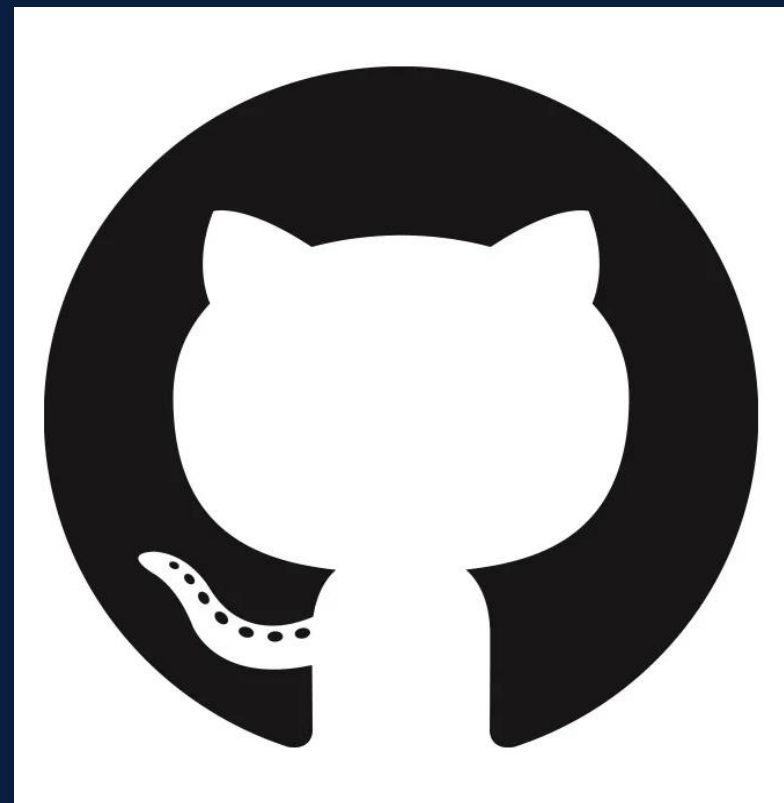
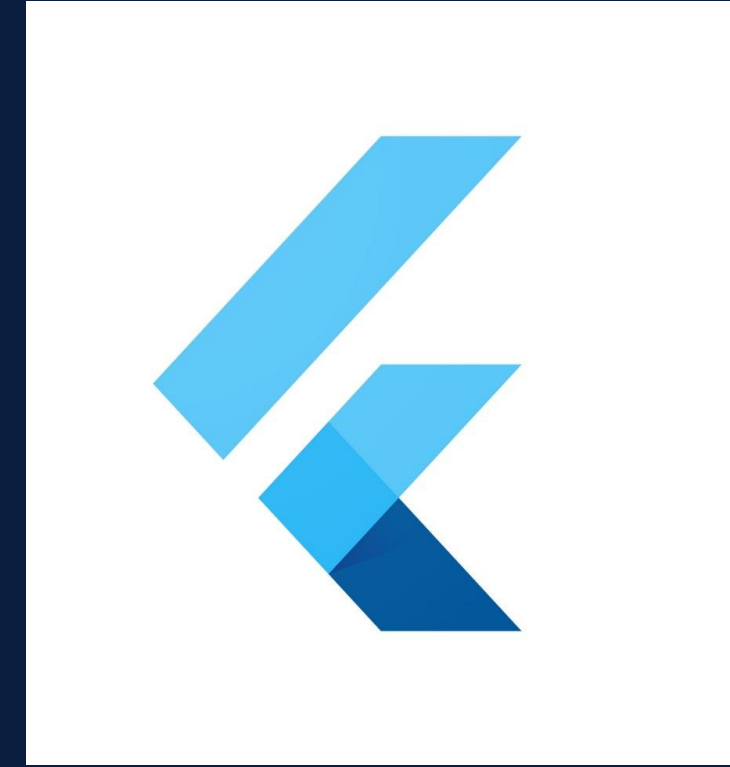




Knight Foundation School of Computing and Informational Sciences

Summer 2025 Senior Design Project

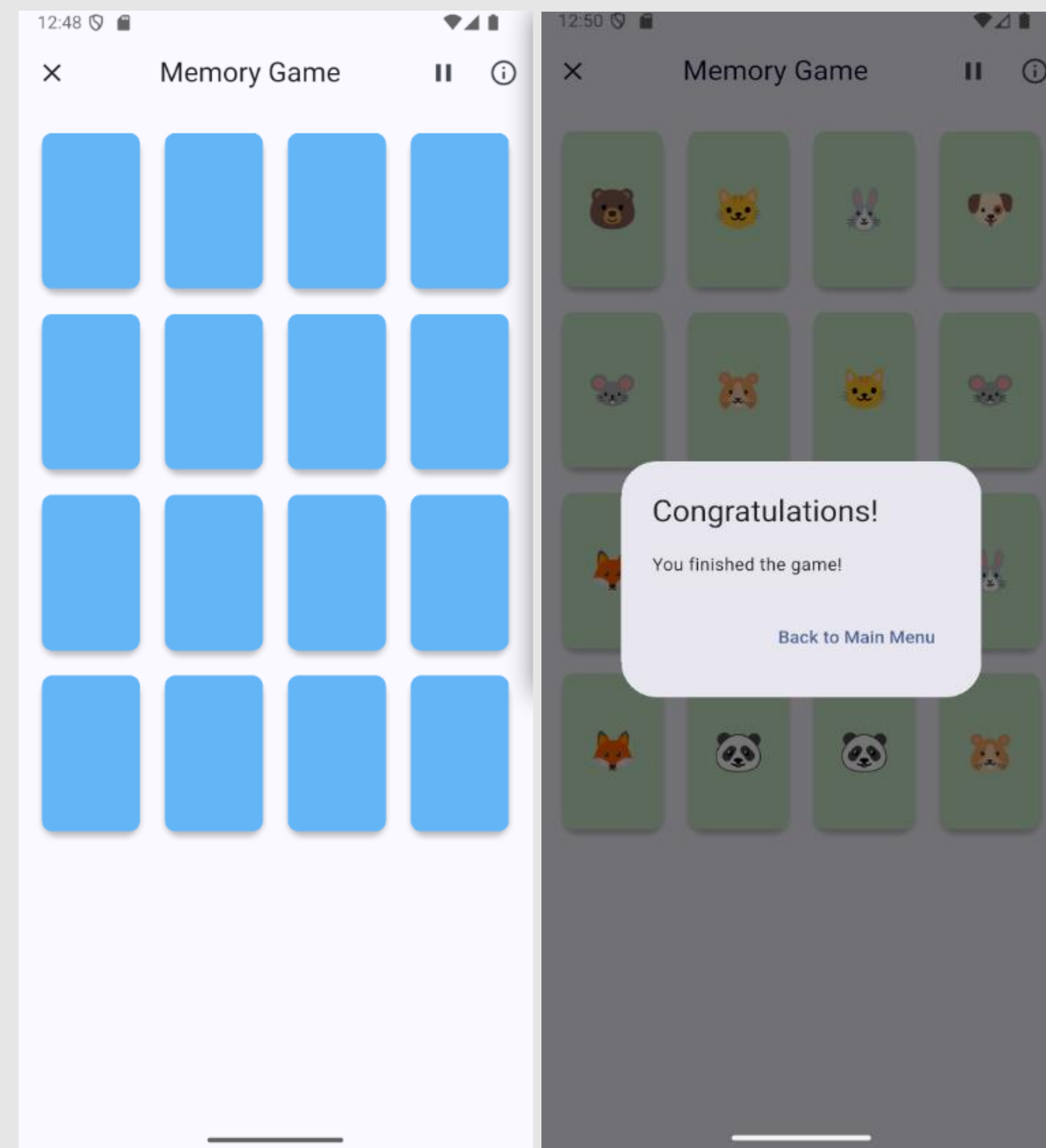
Games

Students: Austin Uwate, Sam Farajzadeh, Carlos Sanchez, Dorreen Vahidiazar

Instructor/Faculty: Professor Seyedmasoud Sadjadi, Florida International University



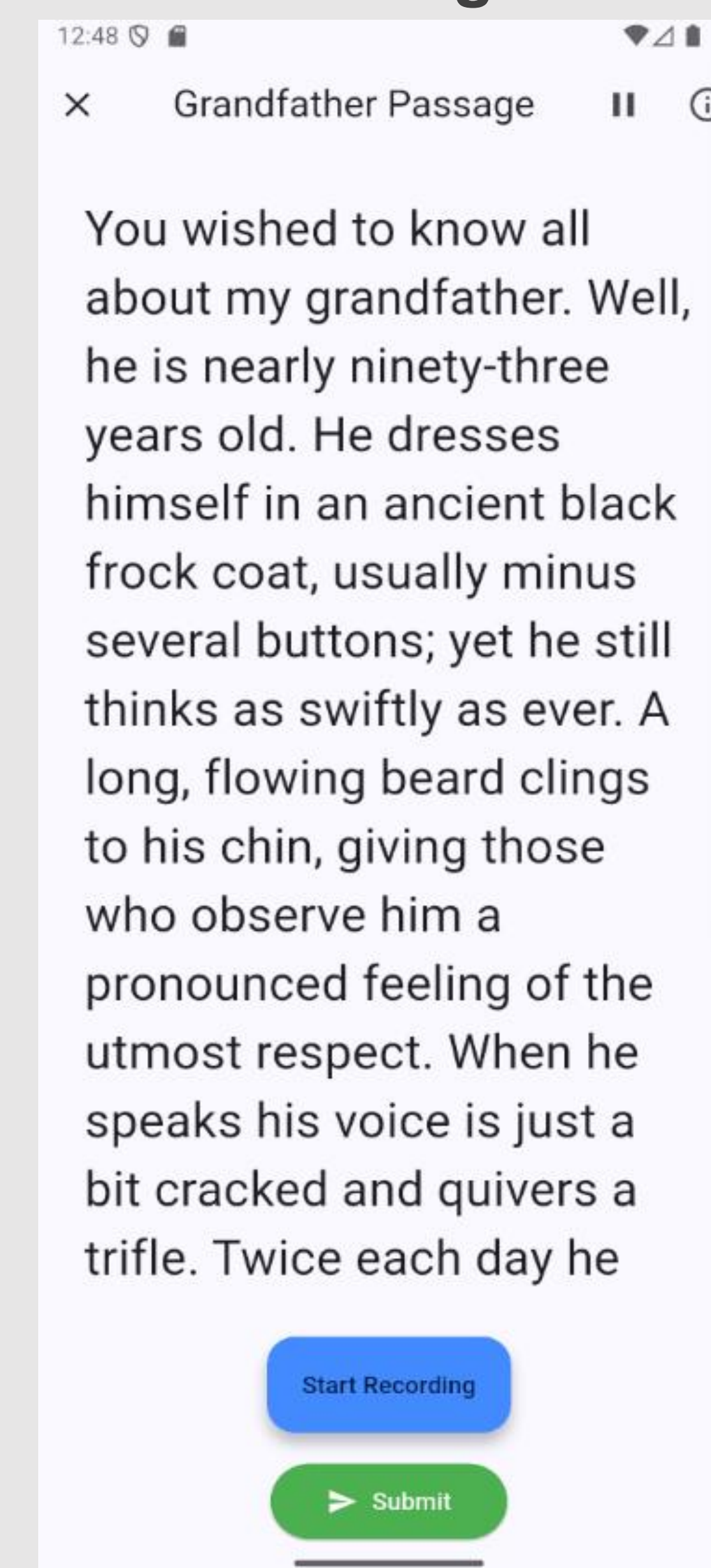
Memory Game



Description

The Memory Game tests short-term memory and pattern recognition. Users are presented with a grid of cards and must match identical pairs by flipping them over two at a time. This game collects data on the user's accuracy, completion time, and number of attempts, providing insights into cognitive processing speed and memory retention.

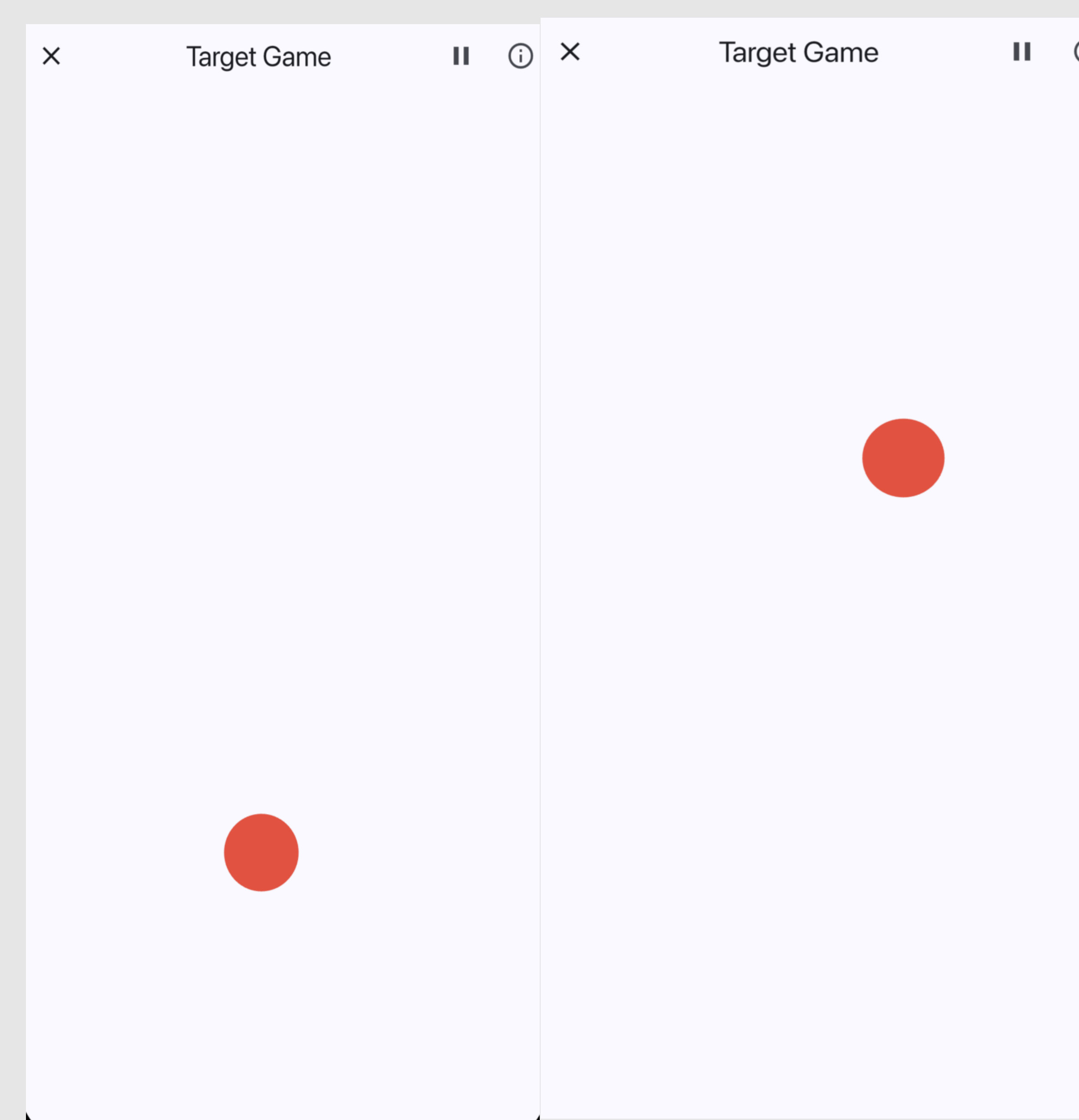
Grandfather Passage



Description

The Grandfather Passage game is a speech and reading task designed to evaluate verbal fluency, pronunciation, and clarity. By recording the reading, the game helps assess speech patterns, articulation, and voice quality. This activity is particularly useful for analyzing language proficiency and detecting potential speech or cognitive issues.

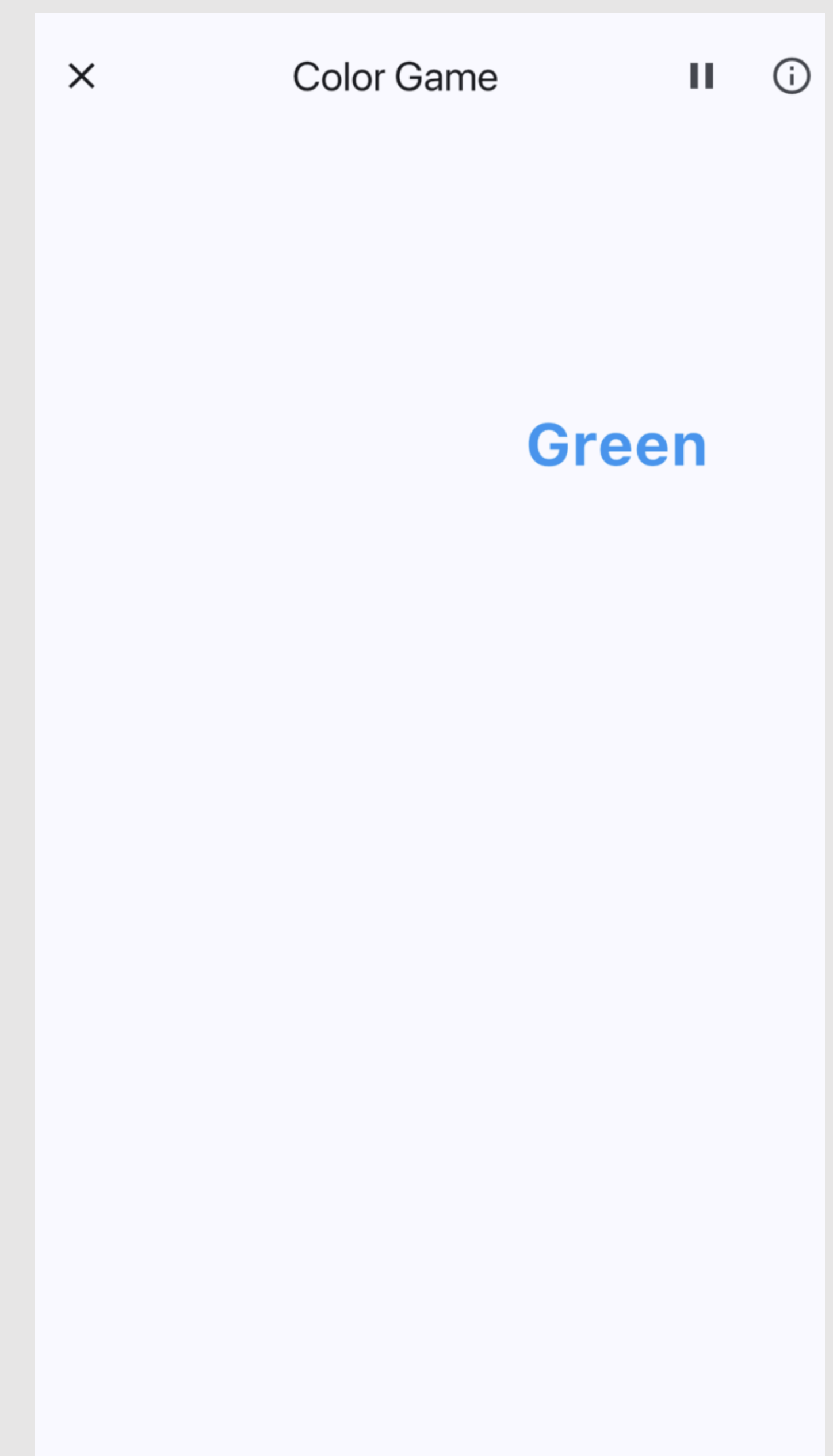
Target Game



Description

The Target Game is a reflex-based task designed to assess a participant's visual coordination and response speed. Players are instructed to tap on targets that appear randomly on the screen within a limited time frame. The game challenges users to stay focused and react quickly, making it both engaging and effective for cognitive evaluation. It is ideal for testing motor response time and hand-eye coordination.

Color Game



Description

The Color Game is a cognitive challenge that tests a player's ability to process conflicting information—a phenomenon known as the Stroop effect. Participants must say out loud the color of the text displayed on the screen, not the word itself, which is intentionally misleading. This game evaluates attention, verbal response accuracy, and cognitive flexibility, encouraging quick thinking.