

StaticDistancing

If number of current visitors does not exceed the maximum capacity of the spot:

```
Welcome to the hospital
Due to the pandemic, we require visitors to enter their visit details in this system

Restricted Spots in hospital:
1) ICU
2) out-patient visitors' main waiting area
3) in-patient visitors' waiting area'
4) medicine dispensary unit waiting area'
5) Administrative office

Please enter the id of the restricted spot you would like to enter:1

You've chosen to enter spot 1

The number of people in this spot now is 8

The maximum human capacity in this spot is 50 people, it has not exceeded its maximum yet, welcome!

System update: the spot capacity is now 9
```

If spot has reached its maximum capacity and the user still wishes to enter the same spot:

```
Welcome to the hospital
Due to the pandemic, we require visitors to enter their visit details in this system

Restricted Spots in hospital:
1) ICU
2) out-patient visitors' main waiting area
3) in-patient visitors' waiting area'
4) medicine dispensary unit waiting area'
5) Administrative office

Please enter the id of the restricted spot you would like to enter:2

You've chosen to enter spot 2

The number of people in this spot now is 30

The spot has reached its maximum capacity (5) , the average waiting time is 40.0mins

Do you still wish to enter (Yes or No)? Yes

The spot is now available to enter, welcome!
```

If spot has reached its maximum capacity and the user wishes to enter another spot:

```
Welcome to the hospital
Due to the pandemic, we require visitors to enter their visit details in this system

Restricted Spots in hospital:
1) ICU
2) out-patient visitors' main waiting area
3) in-patient visitors' waiting area'
4) medicine dispensary unit waiting area'
5) Administrative office

Please enter the id of the restricted spot you would like to enter:2

You've chosen to enter spot 2

The number of people in this spot now is 20

The spot has reached its maximum capacity (5) , the average waiting time is 40.0mins

Do you still wish to enter (Yes or No)? No

Would you like to visit another restricted spot within the hospital (Yes or No)?
Yes
Welcome to the hospital
Due to the pandemic, we require visitors to enter their visit details in this system

Restricted Spots in hospital:
1) ICU
2) out-patient visitors' main waiting area
3) in-patient visitors' waiting area'
4) medicine dispensary unit waiting area'
5) Administrative office

Please enter the id of the restricted spot you would like to enter:
```

If spot has reached its maximum capacity and user chooses to quit:

```
Welcome to the hospital
Due to the pandemic, we require visitors to enter their visit details in this system

Restricted Spots in hospital:
1) ICU
2) out-patient visitors' main waiting area
3) in-patient visitors' waiting area'
4) medicine dispensary unit waiting area'
5) Administrative office

Please enter the id of the restricted spot you would like to enter:2

You've chosen to enter spot 2

The number of people in this spot now is 36

The spot has reached its maximum capacity (5) , the average waiting time is 40.0mins

Do you still wish to enter (Yes or No)? No

Would you like to visit another restricted spot within the hospital (Yes or No)?
No
Thank you for using the app.
```

DynamicDistancing

User is in safe dynamic distance:

```
Please enter your physical distance from other people in immediate surrounding in four diffrent directions (in meters)
Front:
1
Back:
2
Left:
2
Right:
4

Your distance from people surrounding you:
      1.0
      |
      |
2.0----|----4.0
      |
      |
      2.0

you are safe in dynamic distance!

1)Add new visitor
2)Exit
```

User has violated safe distancing rules:

```
Please enter your physical distance from other people in immediate surrounding in four different directions (in meters)
Front:
1
Back:
2
Left:
2
Right:
0.5

Your distance from people surrounding you:
      1.0
      |
      |
2.0----|-----0.5
      |
      |
      2.0

move left 0.50 meters

You have been classified as casual contact, please provide us your details:
Your ID:
```

Provide casual contact details:

```
You have been classified as casual contact, please provide us your details:
Your ID:
20408309
Your name:
Lim Bing Qian
Your phone number (+60):
01123458689
Date you entered the spot (dd/mm/yyyy):
29-08-2023
Time you entered the spot(hr:min):
15:09
|
Your casual contact details:

ID: 20408309
Name: Lim Bing Qian
Phone Number: 01123458689
Date you entered the spot: 29-08-2023
Time you entered the spot: 15:09
Restricted spot id you entered: 1
Restricted spot name you entered: ICU

You will be contacted at least once in the next seven days to make sure you are safe

1)Add new visitor
2)Exit
```

Write into file (casual_contact_details.txt):

```
ID: 20408309
Name: Lim Bing Qian
Phone Number: 01123458689
Date you entered the spot: 29-08-2023
Time you entered the spot: 15:09
Restricted spot id you entered: 1
Restricted spot name you entered: ICU
Contact Status: Casual Contact
```