

Assignment 1 – Bad and good interface designs

1. Bad user interface design example

Door placement in trams in Almada



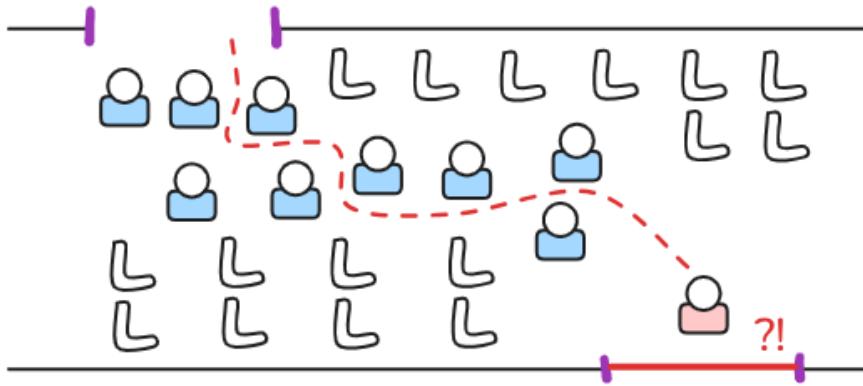
Objective:

Provide commuters a way to get on and off the vehicle (in a fast and convenient way ideally).

Bad aspects:

Doors in trams in Almada are placed on both right and left side of the vehicle. Sometimes just on one of the sides, sometimes on both. This is an example of a bad design which is not so obvious for a person who is used to it.

A commuter needs to know on what side the door open on a specific stop, or quickly react. This becomes a problem when a tram is full. This problem is worse if the passenger is new to the route or simply wasn't paying attention. They might be standing right by one door waiting to get off, only to discover that the doors on the opposite side are opening at that particular stop. Suddenly, they must squeeze through the crowded tram to make their way to the correct exit. Illustrated on picture below.



Multiple times I have observed that people did not make it on time and once it happened to me.

Another bad aspect is that on each stop the amount of doors used is only a half of all the doors which makes the throughput to be also at only 50%. This might cause that there are more doors in total, but that takes away the area where chairs could be placed in tram.

I can observe the difference because the opposite approach is used in the city of Poznań where I come from. Trams have doors only on the right side there. Because of that, the rails always stay together which also makes less confusion when looking at the stops. I can see that there is more space and chairs in Poznań trams and always 100% of doors is used which makes the throughput larger.

Why was it designed that way (and good aspects):

It was intended to make a tram work both ways without needing a loop to turn around (to place doors on correct side). This saves some money and space, but makes it less convenient for the passengers everyday.

Correction would be to create loops at the end of each line and create trams with doors on just one side with more chairs, but I understand it would be costly.

2. Good user interface design example

Books – for-edge chapter indexing



Objective:

Fast navigation throughout a book chapters. Showing current chapter.

Good aspects:

The benefits of this system are primarily speed, intuitiveness and usability, especially for non-linear reading. The "thumb ones" are particularly good because they are tactile; you can find a section by feel and open the book with one hand, which is ideal for large reference volumes. The printed "normal indexes" are visually powerful; they can use color to create a "map" of the book, showing you the length and position of each section instantly. An advantage of this concept is its adaptability: if a book doesn't include these, you can do it yourself by drawing on the edge of the book. The chapter indexes not only can be seen and utilized by looking from the side, but also on the page itself they can show to which chapter this page belongs by stating its name in the field. The thumb indexes can be also profiled for left on the first half of pages and right thumb on the second half to make it easier to grab the page stack. This design is a lot faster and more convenient compared to looking at the table of contents and finding the desired page every time.

