

✓ Peer-graded Assignment: 10,000 Floor Elevator

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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.
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.

For the peer assessment, please submit all 20 sketches, clarifying which are the "first 10" and which are the "second 10."

Review criterialess

Below is the list of criteria that will be used to evaluate your submissions:

Sketches: How many ideas were submitted?

Clarity: How clear are the ideas and sketches?

Diversity: How unique were the ideas?

Convergence: Were design constraints and/or criteria clearly explained?

Constraints: Did the ideas presented work within the established criteria and constraints?