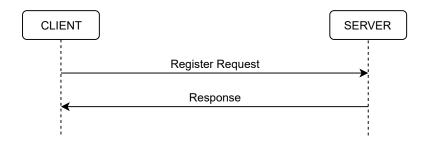
Scenarios

i. Client registers into app

- Server needs to check if username is unique.
- Register doesn't connect user.



1. Register (Request)

• username : Name that identifies user

• password : User's Password

TYPE = 1 username password

0. Response

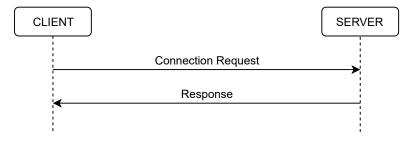
• successFlag : If the operation was successful or not

• message : Additional information

TYPE = 0	successFlag	message
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ii. Client logs in

- \bullet Server needs to make sure username and password are correct.
- If successful, server sends the port for conection.
- $\bullet\,$ If unsuccessful, server sends an error message.



2. Connection (Request)

• username : Name that identifies user

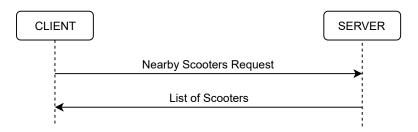
• password : User's Password

TYPE = 2	username	password
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iii. Client logs out

iv. Client asks to see all scooters nearby

• Server sends a list of scooters and their locations



3. Nearby Scooters (Request)

• location : where the user is

TYPE = 3	х	у
	х	у

4. List of Scooters (Response)

• numberOfScooters : How many scooters the list has

• location : Where the scooter is

TYPE = 4	numberOfScooters	х	у	
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v. Client asks to see all rewards nearby

 \bullet Server sends a list of rewards nearby



5. Nearby Rewards (Request)

• location : where the user is

TYPE = 5 x y

6. List of Rewards (Response)

 \bullet numberOfScooters : How many rewards the list has

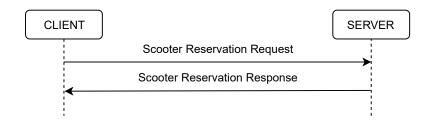
ullet originLocation : Where to start trip

• destLocation : Where to end trip

					-	
TYPE = 6	numberOfRewards	х	у	x	у	

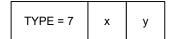
vi. Client asks for scooter reservation

- Clients asks to reserve a scooter
- Server creates a reservation for a scooter, adds it to the list of reservations and sends the reservation code to the client.
- If client doesnt use the reservation code in X time, the server will discard the reservation.



7. Scooter Reservation (Request)

• location : where the user is



8. Scooter Reservation (Response)

• reservationCode : Code that user will use to start the trip(can be UNSUCCESSFUL)

• location : Where the scooter is.

TYPE = 8	reservationCode	х	Y
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vii. Client starts trip

• Client will use the code to start the trip



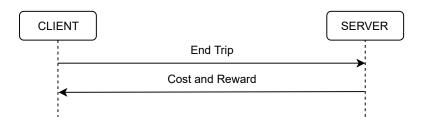
9. Start Trip

• location : where the user is



viii. Client ends trip

- Client sends reservation code and the server will calculate total distance and total time, generating the cost and reward of the trip.
- \bullet Server takes reservation out of list of reservations and updates a new reward list.



10. End Trip

- reservationCode : id of reservation where all the information is saved.
- location : Final location of client.

TYPE = 10	reservationCode	x	у
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11. Cost and Reward (Response)

- ullet cost : How much the client will pay
- reward : How much the client saved??

TYPE = 11	cost	reward
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ix. Client turns on notifications for rewards nearby

x. Client turns off notifications for rewards nearby