Ignacio- Maze Task

Cognitive Difficulty – Low
Required Coverage – HPC
Preferred Coverage – Frontal, OFC, AMY
Task Duration ~1 min (practice) + ~10 min (single block)
Needed Equipment - Photodiode

From Saez Lab

Matlab/psychtoolbox
Cell:713-470-8673
Email:isaez@ucdavis.edu
Available OS: Windows, Linux

Setup

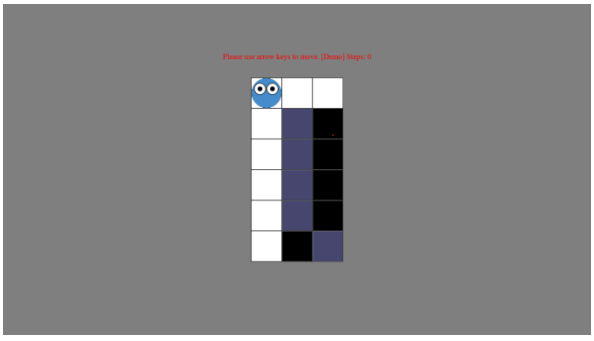
1. Keypad
   - Subjects will navigate a maze using the arrow keys.
2. Photodiode
   - Bottom left of screen.

Scripts

In Ignacio\Maze, Task script: Experiment-Main.m
You need to open a Matlab select the task script. Fill in subject ID.

Task overview

Their goal is to find the exit labelled with a red square. The exit is hidden under black squares. The subject can navigate adjacent to a hidden square to reveal all hidden squares in that row or column up to a blue square. Blue squares represent walls and cannot be moved to.



Subjects are instructed to move as quickly in as least moves as possible to find the exit. Once the exit is found a new maze will begin

Subject Instructions

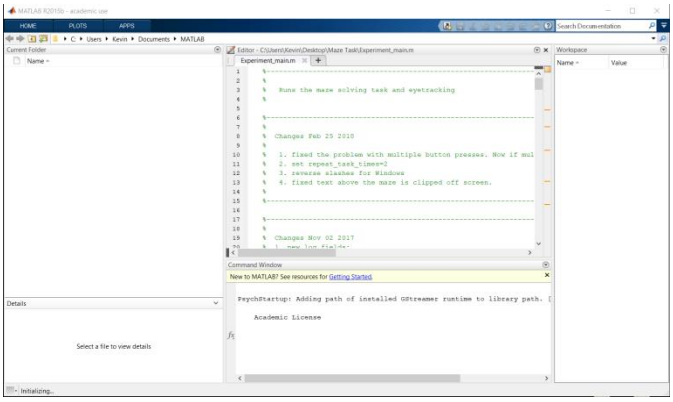
In this experiment, you will navigate a series of mazes using the arrow keys. Your goal is to find the exit hidden behind a black square. We will complete a practice trial; please let us know if you have any question.

Experimenter instructions

Start the game using Matlab. Select file Experiment-main.m in the Maze folder. Enter the subject ID. The game runs for 2 blocks of X rounds. Remind the subject to make a selection as fast in as few moves as they can. The game lasts ~10'. Use "P" to pause and unpause the game.

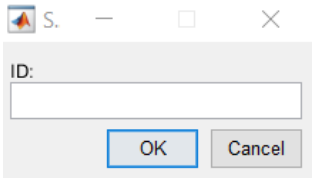
Step by Step Instructions

1. Open Matlab



2. Fill in GUI

   Participant ID: Subject ID



3. Maze Example