

## 5 Interaction Design (hg410)

Nowadays, timepieces (such as clocks, wristwatches, etc.) have a variety of functions. They not only tell the time and date but they can speak to you, remind you when it's time to do something, and provide a light in the dark, among other things. Mostly, the interface for these devices, however, shows the time in one of two basic ways: as a digital number such as 23:40 or through an analog display with two or three hands – one to represent the hour, one for the minutes, and one for the seconds.

In this question, we ask you to design a new timepiece for your own use. This could be in the form of a wristwatch, a mantelpiece clock, an electronic clock, or any other kind of timepiece you fancy.

- (a) Think about the interactive product you are designing: describe what you want it to do for you. Write a list of functional and non-functional requirements. [4 marks]
- (b) Sketch out an initial low-fidelity prototype for the timepiece and develop at least two distinct alternatives that both meet your set of requirements listed above. [8 marks]
- (c) Nielsen's heuristics used for Heuristic Evaluation are: (1) visibility of system status, (2) match between system and real world, (3) user control and freedom, (4) consistency and standards, (5) error prevention, (6) recognition rather than recall, (7) flexibility and efficiency of use, (8) aesthetic and minimalist design, (9) help users recognize and recover from errors, and (10) help and documentation.

Evaluate the two low-fidelity prototypes using Heuristic Evaluation. [8 marks]