Design THINKING

UNIT 3A

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REVIEW OF TAKE HOME ACTIVITY

DEFINE PHASE: ACTIVITY

Add observations, and find the needs and insights.
Then write two problem statements, then modifying it to ‘how might we’ question. (one of it should lead to a hardware design, one a service design).

DEFINE PHASE: ACTIVITY

1. Healthcare workers are not getting 3rd dose in time.
2. Many healthcare workers are dying due to the pandemic.
3. The hospitals and the healthcare workers are overwhelmed by the number of patients.
4. The healthcare workers involved in treating cancer/ TB and other diseases don't have patients due to pandemic.
5. When there is lockdown, healthcare workers find it difficult to commute.
6. .....

SUMMARY

EMPATHIZE PHASE: Identifying with the user

- Be aware of the bias that you have
- Conduct interviews: Design broad questions, identify the end user, and conduct the interview
- Take down the observations
- Immerse yourself in the problem to identify the root
- Conduct research to gather more information about the design question
- Build an empathy map

DEFINE PHASE: Identifying the need

- Synthesize needs and insights: Group the observation and identify the needs. Structure it with cause of user behavior to get insight.
- Build an actionable problem statement.
- Modify it to ‘how might we’ question

IDEATE PHASE

Use what you've learnt from the empathy work to generate multiple solutions for the problem statement devised.

Step 1: Generate MANY ideas

Step 2: Choose the most intriguing and optimal solution

Demystifying creativity

Myth 1: Ideas are generated by lone **geniuses**

Myth 2: Ideas are generated by **lone** geniuses

Did you think Thomas Edison sat alone in a garage and thought of solutions?

Demystifying creativity

Truth 1: With practice, anyone can generate good ideas

Truth 2: Good innovators also need a team! And need to stand on the shoulders of giants!

Thomas Edison worked with a team of 40 people in a large-scale research lab

Find the predecessor

Volunteer!

One student is to mention a modern day invention, others have to say what were its predecessors, and what theories had to be in place for the invention to come about

IDEO – Shopping cart challenge

www.youtube.com/watch?v=M66ZU2PCIcM

IDEO – Shopping cart challenge

PRINCIPLES

- One conversation at a time
- Stay focused
- Encourage wild ideas
- Defer judgment
- Build on the idea of others

Pre-Brainstorming: Mindset, Warm-ups

- **Practical Optimism**: Positive thinking + Beneficial action = Good results
- Knowing that **getting stuck** is ok! (Activity of the circles)
- **Help improvise others' ideas:** Try not to say 'Yes, but'. . Try saying 'Yes, and'

Divergent thinking

- **Quantity better than Quality**: Do not try to fine tune your idea. Work on getting many ideas

- **Encourage wild ideas**: Initially it might look pointless, but with practice, you'll be surprised!

Building on ideas

- **Build by ‘plus’sing on ideas of others**: Do not use their ideas/ solutions as such. See how you can improve or customize them.

- **Share your opinions with others**: Use sticky notes (or such) to share your opinions

- **Getting unstuck:** Create subsidiary ‘how-might-we’ question or reframe problem statement.

Convergent thinking:

- When you have enough ideas that appropriately addresses the problem statement, choose the best idea

- **Criteria:** Most likely to make user happy. Most likely to work. Most likely to be interesting.

- **Getting unstuck:** Create subsidiary ‘how-might-we’ question or reframe problem statement.

Make a blueprint

- Can be technical drawings or strategic plan, a website, a flow chart, a story board, or so on.

Take home activity

- In a sheet (for submission) write down different ideas for DIY mechanical games inspired by video games. Then converge to one idea and bring a blue print.

https://youtu.be/BWFtC0GKWf0