

DESIGN THINKING



What is our GOAL for this MODULE?

We learned about the design thinking process and how design thinking can help to get better solutions.

What did we ACHIEVE in the class TODAY?

- We learned about the design thinking process

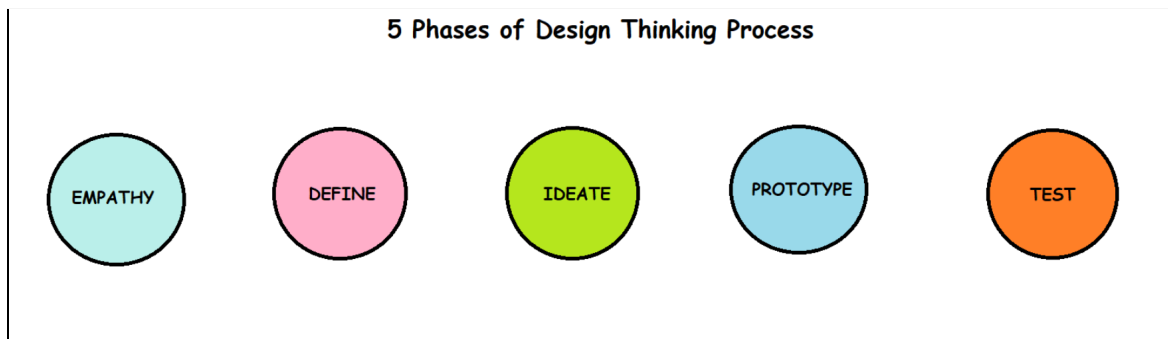
Which CONCEPTS/CODING BLOCKS did we cover today?

- Design thinking process and steps

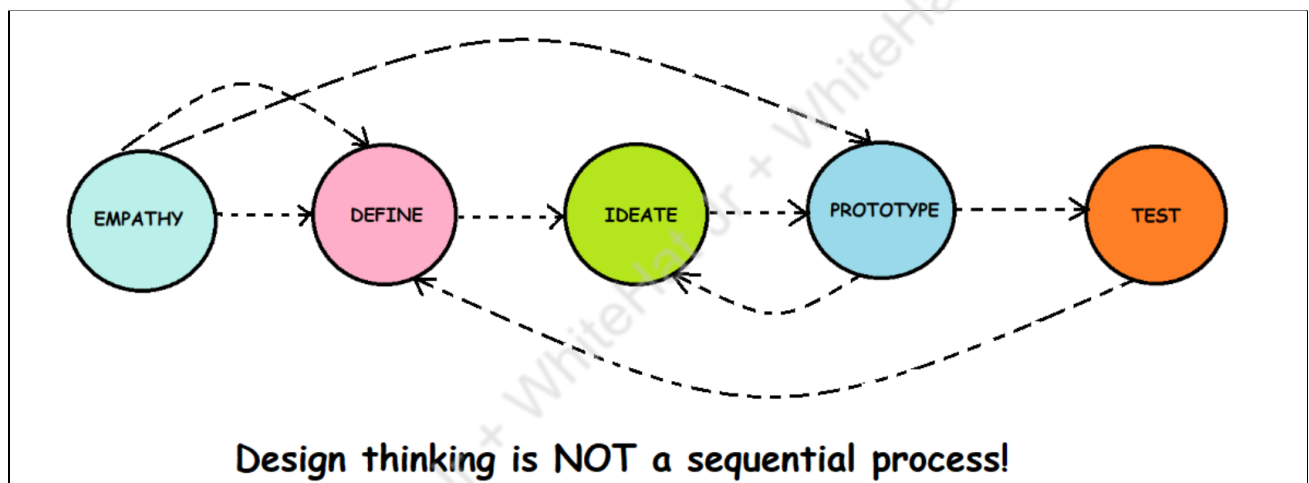
How did we DO the activities?

1. Design thinking process and how it is useful
 - Design thinking is the process of finding innovative solutions to the problems we are trying to solve.
 - The design thinking techniques help us to find user-centric solutions to the problem.
 - It solves 'highly complex, wicked problems' that can't be solved using standard methods.

2. The design thinking process can be divided into 5 key steps:
 - **Empathy:** Getting to know what users want
 - **Define:** Defining the problem in a user-centric way.
 - **Ideate:** This phase focuses on creative idea generation. Ideas for possible solutions.
 - **Prototype:** Sample output. It could be in the form of a sketch, flow diagrams etc
 - **Test:** Testing the result. This phase helps to figure out what will work and what will not.



3. The steps of design thinking need to be repeated again until our solution is refined.



4. Questions to be asked under each phase of the design thinking process.

Phase 1 : Empathize

- What will we make?
- Who all can use this?
- Why should we make this?
- How can we help humans with this application?
- Who all will benefit from this application?
- How can this application help a
- large community?

Phase 2 : Defining

- What is the problem statement?
- What are the challenges that we face?
- Defining a human-centric problem statement?

Phase 3 : Ideation

- What are the elements that we will need?
- How is it going to work?
- How will it be given to end users?
- How is a scene going to look?
- What will be the rules in the game?
- Do we need to assign some points to the players?
- Is it going to be a single player or multiplayer?
- What will be the physics in the game?
- How can physics be implemented in 3D?
- Is there going to be any time limit?

Phase 4 : Prototyping

- Game rules
- Flight controls
- Player movement
- Points to the players
- Single player
- 3D collisions
- Timer
- 3D Text

Phase 5 : Testing

- Issues coming to the trial run?
- How can we fix them?
- Can we improve this prototype or do we need a new idea?
- Did we try it with the end users?
- How was the user's reaction about the product?

We have successfully learned about the design thinking process and the steps involved in coming up with an idea to solve a complex problem.

What's NEXT?

In the next class, you will work on your projects and I will guide you to design your own projects.

EXTEND YOUR KNOWLEDGE:

- You can refer to the link below to explore more about A-Frame
[A-Frame](#)