Group - 4

PROJECT FMS DEMO

Devansh Gupta
Cody Yeung
Chan Santawisuk

CONTENTS

- **The Problem & Our Solution**

- **Description of the GUI & Games**

- **Final Demo of the Application**

Description of **Project/Problem & Our Solution...**

Description of Problem

A toddler's first few years of development are crucial, thus, our objective is to help the toddler to develop the necessary skills at an early age and refine them to be able to function and uses those necessary skills in everyday life

Our solution and it's Goal

The product is our web-based app which consists of three individual games that are designed to fulfill our objective which will focus on helping the toddler (our target user) to develop their necessary skills to be gain certain cognitive as well as physical abilities.
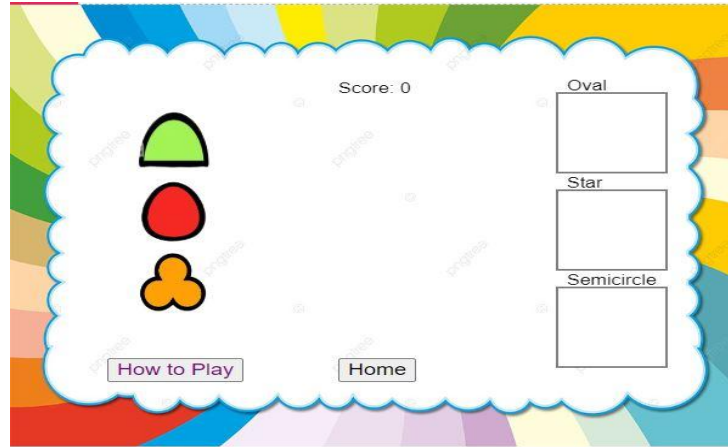
Description of the
GUI & Games

GUI

The GUI has a colorful design with a plain but cartoon-like background to make it more enticing for the toddlers to use.

User (toddler) can choose between 3 games. Upon clicking those buttons, the user will be taken to game screen of that individual game.

❖ <u>Features</u>
  ➢ This game helps toddlers in cognitive learning through making them learn the different names of shapes as well as fine motor skills as they have to use the feedback (received from the screen) with their eyes and ears and coordinate their fingers while dragging the shapes using the mouse.
  ➢ It will help them to make decisions based on their learnings (whether what they are matching is correct or not) through playing the game on a regular basis.
  ➢ With every correct match the learning is affirmed (strengthened) that the name of the shape which the toddler has learned is correct. Also their ability to visualize is also enhanced.
  ➢ Reading ability also increases by reading the names of shapes.

Game 1: 'Drag-On' by Devansh Gupta

❖ <u>How to Use:</u>
  ➢ The user will be presented with 3 distinct shapes and 3 distinct choices (on every level) out of which only 2 matches are correct.
  ➢ **(INTERACTION)** The user (toddler) needs to click and drag the object to the choice of field which represents the best match according to them.

❖ <u>Feedback:</u>
  ➢ On a correct match, they are greeted with a 'congratulations' message on screen along with a soft sound.
  ➢ On an incorrect match, they are greeted with a 'oops wrong match' message on screen along with a hard sound.

❖ <u>Gamified Component:</u>
  ➢ **Score** is also kept (+5 for correct & -5 for incorrect) because keeping a high score helps the child to gain confidence in themselves and what they are learning.
  ➢ There is also a **Home-button** provided on every stage for the user to exit the game to the homescreen at any point.
  ➢ The game also has funny **background music** for it to be more engaging for the toddler.
  ➢ **Soft & hard sounds** for correct & incorrect matches, respectively.
  ➢ There is a '**How to Play**' button which provides you with the instructions on how to play the game.
  ➢ The game also has a **cheerful design** with a **multicolored background** and **colorful shapes** which is inviting in nature for the children and they don't feel bored with the game.

Game 2: 'Tracking Game' Cody Yeung

- Features
  - Helps toddlers develop their eye hand coordination skills my following what they see on the screen with their right hand
  - Uses a mouse or trackpad
- How to use
  - As the circles appear on the screen, use your mouse to follow along and click the circles as they appear
- Feedback
  - Scoring is based on how close to the center that the user clicks
  - Score is kept in the top corner
  - Home button is there to return to main page
- Gamification
  - Colorful background that is welcoming to children
  - There is a clicking noise whenever the user clicks on a circle successfully
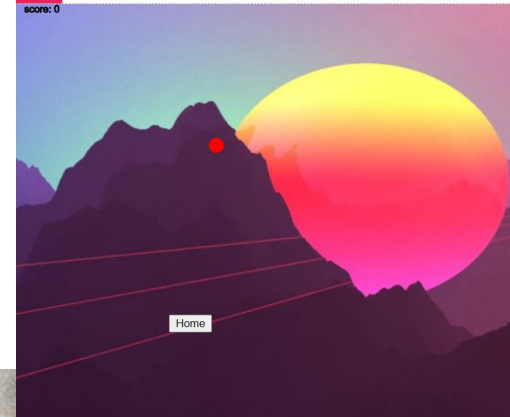
Game 3: 'Tic tac toe' by Chan Santawisuk
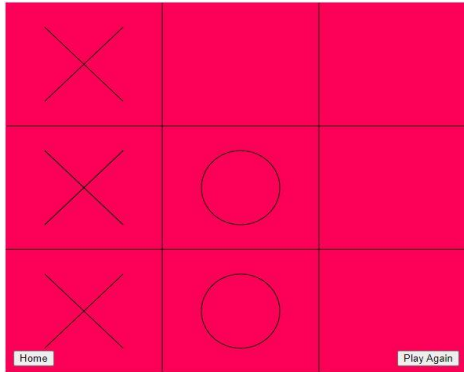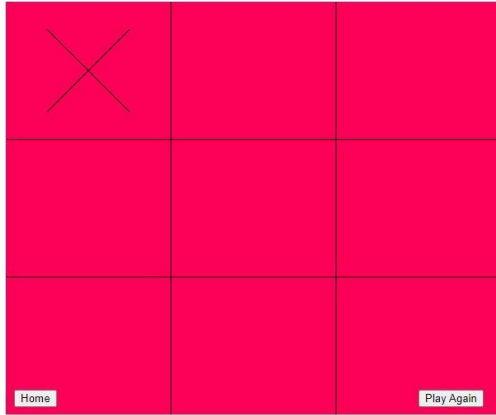
X Wins
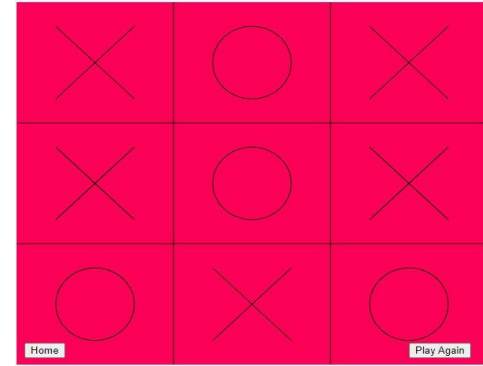
Tie

Feature: Simple tic tac toe that toddlers can play, with a bot algorithm to calculate move and play, which helps toddlers to think logically like chess game and any other game that require calculation.

How to use & Feedback: Upon starting the bot will already place their move player simply needs to place their next move by using the mouse to click on the boxes. Players always start second. With the bot starting first. Winning condition will be displayed at the end of the match as text, shown in the picture above.

Other feature: Player can use the button shown in the picture to go back 'Home' which will return the player to the home GUI screen or the player can choose the 'Play again' to start a new match

Demo of the
Working Application

Link:

ASU

That's the end of our Final Demo

Thank You for Watching!