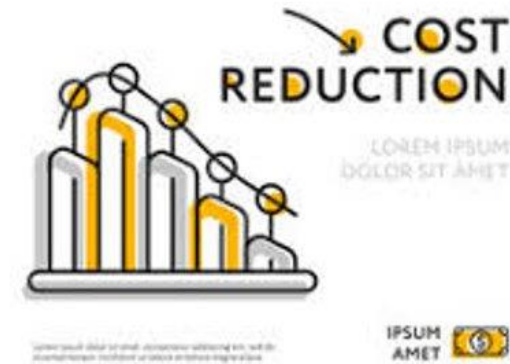
System Requirements

- Each Actor a node in the blockchain
- Ability to record locations available and their status
- Ability to search for nearby parking
- Interaction with Google Maps API
- Interaction with users wallet using web3



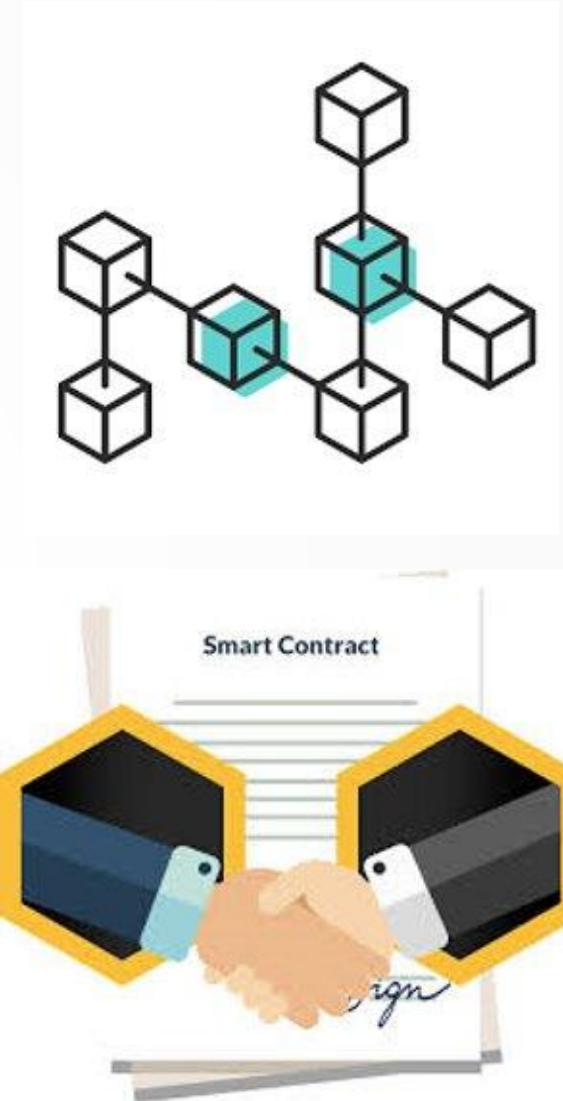
Non-Functional Requirements

- Cost-Efficient : due to competitive and open market
- Secured : Payments using one of the cryptocurrency
- High Accessibility : to anyone & everyone wishing to park
- High Response Time : real-time platform
- Transparency : because its based on Blockchain



Components

- **Smart contract** : defines behavior of system
- **Blockchain** : stores database of parking lots
- **Data Structure** : { Price Information, status, location }
- **Transaction** : used to make bookings.
- **User Interface** : helps interact with DApp.



Rating System

- Users would rate their experience.
- Give incentive for owner to provide legitimate facility
- Users make informed choices based on ratings.





Reference



- http://www.academia.edu/4576117/Parking_Management_Market_worth_7.43_Billion_by_2018
- <http://www.cdl.edu/uploads/Qd/S6/QdS615B1DcnwRZInSuTDnQ/writing-requirements.pdf>