Lecture - 10:
Individual differences

Logistics

- 14 Feb (Fri) : Quiz (all things humans)
- 21 Feb (next Friday): No lecture
- 18 Feb (Tues): Regular lecture
  - Additionally, makeup lecture Tu 6-7:15pm.
  - One of this is a guest lecture on humans using AI!

- We start on projects next week
  - Groups of 3, start forming them.
  - Some projects seeded, but you can also pick your own.
  - Details on Tuesday
  - Project proposal and teams due before midterm.

Recap

- Humans
  - I/O
  - Attention, Memory, Learning, Thinking, Emotions
  - Broadly about humans in a variety of contexts

- Today
  - Motivation (broadly about humans)
  - Individual differences

Motivation

- Is what “drives” / “propels” people to do something
- It is an internal state of a person (w.r.t an action/behavior)
  - Goal/direction, Intensity, Duration
- Various kinds:
  - Intrinsic → From within (e.g., joy): “Activity for its own sake”
  - Extrinsic → From outside (e.g., penalty, reward): “For its desirable outcome”
  - The two can strengthen / be against each other; can change
  - In general, intrinsic is better.

Motivation

- Intrinsic vs. extrinsic
- Short term vs. long term
- Rational vs. Irrational
- Egoistic vs. Altruistic

- Opposite of motivation
  - Apathy (Don’t care)
  - What about avoidance?

Useful in HCI for a variety of reasons

- Why people do stuff has a bearing on…
  - How much they invest in learning
  - How much they invest in doing something
  - The quality of outcomes
  - Experience / pleasure derived out of a task

- Used widely in various tools we use
  - Exercise trackers, fitness trackers
  - Todo lists
  - Education
  - …

Individual differences

- So far, what we did is about what is common across people
  - … or groups of people

- If everything was common, we'd all be similar
  - And the same HCI should work for everyone / groups of people.

- But, turns out not!
  - People are different
  - Differential psychology → what makes people different
  - Individual differences & factors governing them
  - Some are very relevant to HCI

Individual differences

- Motivations itself → levels of motivation, persistence, etc.
- Tech use motivation → technophilic vs. get stuff done
  - There are also technophobic people
- Age
- Gender
- Skills, expertise levels
  - Multi dimensional → domain, device, tech, etc.
  - Literacy (incl. in language)

Individual differences: Cognitive styles

- Learning styles: tinkering vs. systematic/structured
- Decision making:
  - Risk-aversion
  - Reflective vs. impulsive
- Information processing:
  - Holistic vs. analytic
  - Verbal vs. Imagery
  - Holism vs. Serial
  - Abstract vs. concrete

Other known differences in individuals

- Personality types (e.g., introversion vs. extraversion)
- Linguistic (incl. L to R, R to L, languages without scripts, literacy)
- Disabilities (incl. invisible ones)
- Neuro-diversity
- Cultural differences

UI/UX is hard…

- … because of such individual differences, on top of cognitive limitations
- Almost all of them are often at play

- How do we design for everyone, then?
  - Impossible, but we try to cover as much ground as we can
  - Start by listing these, and then covering both ends of the spectrum of your target user groups
  - What is the target user groups characteristic? – LATER

Questions?

Quiz papers

- Take them from the pile
- Check (total, grading, etc.)
- If there is a question, please write your question at the very top.
- Submit it back (even if you don’t have corrections)
  - Grades haven’t been recorded
- 2 scripts don’t have names; write them in and submit.

- REMEMBER TO PUT ALL YOUR SCRIPTS BACK