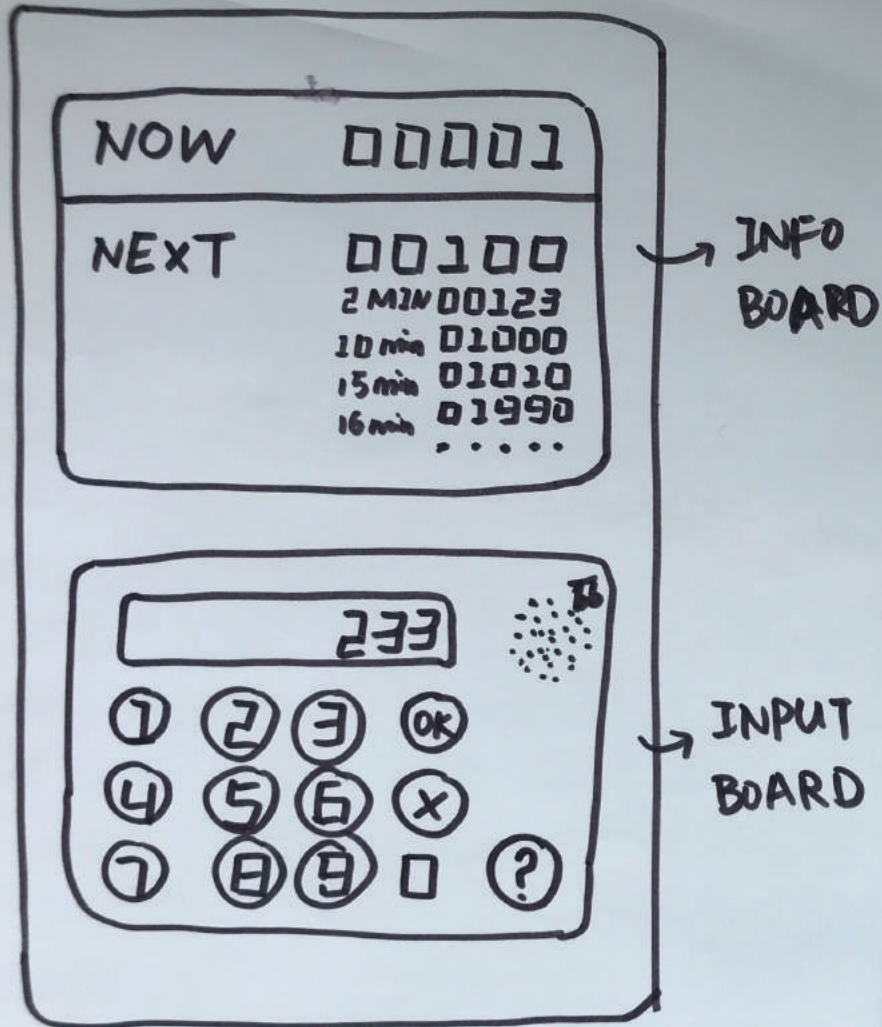


In this assignment, you will design alternative control interfaces for an elevator. A really long elevator. An elevator that can service all of the floors of a 10,000 floor building. Nevermind that such a building, at 30,000 meters (100,000 feet, or roughly 3-4 times higher than Mt. Everest) could probably not be built given current technology. Do consider, though, that at 20.5 m/s (the current top speed for an elevator, a record held by Shanghai Tower), it would take nearly 30 minutes to reach the top floor if there were no stops in between. Also consider that an elevator servicing so many floors would need to move a lot of people, suggesting a capacity of dozens, if not hundreds, of passengers.

There are three components to this assignment:

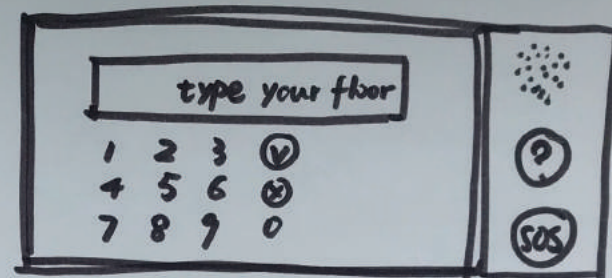
1. Sketch 10 different designs for a control interface for such an elevator. Keep in mind that such an interface would make riders aware of the elevator status (current floor, time to desired floor) as well as providing control. Keep in mind, also, that you can take advantage of multiple points of interaction, including panels in the elevator or lobbies, personal devices, wearables, etc.

Sketch 1

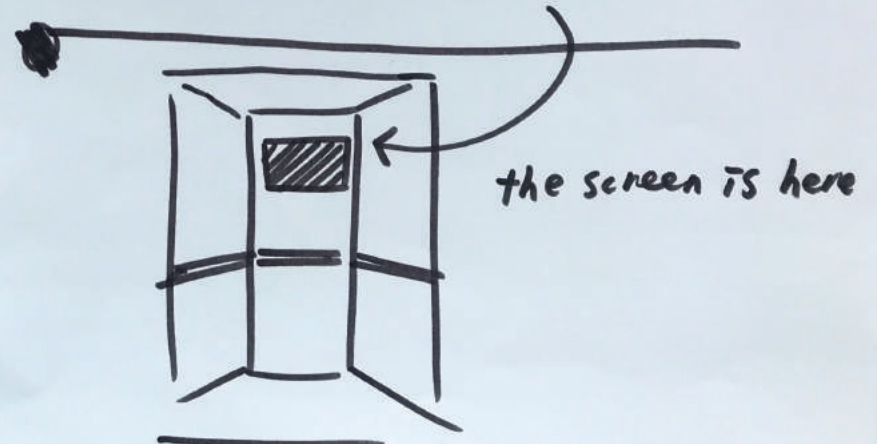
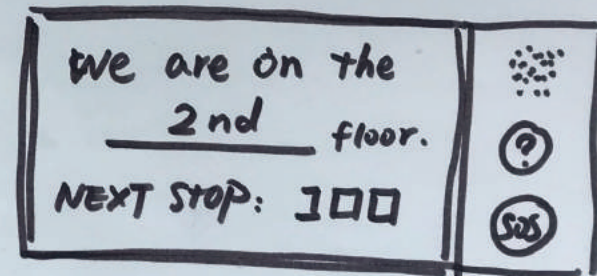


Sketch 2 A Screen

③ Everytime People comes in



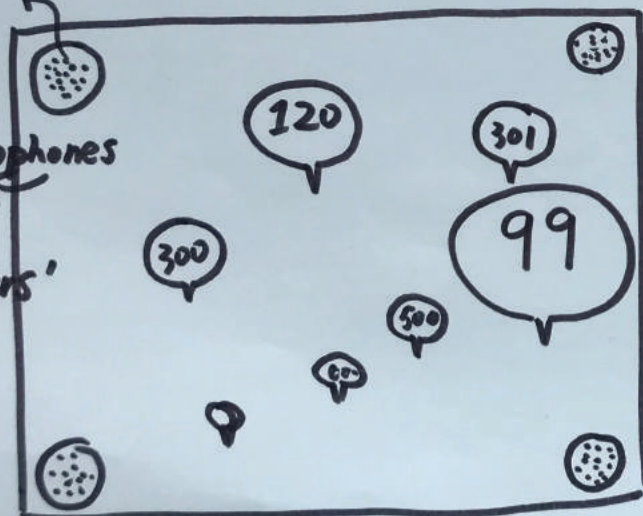
③ once the elevator works



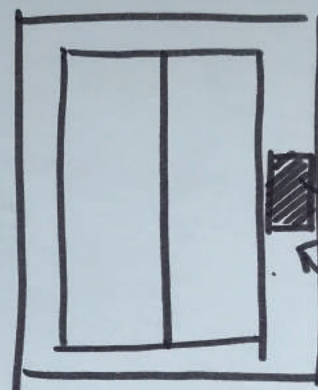
Sketch 3 A SCREEN ON THE CEILING



Microphone
AI and
the microphones
detect
customers'
sound



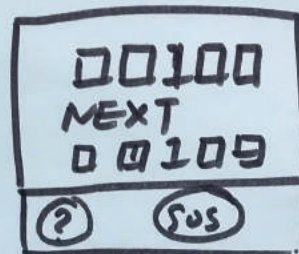
Sketch 4



outside the
elevator
on every floor



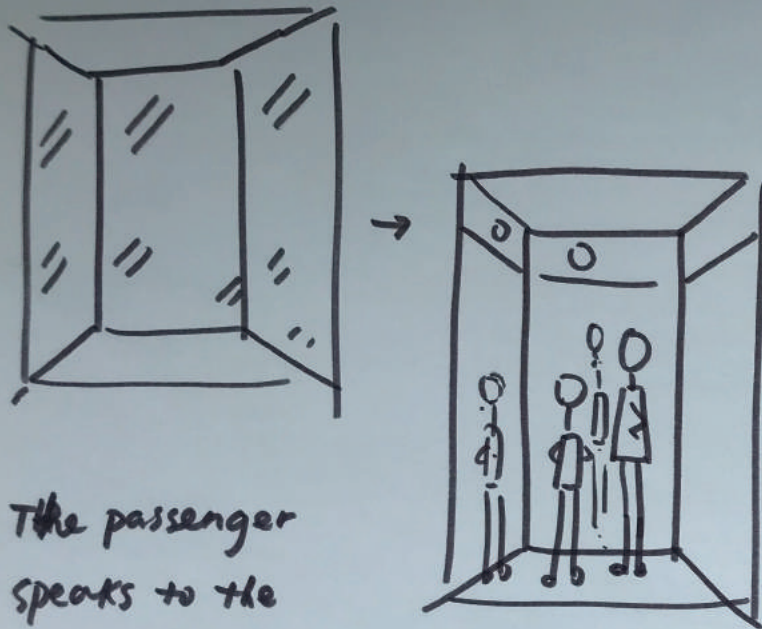
type which floor
you're heading
before taking the
elevator



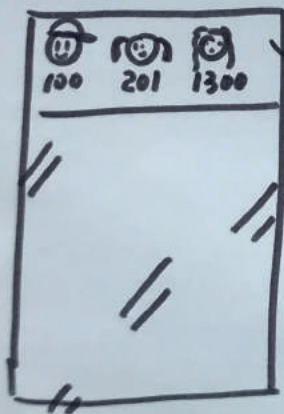
→ inside the
elevator
only show the status

Sketch 5

MIRRORS!

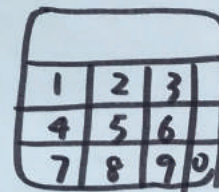
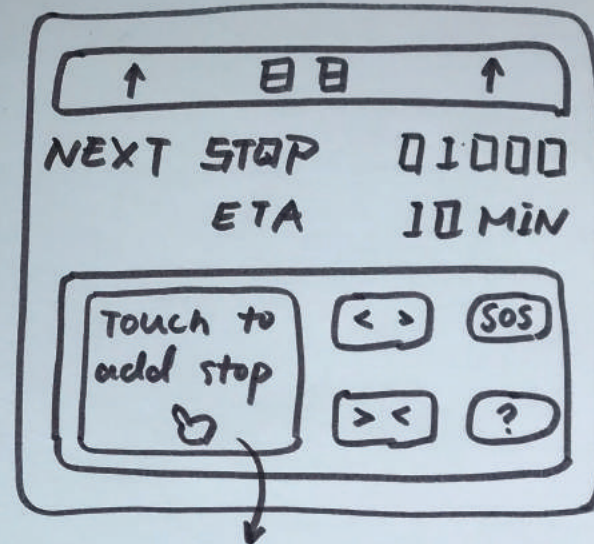


The passenger speaks to the mirror wall the wished stop.



on the top of each mirror will show the relevant information.

Sketch 6



SKETCH 7

	9	3	2
1	0	4	3
0	1	5	4
	2	6	5
	3	7	6

OK

X

NEXT STOP	100
EST	505

<|> >|< SOS ?

criteria:

- ① easy to ~~use~~ field stops
- ② relevant information
- ③ easy to understand.

Sketch 8

↓ 22 ↑

next stop	100
EST	505

9 8 7

6 5 4

3 2 1

delete 0 Enter

100	X
130	X
300	X
500	X
502	X

◀|▶

▶|◀

SOS ?

Sketch 9

Current status
 222 ↑

250 ⊗
 260 ⊗
 500 ⊗
 520 ⊗
 580 ⊗

ADD STOP		
9	8	7
6	5	4
3	2	1
⊙	0	⊗

<1> >1< SOS ?

SKETCH 10

NEXT stops		ADD stops	Settings
208	505		<1> >1<
500	1005	1 2 3	History
550	1025	4 5 6	xx
800	3005	7 8 9	xx
810	4005	0 0 ✓	SOS ?
909	5005		

2. Reflect on your initial sketches, and determine which design ideas are the most promising and worthy of further development. From these ideas, determine a set of criteria (characteristics that a successful design solution for this problem should have) and a set of constraints (factors that limit what design solutions would work--these could be technical, social, ergonomic, etc.) **Write down 3-5 criteria and/or constraints, with a brief (2-5 sentence) explanation of how you derived these criteria/constraints from your initial assignment.** Your resulting criteria/constraints should be narrow enough so that at least some of the ideas from your initial round of sketching would be excluded, but broad enough that several different particular designs would still be possible.
3. Keeping in mind your criteria and constraints, generate 10 new sketch ideas, attempting to diversify your ideas as much as possible within the established constraints.

Criteria

1. Easy to understand

it shouldn't take too much time for the user to interact with the interface. Thus, making the UI easy to understand and using some common UI elements are very necessary.

2. Editable

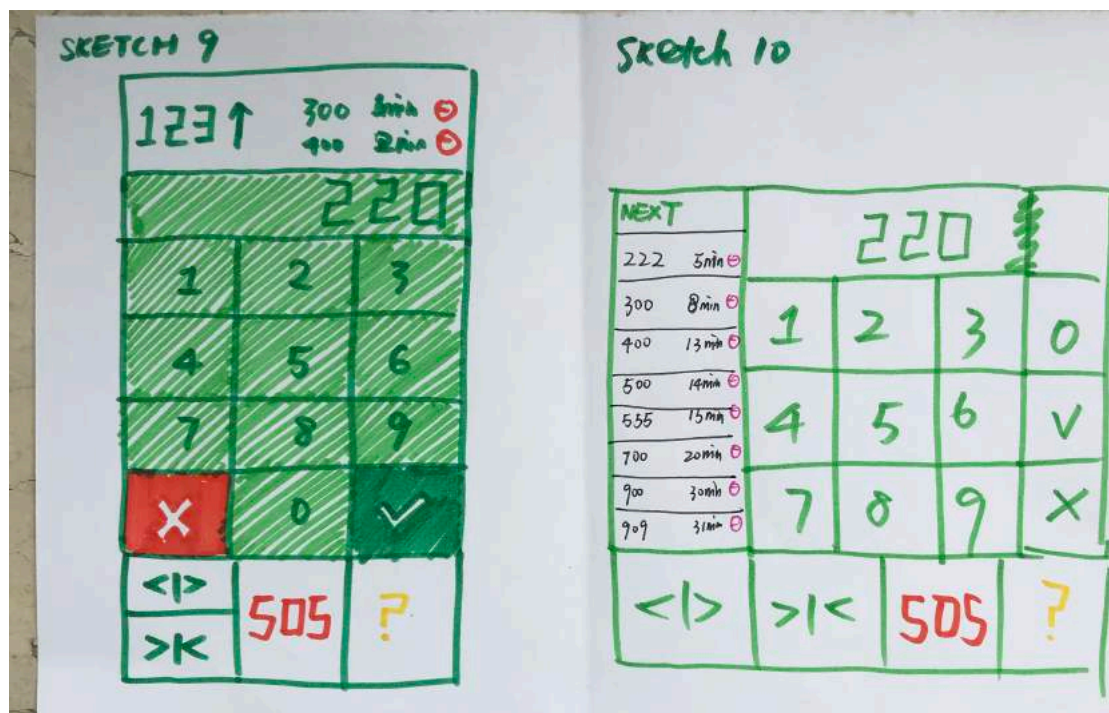
it is possible that the user type a wrong floor. Thus, the system should provide user the opportunity to edit or delete the wrong ones.

3. Consistency

The UI should present the same Aesthetic style or design language.

4. Help/SOS

The system should provide users help when they have difficulty in dealing with the interface and also SOS button when they need emergency call.



Sketch 1

NEXT STOPS			
208	205	600	820
210	805	607	890
450	405	808	999

ADD STOPS			
3	4	5	6
0	5	6	7
	6	7	8

V

<1>

>1<

SOS

?

Sketch 2

NEXT STOPS			
208	205		
300	1min		
307	2min		

	4	5	6
0	5	6	7
1	6	7	8

<1>

>1<

SOS

?

Sketch 3

NEXT STOPS			
208	205		
300	1min		
307	2min		

	4	5	6
0	5	6	7
1	6	7	8

V

<1>

>1<

SOS

?

Sketch 4

↓
208
↑

NEXT STOPS			
300	1min		
330	2min		

	4	5	6
0	5	6	7
1	6	7	8

ENTER

<1>

<1>

SOS

?

SKETCH 5

↓ 208 ↑

NEXT STOPS 300 1min (X)
400 8min (X)
500 10min (X)

ADD STOPS

0	4	5	6	✓
1	5	6	7	
	6	7	8	

<|> >|< SOS ?

SKETCH 6

↓ 208 ↑ NEXT 300 1min (X)
400 8min (X)
500 12min (X)

	4	5	6	+
0	5	6	7	
1	6	7	8	

<|> >|< ? SOS

SKETCH 7

CURRENT	NEXT
↑ 222 ↓	300 1min X 400 8min X 500 12min X

ADD

→ 0	4	5	6
1	5	6	7
	6	7	8

✓

<|> >|< SOS ?

SKETCH 8

↑ NEXT 300 1min (X)
222 400 8min (X)
↓ 500 12min (X)

1	2	3
4	5	6
7	8	9
X	0	ADD

<|> >|< SOS ?