

### Bus Table:

Bus Number	Bus ID	Status	No. Of Passengers On- board	Bus Current Position
1	1-001	T	2	10012
1	1-002	T	1	12332
1	1-003	F	0	-
2	2-001	T	8	34234
3	2-001	T	0	23432
3	2-002	F	0	-
4	2-001	T	10	44534

Note: column 'Status' determines if the bus is on the road or hasn't departed yet.

Passenger Current Position Table:

ID	Passenger Current Position	Bus Current Position

Note: Data will be filled in once passenger click on the ‘On-board’

Waiting...

Bus Number: <div>1</div>	Bus Number	Bus ID	No. Of Passengers On-board
	1	1-001	2
	1	1-002	1

If passenger clicks on 'waiting', they will need to fill in which bus number they are waiting for e.g. waiting for bus number 1.

Then, it will show up 'Bus Number', 'Bus ID' and 'No. Of Passengers on board' where the bus number is 1 and 'Status' is T.

The buses are listed in an order which the nearest one is at the first row.

Once the passenger starts to wait:

- Every 1 minute the app prompts an alert to remind the passenger to click "on board" button as the passengers may forget to do that after they on board. User can cancel a waiting at any time.
- Or if it is possible, there is a device on the bus which can automatically contact with the mobile device and the system will match the passenger with that bus, the passengers do not need to do anything for changing their status.

Van

On-board...

Bus Number:

1



ID	Passenger Current Position	Bus Current Position
1	12332	12332

If passenger click on 'On-board', again they will need to fill in the bus number they are board.

Then the data of their current position will be sent to the 'Passenger Current Position Table' one by one.

(The system?) Select the row from the 'Bus Table' which has the same bus number as the one passenger filled in, as well as the same 'Bus Current Position' of the bus. Then increment the 'No. Of Passengers On-board'.

## Bus Table:

Bus Number	Bus ID	Status	No. Of Passengers On- board	Bus Current Position
1	001	T	2	10012
1	002	T	2	12332
1	003	F	0	-
2	001	T	8	34234
3	001	T	0	23432
3	002	F	0	-
4	001	T	10	44534

ID	Passenger Current Position	Bus Current Position
1	9876	1111
2	2222	2222
3	3333	3333
4	4444	4444

In the 'Passenger Current Position Table', if the 'Passenger Current Position' and 'Bus Current Position' are different (means the passenger has got off the bus), remove that row.

Once the bus arrives terminal point, that bus will be reset in the Bus Table: the 'Status' will become 'F' and 'No. Of Passengers On-board' will be set to 0.

When the passenger click on 'On-board', there will be an alert message, asking for the passenger to answer if the bus has come on time or delayed.

Did the bus arrive on time?

☐ Yes

☐ No

If no, how long did the bus get delayed?