

10 Further Human–Computer Interaction (afb21)

This question relates to the design of an online tool for use by a local radio station, that can be used to more efficiently generate scripts for their bulletins. The station manager has asked you to investigate whether presenters could ask ChatGPT to automatically generate the evening weather report, which typically includes a summary of today’s weather, and forecasts for tomorrow and the rest of the week.

- (a) Sketch a user interface that might be used as the front end to a generative AI large language model, as an alternative to the standard conversational style of interaction with ChatGPT. [3 marks]
- (b) Add labels to refer to two specific parts of your sketch, and explain how the graphical properties of those elements correspond to their function within your design. [4 marks]
- (c) What analytic method could be used to predict whether your alternative design would be more time-efficient than the standard style of interaction with ChatGPT? [1 mark]
- (d) Based on the analytic method that you suggest, provide calculations for an estimated (within an order of magnitude) comparison of (i) the station manager’s suggestion to use ChatGPT, and (ii) the use of the user interface you have sketched, in a typical usage. [4 marks]
- (e) Describe an empirical approach that could be used to evaluate whether the estimates that you have calculated are justified. [4 marks]
- (f) Describe up to four further considerations, beyond time-efficiency, that might be relevant to the station manager’s decision to deploy such a tool. Make specific reference to topics from the HCI literature, e.g. from the lectures, notes or readings, but not media reports of AI. [4 marks]