USER INTERFACE AND DESIGN

EXPERIMENT 2

Aim : To Design a UI where users recall visual elements (e.g., icons or text chunks). Evaluate the effect of chunking on user memory.

Procedure :

A. Home Screen (It contains Instruction Page)

Step 1: Create a Frame:

- o In Figma, create a new frame (File → New Frame). Set the size to **1024x768px** for a standard desktop view.

- o This will be your **Home Screen** where users start the task.

Step 2: Add Instructions:

- o Use the **Text Tool (T)** to add a heading like "Memory Recall Task."

- o Add a smaller body of text with instructions such as:

    - "You will be shown several groups of icons or text. After viewing, recall the items you remember."

- o Use the **Text Tool (T)** to add more detailed instructions like "You will have 5 seconds to view the items. Then, recall them in the next screen."

Step 3: Start Button:

- o Create a button at the bottom of the screen. To do this:

    - Draw a **Rectangle** (R) for the button.

    - Use the **Text Tool (T)** to add "Start."

    - Style the button (color, border radius) to make it stand out.

    - Use **Figma's Prototyping Tools** (top bar → Prototype) to link this button to the next screen (Chunking Phase).

- You can also use **interactive components** like hover effects for more realism.

B. Chunking Phase (It Display Chunked Items)

Step 1: Create a New Frame:

- Create a new frame for the **Chunking Phase** (the second screen). This frame will display the icons or text.

Step 2: Design Chunked Items:

- Use **icons** or **text blocks** that users will have to recall. If you're using text, it could be short phrases or words. If you're using icons, you can either import them from **Figma's resources** or draw simple shapes using Figma's drawing tools.

- **For Chunking with Borders**:

  - Group 3-5 icons or text together in a box (use the **Rectangle Tool (R)**) to visually represent a chunk. You might want to create 3-4 groups.

  - Space these chunks out with some empty space in between them to ensure users can identify each chunk.

- **For Chunking without Borders**:

  - Place the elements next to each other without clear separation. This can be done by not using boxes and just visually mixing the items.

Step 3: Set the Viewing Time:

- **Time Simulation**: Figma does not have true timers, but you can simulate a fixed time by setting the next screen transition after 5 seconds:

  - Select the entire **Frame (Chunking Phase)**.

  - Under the **Prototype** tab, link this frame to the next screen (Recall Phase).

  - Set the interaction to "After Delay" and enter 5000ms (5 seconds).

C. Recall Phase

Step 1: Create a New Frame for Recall:

o   This is where the user will recall the items they saw in the previous chunking phase.

Step 2: Recall Input (Multiple-choice or Text Input):

o   **Option 1: Multiple-Choice**:

▪   Create multiple options for the user to select (e.g., 4-5 icons or text options).

▪   Use **Checkboxes** or **Radio buttons** to allow users to select what they remember.

▪   Add a question at the top: "Select the items you remember seeing."

o   **Option 2: Text Input**:

▪   Create **Text Input Fields** where users can type what they remember. Create 3-5 input fields depending on how many chunks you showed.

▪   This can be done by selecting the **Text Tool (T)**, adding a label ("Item 1", "Item 2"), and setting up input boxes.

Step 3: Submit Button:

o   Create a **Submit** button at the bottom using the **Rectangle Tool (R)** and adding text like "Submit Recall."

o   Add an interaction to move to the **Feedback Screen** after submission.

D. Result Screen

1. **Create a Feedback Screen**:

o   After the user submits their recall, provide feedback.

o   Add text like: "You recalled 4/5 items correctly!" or "Good job, you remembered 3 out of 5 items."

2. **Analyze**:

o   For your experiment, you can vary the **chunk size** (3 vs. 5 items per chunk) and the **chunk type** (icons vs. text) across different test sessions to evaluate their impact on recall.

Output :

Memory recalling exercise

You will be shown several groups of icons
recall as many as you can!

Start!

You will be given 5 seconds!
GoodLuck.

Memory recalling exercise

Here Are The Icons!

5 SECONDS

Memory recalling exercise

What did you see?

Item 1	Item 4
Item 2	Item 5
Item 3	Item 6

Submit!

Result phase

Memory recalling exercise

Here Are The Results!

Item 1		Item 4
Item 2		Item 5
Item 3		Item 6

Intro phase

Memory recalling exercise

You will be shown several groups of icons
recall as many as you can!

Start!

You will be given 5 seconds!
GoodLuck.

Question phase
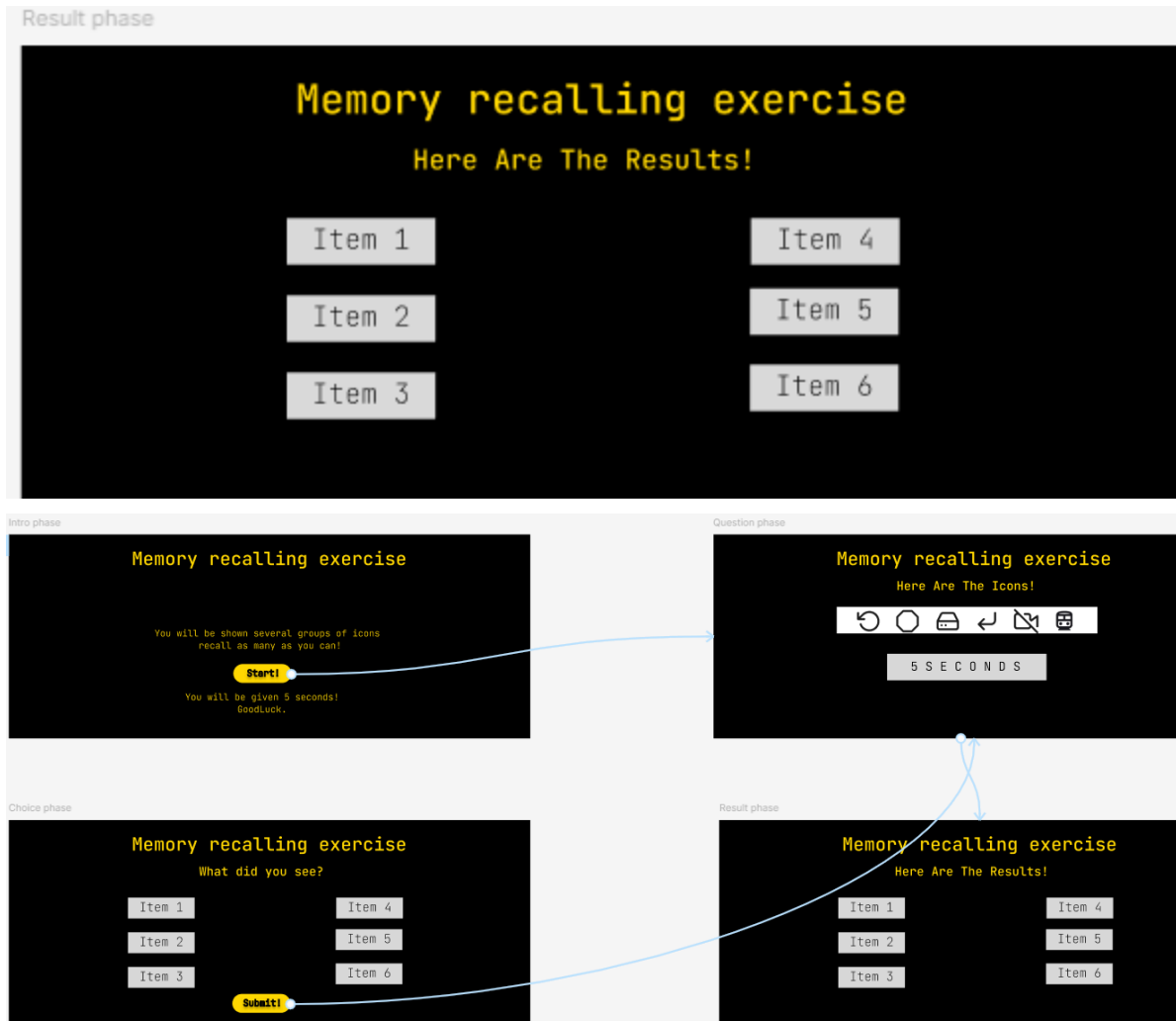
Memory recalling exercise

Here Are The Icons!

5 SECONDS

Choice phase

Memory recalling exercise

What did you see?

Item 1		Item 4
Item 2		Item 5
Item 3		Item 6

Submit!

Result phase

Memory recalling exercise

Here Are The Results!

Item 1		Item 4
Item 2		Item 5
Item 3		Item 6

Result : Thus, a figma design for creating a game using memory recall and prototyping along with the use of chunking was successfully studied and executed.