user interface

(from Use Case View)

send query request

(from Use Case View)

database interface

(from Use Case View)

UI chartView

(from Use Case View)

generate analysis chart

(from Use Case View)

fetch query result

(from Use Case View)

trip date

(from Use Case View)

date : String

trip time

(from Use Case View)

use guide text

(from Use Case View)

guide : Stri...

user interface

(from Use Case View)

get help type

(from Use Case View)

database interface

(from Use Case View)

bicycle interface

(from Use Case View)

🔒longitude : stri...
🔒latitude : string
🔒bicycleID : stri...

🔷sendData()
🔷getData()

get bicycle real time location
(from Use Case View)

database interface
(from Use Case View)

user interface
(from Use Case View)

fetch bicycle location info
(from Use Case View)

user interface

(from Use Case View)

get account and
password

(from Use Case View)

user id and password

(from Use Case View)

fetch query result

(from Use Case View)

database interface

(from Use Case View)

BDNavigation interface

user interface

get destiny and user
location

user current location

longtitude : double
latitude;double
description：String
rangeradius : dou...

getlocation()

user interface

(from Use Case View)

get choosed bicycle id

(from Use Case View)

query bicycle state

(from Use Case View)

fetch query result

(from Use Case View)

database interface

(from Use Case View)

bicycle interface

(from Use Case View)

longitude : stri...
latitude : string
bicycleID : stri...

sendData()
getData()

bicycle state

(from Use Case View)

bicycleID : string
longitude : string
latitude : string
lock : boolean
preorder : boole...

modify bicycle state

(from Use Case View)

update bicycle state

(from Use Case View)

user id and password

(from Use Case View)

user interface
(from Use Case View)

get account and password

(from Use Case View)

add new user

(from Use Case View)

database interface

(from Use Case View)

report description

(from Use Case View)

bicycle state

(from Use Case View)

- bicycleID : string
- longitude : string
- latitude : string
- lock : boolean
- preorder : boole...

user interface

(from Use Case View)

get report description

(from Use Case View)

modify bicycle state

(from Use Case View)

fetch query result

(from Use Case View)

modify user credit

(from Use Case View)

database interface

(from Use Case View)

tirp start time

(from Use Case View)

🔒◆starttime : String

bicycle interface

(from Use Case View)

🔒◆longitude : stri...
🔒◆latitude : string
🔒◆bicycleID : stri...

🔶sendData()
🔶~~~~()

calculate bicycle unlock time

(from Use Case View)

unlock bicycle

(from Use Case View)

tirp end time

(from Use Case View)

🔒◆endtime : Stri...

record into database

(from Use Case View)

users

(Use Case View)

...ccount : string
...ssword : String
...rs : UserVec...

user interface

(from Use Case View)

database interface

(from Use Case View)

bicycle interface

(from Use Case View)

🔒◈longitude : stri...
🔒◈latitude : string
🔒◈bicycleID : stri...

◆sendData()
◆getData()

unlock bicycle

(from Use Case View)

get choosed bicycle id

(from Use Case View)

query bicycle state

(from Use Case View)

fetch query result

(from Use Case View)

database interface

(from Use Case View)

bicycle state

(from Use Case View)

🔒◈bicycleID : string
🔒◈longitude : string
🔒◈latitude : string
🔒◈lock : boolean
🔒◈preorder : boole...

modify bicycle state

(from Use Case View)

update bicycle state

(from Use Case View)

user interface

(from Use Case View)

user interface

(from Use Case View)

database interface

(from Use Case View)

users

(from Use Case View)

account : string

user info management
(from Use Case View)

order bicycle

(from Use Case View)

use bicycle

(from Use Case View)

bicycles

(from Use Case View)

manage user wallet

(from Use Case View)

manage user credit

(from Use Case View)

manage user trip

(from Use Case View)

user balance

(from Use Case View)

amount : doub...
account : string
time : string

user credit records

(from Use Case View)

credit : int

trip date

(from Use Case View)

date : Strii...

trip time

(from Use Case View)