

10 Further Human–Computer Interaction (afb21)

- (a) Explain the aspects of goal-directed human behaviour involved in the phenomenon of bounded rationality, including the role of heuristics and satisficing. [2 marks]
- (b) How do these principles apply when using an internet search engine to buy a product online? [2 marks]
- (c) What will change, by reference to these principles, if the search interface is modified to include an AI-generated summary before the list of results? [2 marks]
- (d) Sketch the design for a graphical browser add-on that would allow a user to specify a policy for their own future online search. The interface should allow the user to specify a condition and corresponding action. For instance, for any given new content, a user might want to default to using Bandcamp, where they can pay the artist directly, rather than using Spotify for streaming. Your add-on should be sufficiently general to support users in many different market domains. [4 marks]
- (e) Give an example of a prompt that might be used when directing an LLM to automatically implement the same kinds of policy supported by the interface you sketched in Part (d). [2 marks]
- (f) Use the cognitive dimensions of notations framework to compare four usability aspects of the two approaches in Part (d) and Part (e). [8 marks]