

Name: Phaveen S  
Roll No: 240701383

# USER INTERFACE DESIGN

## Experiment 2

### Visual Memory Task – Documentation

#### 1. Overview

The **Visual Memory Task** is a simple cognitive test designed to evaluate a user's short-term visual memory. Users are briefly shown a set of icons and are required to remember as many as possible within a fixed time limit.

This task is commonly used in:

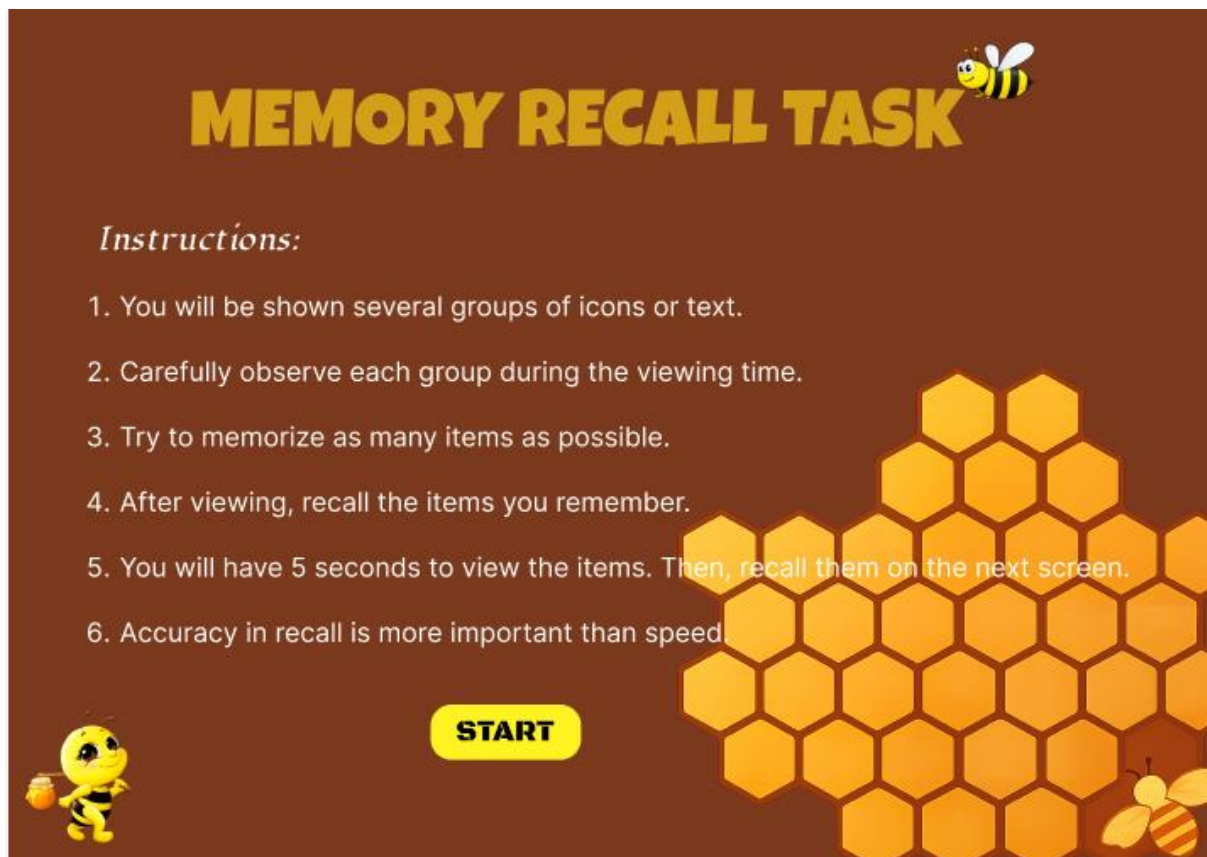
- Cognitive training applications
  - UX / HCI academic projects
  - Brain-training or memory assessment tools
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#### 2. Objective

The main objective of the Visual Memory Task is to:

- Test the user's ability to recognize and recall visual elements
  - Measure short-term visual memory capacity
  - Provide a clean and distraction-free interface for memory testing
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#### 3. User Interface Description



### 3.1 Welcome / Instruction Screen

**Title:** Visual Memory Task

**Content:**

- Displays the rules of the task
- Informs the user that icons will be shown for **10 seconds**
- Encourages the user to remember as many icons as possible

**Action Button:**

- **Go** – Starts the memory task
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### 3.2 Icon Display Screen

**Title:** List of Icons

**Description:**

- Displays a grid of multiple icons
- Icons represent different categories such as:
  - Food (burger, salad)
  - Transport (car, truck, airplane)
  - Technology (chip, settings, game controller)
  - General symbols (star, bulb, cycle)

**Action Button:**

- **Start** – Begins the 10-second icon visibility timer

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### 4. Task Flow

1. User lands on the instruction screen
2. User clicks **Go**

3. Icon list screen appears
  4. User clicks **Start**
  5. Icons are displayed for **10 seconds**
  6. After time expires, icons are hidden
  7. User is expected to recall or identify remembered icons (future enhancement)
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## 5. Rules of the Task

- Icons are shown only once per round
  - Viewing time is limited to **10 seconds**
  - No interaction is allowed during the timer
  - User must rely only on memory
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## 6. Functional Requirements

- Display instruction text clearly
- Show a fixed set of icons

- Implement a 10-second timer
  - Hide icons automatically after timer ends
  - Provide start and navigation buttons
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## **7. Non-Functional Requirements**

- Simple and minimal UI design
  - High icon visibility and contrast
  - Responsive layout for different screen sizes
  - Fast loading and smooth transitions
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## **8. Design Considerations**

- Neutral color palette to avoid distractions
  - Rounded buttons for better usability
  - Consistent icon size and spacing
  - Clear typography for readability
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## **9. Possible Enhancements**

- Scoring system based on correct recall
  - Difficulty levels (more icons, less time)
  - Randomized icon sets
  - User performance analytics
  - Sound or animation feedback
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## 10. Conclusion

The Visual Memory Task provides a clean and effective way to test short-term visual memory. Its simple design and clear rules make it suitable for educational projects, usability studies, and cognitive training applications.