EXPERIMENT – 2

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Design a UI where users recall visual elements (icons or symbols). Evaluate the effect of chunking on user memory.

FRAME 1:

INSTRUCTION / START PAGE:

Chunking Analysis of the Instruction Page

Chunking is a cognitive strategy that breaks down information into smaller, manageable units, making it easier to process and retain. The **Galaxy Recall instruction page** effectively utilizes chunking in the following ways:

1. Clear and Sequential Guidance

• The screen presents a simple **START action**, avoiding unnecessary complexity.
• The minimal interface ensures users immediately understand the next step.

2. Logical Grouping of Information

• **Title Section →** Introduces the task name “GALAXY RECALL”.
• **Visual Theme →** Space background builds context.
• **Action Element →** Start button directs navigation.

3. Visual Hierarchy and Design Elements

• Bold futuristic title grabs attention instantly.
• Dark galaxy background with stars enhances focus.
• Centrally aligned **START** button signals the beginning clearly.
• Space visuals (astronauts, planets) add engagement without distraction.

4. Simplicity and Clarity

• Interface contains only essential elements.
• The active visual style makes the screen engaging and action-oriented.

FRAME 2:

INSTRUCTION PHASE:

Analysis of the Galaxy Recall – Instruction Screen

This screen represents the **Instruction Phase of the Galaxy Recall Task**, where users understand what actions they need to perform before entering the memory stage.

1. Purpose of the Screen

• This is the **preparation phase**, where users read and understand the task flow.
• The instructions encourage users to focus on observing and memorizing symbols.

2. Key Elements and UI Components

Instruction Text
• “Ready for Liftoff”
• “Observe the constellations carefully”
• “Memorize the space symbols”
• “Select the symbols you remember”

Start Button

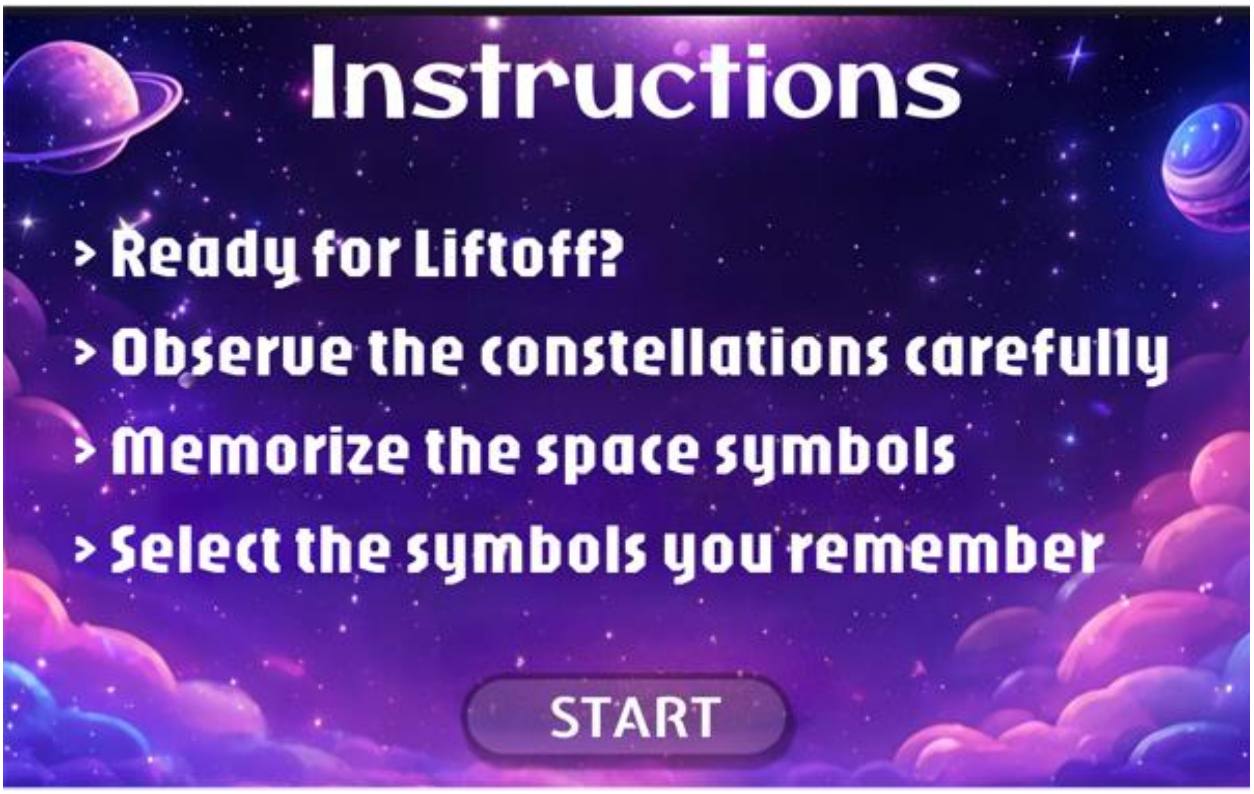
• Positioned at the bottom to indicate transition to the next phase.

Background Theme

• Cloud and galaxy visuals create a playful and immersive atmosphere.

3. Cognitive and UX Benefits

• Short direct sentences reduce cognitive overload.
• Bullet structure improves readability.
• The themed visuals maintain user interest and motivation.



FRAME 3:

CHUNKING PHASE:

Analysis of the Galaxy Recall Task – Chunking Phase Screen

This screen represents the **Chunking Phase of the Galaxy Recall Task**, where users observe and memorize different space icons within a limited time.

1. Purpose of the Screen

• This is the **visual memory encoding phase**, where users view and group icons mentally before recalling them.
• The term “Chunking Phase” implies categorizing icons into meaningful groups for easier retention.

2. Key Elements and UI Components

Grid of Space Icons
• Icons such as rockets, planets, stars, aliens, astronauts, and satellites are displayed in a structured grid format.
• Icons are visually distinct yet relatable, encouraging chunking strategies like:
o Categorizing by theme (planets, vehicles, characters).
o Grouping by colors or shapes.
o Associating repeated patterns.

Themed Background
• Maintains a consistent galaxy atmosphere, preventing distraction.

3. How the Chunking Phase Works

1. Users scan the grid and look for patterns.
2. They create mental groups of similar icons.
3. After observation, they transition to the recall phase.

4. Cognitive and UX Benefits

• Enhances short-term memory retention.
• Improves pattern recognition skills.
• Reduces cognitive overload by structured grouping.

FRAME 4:

RECALL PHASE:

Analysis of the Galaxy Recall Task – Selection Phase

This screen represents the **Selection Phase of the Galaxy Recall Task**, where users recall and choose the symbols they remember from the previous chunking phase.

1. Purpose of the Screen

• This is the **memory retrieval stage**, where users select remembered icons.
• The goal is to test short-term memory effectiveness.

2. Key Elements and UI Components

Grid of Icon Choices
• A set of multiple icons are displayed as options.
• Some icons were previously shown, while others act as distractors.
• Selection buttons allow clear interaction.

SUBMIT Button

• Positioned at the bottom centre to confirm selections.

3. How the Selection Phase Works

1. Users analyse displayed symbols.
2. They select icons they remember.
3. Distractors test accuracy of recall.
4. Clicking **SUBMIT** finalizes choices.

4. Cognitive and UX Benefits

• Tests memory accuracy and recognition ability.
• Interactive mechanics improve engagement.
• Distractors evaluate true vs false memory.

FRAME 5:

RESULT PAGE:

Analysis of the Galaxy Recall Task – Score & Feedback Screen

This screen represents the **Score & Feedback Phase**, where users receive their performance evaluation based on their recall accuracy.

1. Purpose of the Screen

• Provides feedback on recall performance.
• Allows users to decide their next action.

2. Key Elements and UI Components

Score Display Board
• Displays score clearly (e.g., 10/15).
• Large styled board emphasizes performance outcome.

Action Buttons

1. **HOME** – Returns to main screen.
2. **RESTART** – Retakes the memory task.
3. **EXIT** – Ends the activity.

3. How This Phase Works

1. The system evaluates user selections.
2. Accuracy score is calculated and displayed.
3. Users choose to continue, restart, or exit.

4. Cognitive & UX Benefits

• Instant feedback improves learning awareness.
• Multiple options give user control.
• Gamified visuals reduce stress and enhance motivation.

PROTOTYPE LINK: https://www.figma.com/proto/SKvVtk1bvhPjFAl1Brn1Zp/Untitled?node-id=0-1&t=92RTSM6YuPqsYNy5-1