8 Further Human–Computer Interaction (lec40)

The design of conversational agents such as Echo or Siri has become very conventional with an activation phrase (e.g. 'hey assistant') and an action phrase (e.g. 'play encouraging music'). You're acting as the HCI researcher for a startup intending to disrupt the market by producing a radically different interaction design for the assistant you're developing.

(*a*) What is a usability problem with conversational agents?   [1 mark]

(*b*) Why is iterative design important? What are the convergent and divergent phases of a design process?   [3 marks]

(*c*) How would you go about performing the divergent phases on this project? What would you expect the output to be?   [4 marks]

(*d*) How would you go about performing the convergent phases on this project? What would you expect the output to be?   [4 marks]

(*e*) After following this process you have a candidate design. What are two properties that the design should have?   [2 marks]

(*f*) For *each* property, (i) name the underlying theory, (ii) what approach you would take to testing whether the design has that property, and (iii) a limitation of your method.   [6 marks]