CPT208 Human-Centric Computing

04. Design alternatives

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Agenda

- Identify the problem you would like to solve in your project
- Find existing solutions for similar problems
- Brainstorm design alternatives for the solution
- Link the alternative design to design principles

Identify the problem

- What is the problem
  - Usability vs. user experience
  - For whom
  - In which ways
- How important is the problem
  - How many will be affected
  - How serious it is
  - How difficult to solve

Identify the problem

- Which is **NOT** an appropriate design problem
  - If it is not related to **Human**
  - If it is a **Need** instead of a **Feel**
    - Need is just the beginning, how to **WELL** satisfying the need is the design
  - If it is related **purely to technical issues**
    - **DON'T** say more accurate or quicker
  - If it is **imagined**
    - Design a translator for aliens…

Identify the problem – about AI

- AI is **not a universal solution** to every problem
- If you would like to include AI, you must be noticed that:
  - **the role of AI in your project**, and why it cannot be replaced by other simple solution
  - if the solution relies on the improvement of AI algorithm or accuracy, then it is not acceptable
  - if you do not improve the experience in using AI, it is also not acceptable

Existing solutions

- No need to find existing solutions for the whole project
  - Could only be related to part of your project, but it must be one of your design focuses
  - Find the latest ones
  - Try to search as many as possible, at least to include the most popular ones
  - Evaluate their shortcomings in design

Design alternatives

- Be creative and include all members in the discussion
  - Try to provide **at least two alternatives** for each design
  - Identify the improvement in alternatives comparing with existing solutions
  - Link with the next step – design principles

Design principles

- Although this is the last step, but keep in mind this will affect all previous steps
  - List the principles that existing solutions have violated or your designs will improve
  - Provide the description of how and why this principle could be met in your solution

In short

- What is the issue you want to solve?
- What is the solution you want to provide?
- What design should be made to make the solution acceptable/enjoyable/bearable....?

Any Questions?

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