Design Simulation Activity Instruction

You will need the following types of cards for this activity.

Step 1: Choose a Technology Card

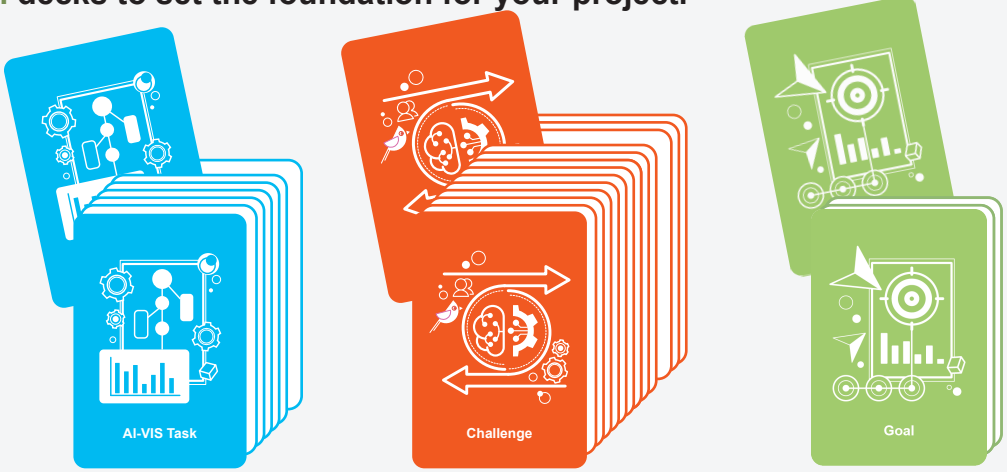
Look through all the Technology cards in the deck and *select one* of your group's interests.

or

You could also *write* or simply *sketch* your own Technology on a blank card.

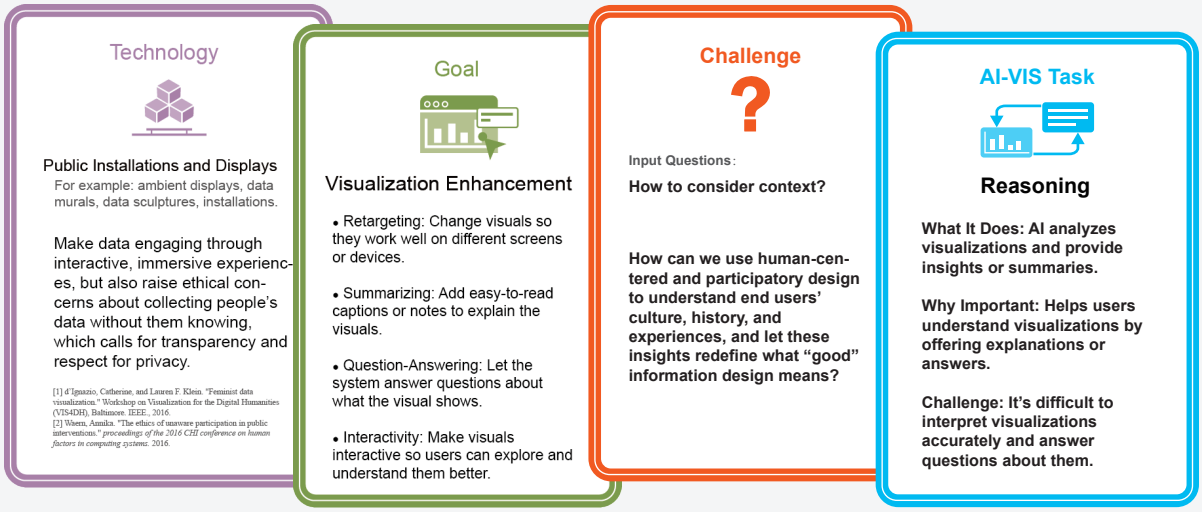
Step 2: Draw Cards

Your group then *randomly draw one* card from the AI-VIS Task, Challenge, and Goal decks to set the foundation for your project.



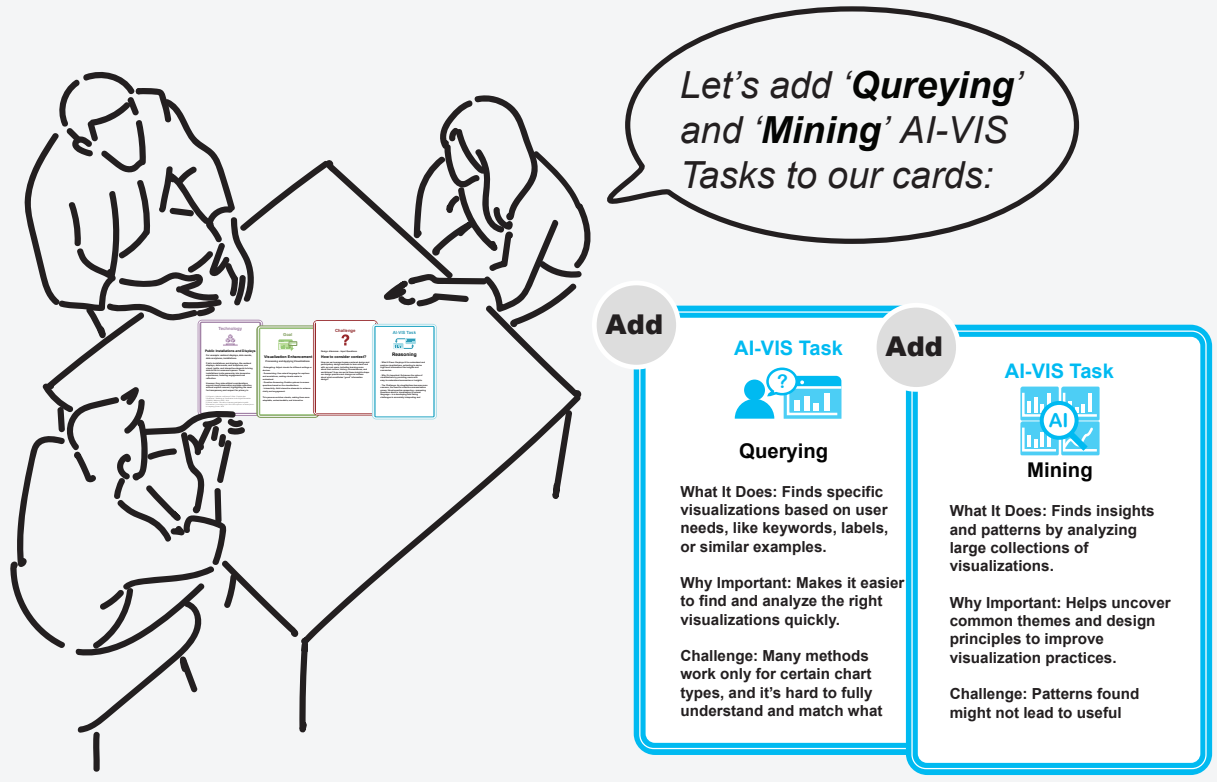
Step 3: Understand the Cards and Brainstorm

For example, if you draw the following cards, your project would use 'Public Installations and Displays' as your technology, include 'Reasoning' as your AI-VIS task, address the 'Consider Context' challenge, and aim for 'Visualization Enhancement' as your goal.

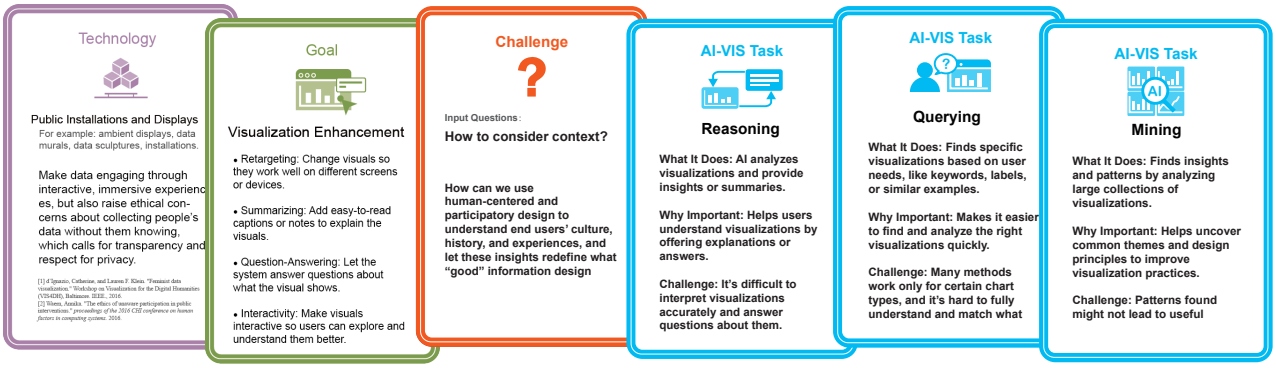


Step 4: Include other AI-VIS Tasks as Needed

As you brainstorm, *consider other* AI-VIS Task cards that relate to your project and *add them* to the original 4 cards from step 3.

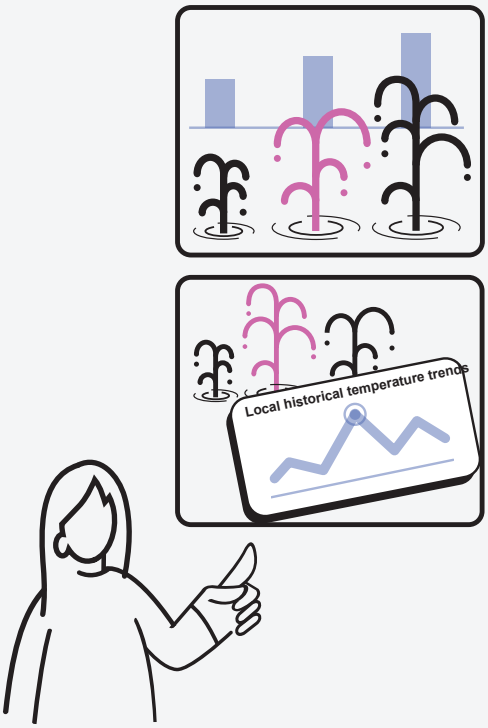


Now, *prepare your story* with these cards from the first 4 steps.



Step 5: Present your Project's Story

Explain how you addressed the challenge and achieved the goal using your chosen tasks and technology. You may also include a sketch of your design to illustrate your solution. **For example:**



Outcome: A public fountain with interactive visuals engages the community on local climate and environmental challenges.

Dataset: Pollution, deforestation, and temperature trends, focusing on regional issues like water scarcity or forest conservation.

Goal: Enhance visualization with engaging, accessible, and interactive displays.

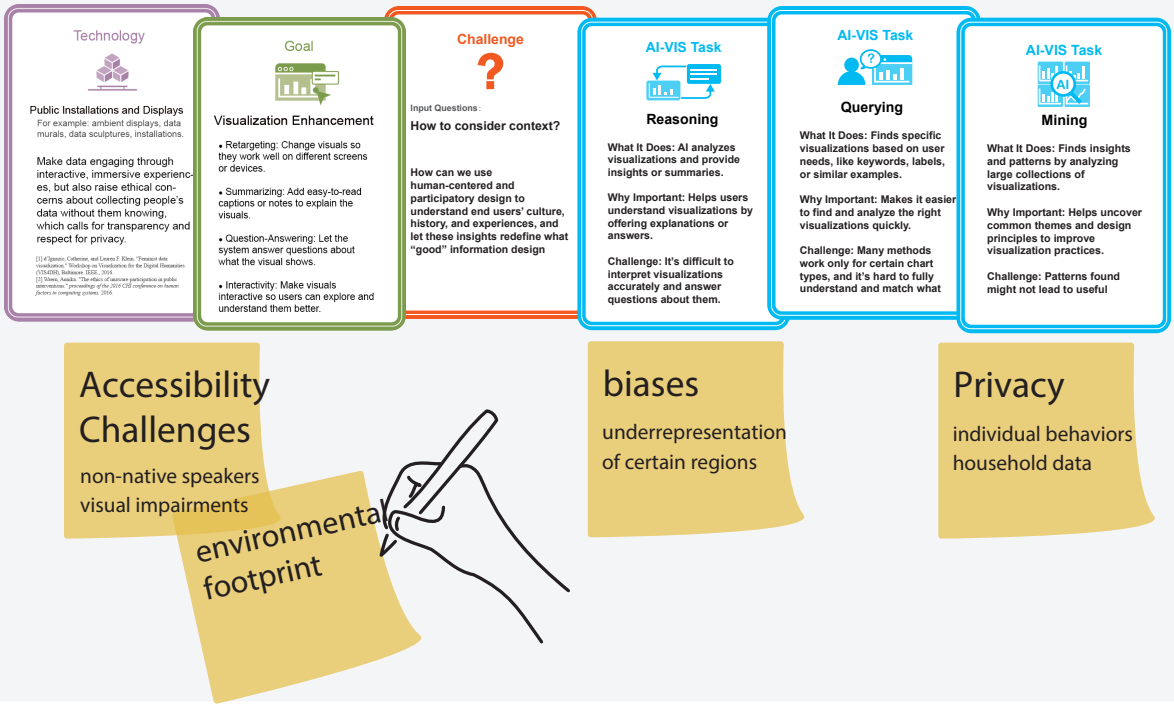
*AI-VIS Task: AI performs '***Querying***' to answer queries like "Which city has the highest temperature?", '***Reasoning***' to summarize data, and '***Mining***' to extract insights.*

*Challenge: Address '***Consider Context***' by integrating cultural symbols, familiar language, and localized data to connect with the community.*

Step 6: Evaluate your Design

Look through all the Ethical Principle Cards to assess your design concept from Step 5 and identify any potential ethical issues.

Then *write down the potential ethical issues* you've identified in relation to the corresponding cards.



Step 7: Finalize Your Design

Discuss *potential solutions* to these ethical issues within your group.

Role Playing Activity Instruction

For this activity, you need People-In-Focus cards and Ethical Principle cards.

Step 1: Draw a Card

Each person in the group draw one card from the People-In-Focus deck.

For example, if you draw a 'People with Health Conditions'

People-In-Focus

People with Health Conditions

For example: neurological illnesses, mental health diagnosis, substance addiction, cancer.

For individuals with health conditions, tracking technologies often monitor symptoms and behaviors, but negative feedback can worsen mental health or self-esteem. The challenge is to design systems that empower and support patients without causing distress.

Step 2: Imagine the Scenario

Try to stand in their shoes. Think about how this person might interact with the application and what their *needs*, *frustrations*, and *concerns* might be.

People need to use gestures to interact with the display, but what about those who have limited mobility or difficulty moving their bodies?

Step 3: Act the Role by Teling a Story

Start telling you story by "I'm <the role you're acting>, and I..."
For example:

I'm Sarah, and I have arthritis, which makes it hard to move my hands smoothly. I walked past an interactive fountain displaying climate data and wanted to learn about rising temperatures in my city. The vibrant visuals drew me in, but the gesture controls didn't work with my limited movement.

I tried the voice interaction, but the noise from the fountain and crowd made it unusable. I felt frustrated and excluded.

Step 4: Address the Problems

Take what you learned from the role-playing exercise and address the identified problems. Use Ethical Principle cards to guide your solutions.