

## CSE 510 – Lab 1 : Muthukaruppan Annamalai

I have seen a number of my friends having extraordinary trouble reading the time off their watches. No, they are not mentally challenged. In fact, a majority of them, I believe, are above the average IQ. Hence, I decided to do a small study on why they were having such difficulty. Going through why each of their watches is ill-designed would be a tedious, time-consuming task. Therefore, I decided to pick the most ill-designed of the lot.

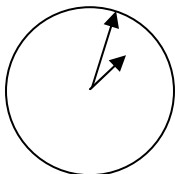
### Design

I have a few pictures of the watches which are similar to the most ill-designed watch that I had found in my group of friends. Notice anything similar between the watches? The background, over which the dials are placed, do not have any markings on them to enable the user to see the time immediately. These watches are designed just like normal watches apart from the fact that there would be markings on normal watches. In a normal watch, every hour has its own mark, and between two hour marks, you might find more finer marks.



### Problems with the design

Assume that the user is in a haste, and sees the following on his/her watch:



It would be very unclear for the user without the marks to make out quickly whether the time is 2:05 or 1:05. Of course, a little bit of constant and determined staring at the dials and making some intuitive calculations would convince the user that 2:05 seems a more likely candidate. The time taken to arrive at this conclusion is rather time consuming and not a very pleasant process if you are in the habit of looking at the time once every ten minutes. The main problem arises, when the user is in a hurry and wants to know the time fast. In such circumstances, this would turn out to be a rather big pain.

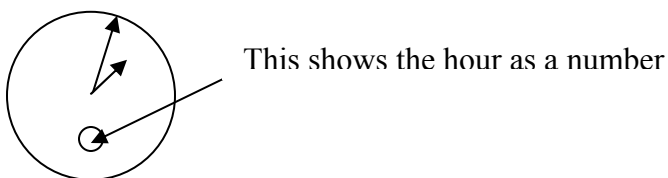
### **Possible intentions for the design**

Though it is rather difficult to read the time off the watch, I can see a number of reasons as to why the designers went down such a path. Firstly, with markings, the watch becomes greatly crowded, hence, eliminating them gives an elegant spacious look. The second reason is that such watches are considered to be a part of the fashion trend, hence users wanting to show-off their in-fashion tastes would opt for the watch.

But aren't these people bothered about the ease of reading the time off their watches? The watch is not the only source of time, lots of us, despite wearing watches would tend to look at the time on our cell phones, because the time is digitally displayed there. Many people buy such watches but do not wear them on a daily basis, instead, they wear them only on special occasions to look and feel good.

### **Design improvements**

It is difficult to maintain the aesthetic appeal of these watches and to improve ease of reading the time off them. However, even small non-glaring marks might solve the problem. Another solution would be to have a small number indicating the hour, as shown below:



If the user is in doubt of what the hour hand is pointing to, then he/she can quickly glimpse at the number at the bottom. Though this slightly improves timing and accuracy, it is still not as good a solution as having small marks. Another possible solution is to produce these marks using light, hence allowing the user to switch them off if not required. The user gets the best of both worlds this way.