

# Scooter Sharing System user manual

Hi, welcome to the campus scooter sharing system ! Our system provides borrow and return services to provide faster on-campus travel, meanwhile, we also provide management and monitoring services for QM manager. Here we introduce our system in two modules.

Please run the ScooterSystem.java first in the main folder.

You can see the picture (Figure A.1), This is our welcome interface. Different users can choose the corresponding entrances to enter, but It is worth noting that if you use our system as an user, you must get an administrator's account opening permission. So let's first enter the administrator interface to find out how the administrators manage the system.

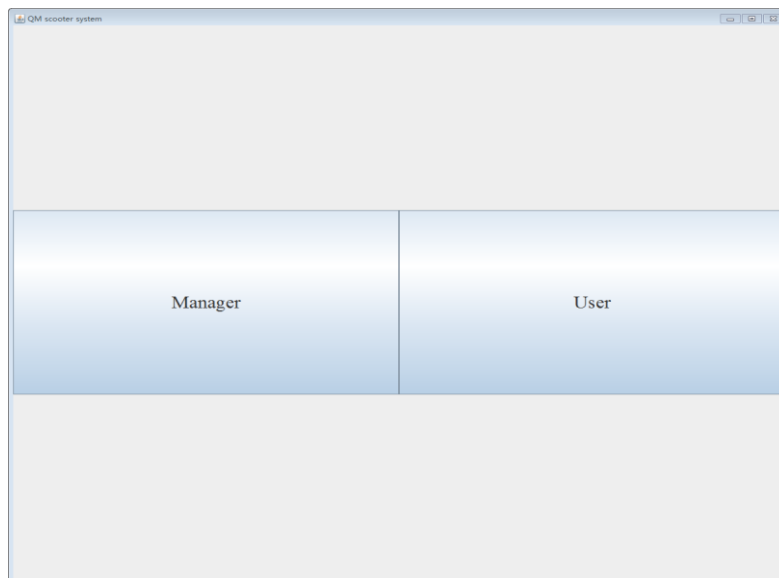
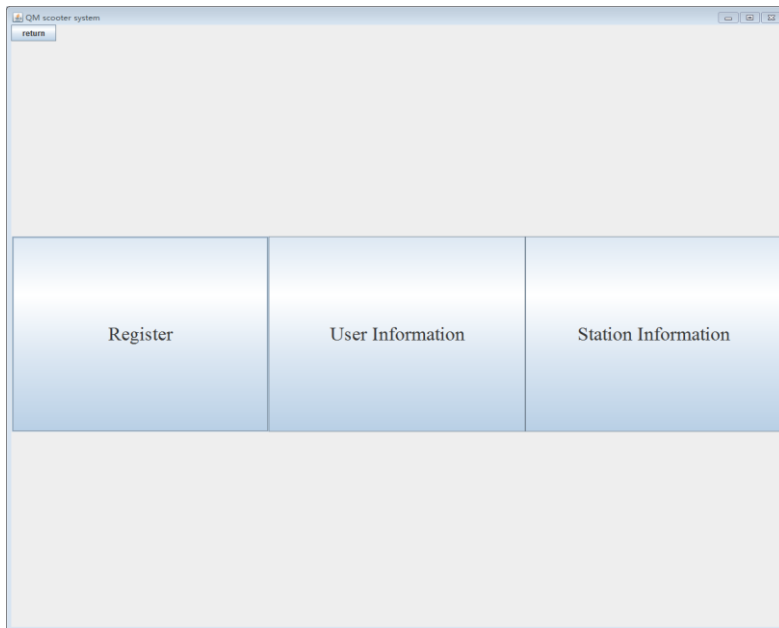


Figure A.1

## A. Manager

- a. If you are a scooter manager, you can help users **register**. The registration processes include:  
Click the button "Manager"-> click the Register->input the ID/Full Name/Email Add.



**Figure A.2**

A screenshot of the registration form within the "QM scooter system" window. It contains three input fields labeled "ID:", "Full Name:", and "Email Add:". Below these fields is a "Submit" button. Underneath the "Submit" button, the text "Please enter info." is displayed. At the bottom of the form is a "Clear" button.

**Figure A.3**

If you enter the wrong info that doesn't comply with the format, you can not register successfully and there will be a hint below the panel. You can click the button 'Clear' to clear all information you have typed in.

QM scooter system

return

ID: 1611

Full Name: LYX

Email Add: 123456789@qmul.ac.uk

Submit

Invalid ID. You must enter 9 digits!

Clear

Figure A.4

QM scooter system

return

ID: 161100000

Full Name: 7418956

Email Add: qmul123 uk@qmul.ac.uk.

Submit

Invalid name.  
Example: Xiaoming Wang

Clear

Figure A.5

QM scooter system

return

ID: 161180000

Full Name: LYX

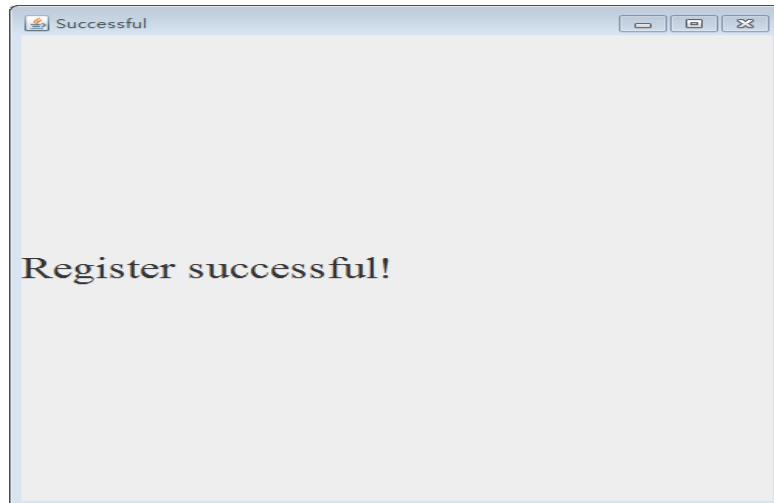
Email Add: 123456789@qq.com

Submit

Invalid email address.  
Example: qmul123 uk@qmul.ac.uk.

Clear

Figure A.6



**Figure A.7**

**b.** As a manager, you are able to check the usage of each user at any time and monitor the status of each docking station. In total there are 3 docking station A, B and C around campus and each station has 5 scooters and 8 slots.

Time	Userid	Name	Type	ScooterID	StationName
2019-05-25 06:00:24	111111111	second	take	1	A
2019-05-25 06:00:24	111111111	second	return	1	B
2019-05-25 06:00:24	111111111	first	take	1	C
2019-05-25 06:00:24	111111111	first	return	1	C
2019-05-25 06:00:24	111111111	first	take	1	B
2019-05-25 06:00:24	111111111	first	return	1	B
2019-05-25 06:00:24	111111111	first	take	1	A
2019-05-25 06:00:24	111111111	first	return	1	A

**Figure A.8**

Station	Occupied	Unoccupied	Total Slots
A	4	4	8
B	4	4	8
C	4	4	8

In use: 1 scooter

**Figure A.9**

## B. User

If you are a scooter user, you must first contact to the manager to register, then click 'User' to choose the nearest station and log in to use scooter.



Figure B.1

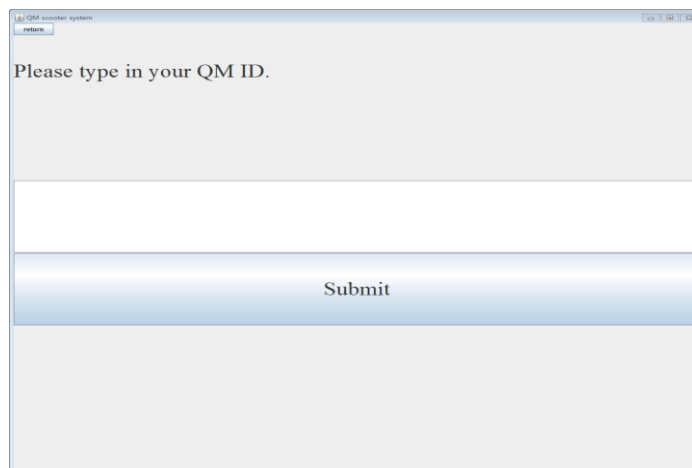


Figure B.2



Figure B.3

a. **TAKE**

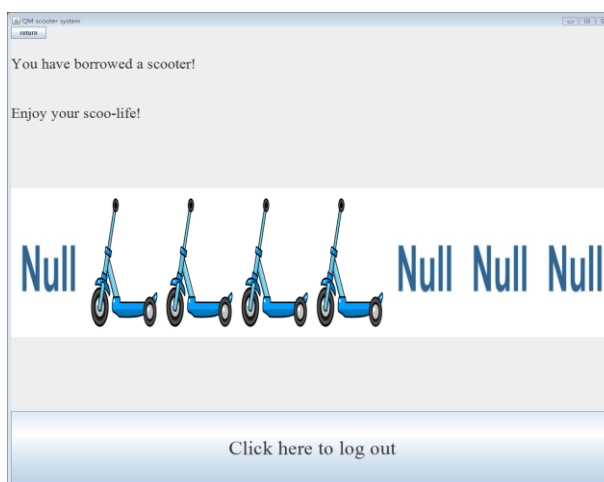
Click '**TAKE**' and '**Help me pick one**', our system will choose a scooter for you and the red light at the slot will be flashing to inform you.



**Figure B.4**



**Figure B.5**



**Figure B.6**

If you do not take the scooter within 1 minute, the scooter will be locked to the slot automatically.

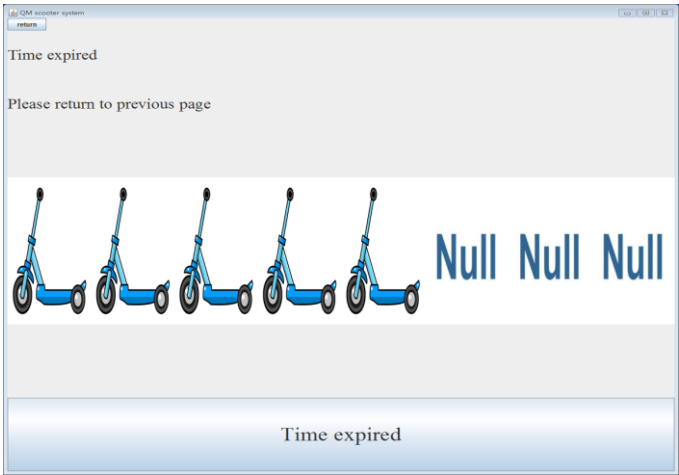


Figure B.7

**b. RETURN**

Click 'RETURN' and 'Help me pick an empty slot', our system will make one empty slot ready and the light will flash. Also, If you do not return the scooter within 1 minute, the light will stop flash and you are unable to put the scooter in.



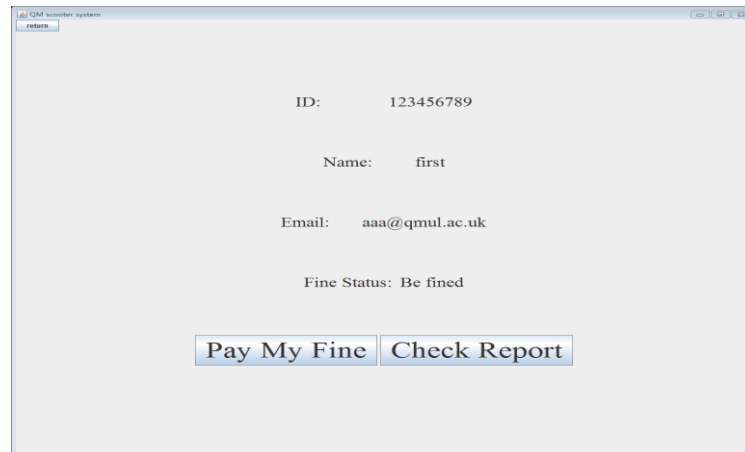
Figure B.8



Figure B.9

### c. MY ACCOUNT

It is free to use the scooter however 1) each time the user must return a scooter within 30 minutes. 2) the total usage must not exceed 2 hours a day. Or a fine of £ 100 should be issued by click '**Pay My Fine**' before the next time you use our scooter.



QM scooter system

return

ID: 123456789

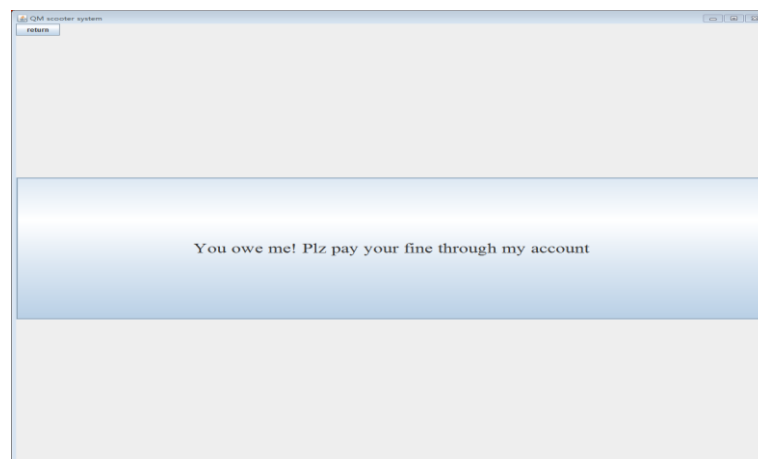
Name: first

Email: aaa@qmul.ac.uk

Fine Status: Be fined

Pay My Fine Check Report

Figure B.10



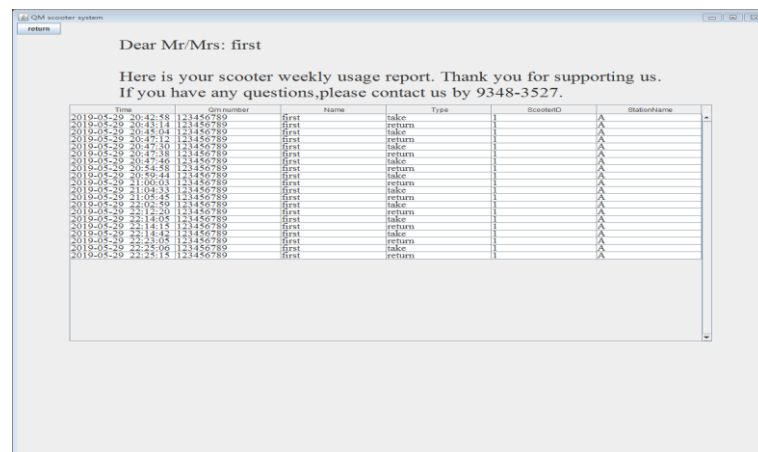
QM scooter system

return

You owe me! Plz pay your fine through my account

Figure B.11

Click '**Check Report**' to check your weekly usage report.



QM scooter system

return

Dear Mr/Mrs: first

Here is your scooter weekly usage report. Thank you for supporting us.  
If you have any questions, please contact us by 9348-3527.

Time	Qm number	Name	Take	Type	ScooterID	StationName
2019-04-20 20:42:48	123456789	first	take			
2019-04-20 20:45:14	123456789	first	return			
2019-04-20 20:45:14	123456789	first	take			
2019-04-20 20:47:10	123456789	first	return			
2019-04-20 20:47:10	123456789	first	take			
2019-04-20 20:47:30	123456789	first	return			
2019-04-20 20:47:30	123456789	first	take			
2019-04-20 20:48:48	123456789	first	return			
2019-04-20 20:48:48	123456789	first	take			
2019-04-20 20:50:44	123456789	first	return			
2019-04-20 20:50:44	123456789	first	take			
2019-04-20 21:00:33	123456789	first	return			
2019-04-20 21:04:33	123456789	first	take			
2019-04-20 21:05:15	123456789	first	return			
2019-04-20 21:05:15	123456789	first	take			
2019-04-20 21:07:20	123456789	first	return			
2019-04-20 21:10:45	123456789	first	take			
2019-04-20 21:14:05	123456789	first	return			
2019-04-20 21:14:05	123456789	first	take			
2019-04-20 21:16:18	123456789	first	return			
2019-04-20 21:16:18	123456789	first	take			
2019-04-20 21:25:06	123456789	first	return			
2019-04-20 21:25:15	123456789	first	take			

Figure B.12



**That's all for our system, thanks for your reading.  
Hope you enjoy using it and have a nice day!**