

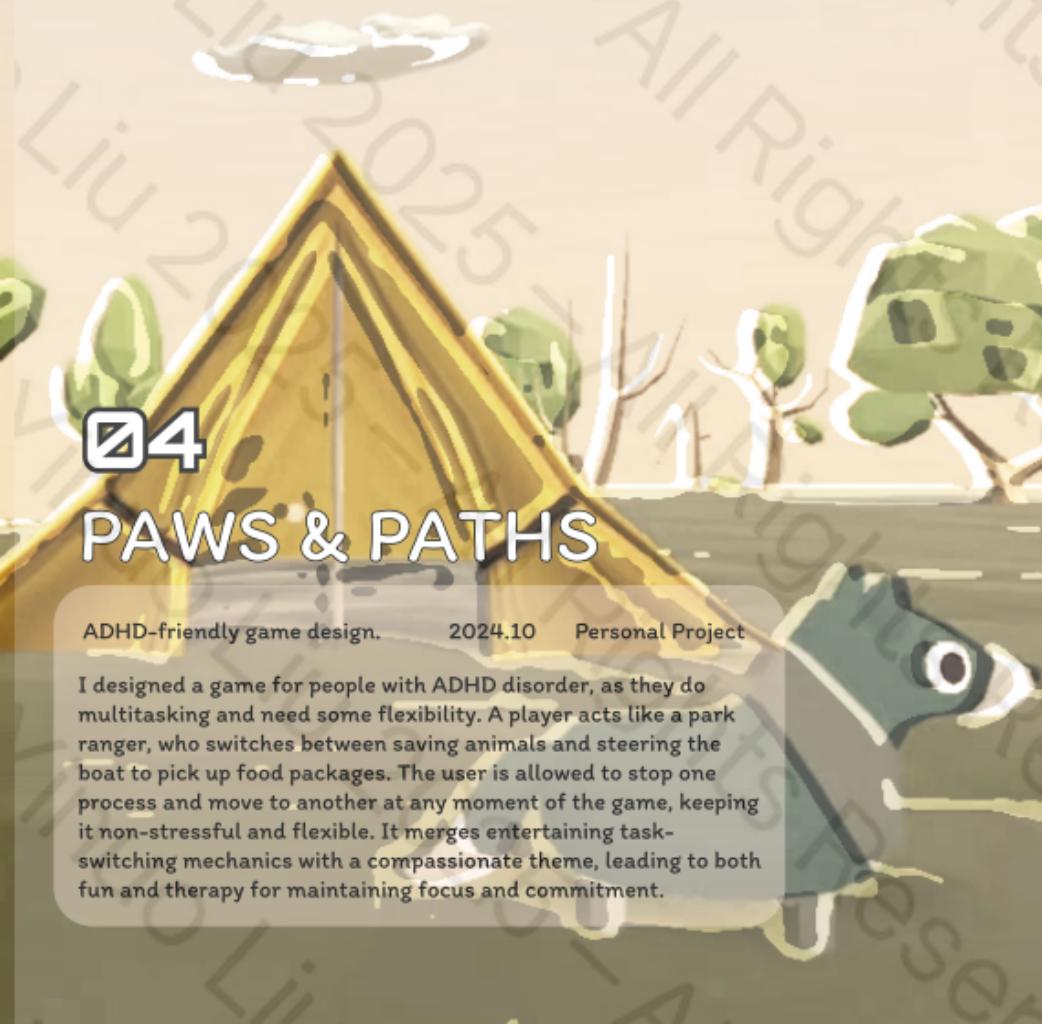
## 04

# PAWS & PATHS

ADHD-friendly game design.

2024.10 Personal Project

I designed a game for people with ADHD disorder, as they do multitasking and need some flexibility. A player acts like a park ranger, who switches between saving animals and steering the boat to pick up food packages. The user is allowed to stop one process and move to another at any moment of the game, keeping it non-stressful and flexible. It merges entertaining task-switching mechanics with a compassionate theme, leading to both fun and therapy for maintaining focus and commitment.



## INSPIRATION

When I was four years old, I was judged by my teacher as having a "bad future" and an "IQ problem" because I got up to walk in class, and I moved from school to school, but it was difficult for me to fit in. Later, I went to the hospital and was diagnosed with ADHD.



## RESEARCH

Attention-deficit/hyperactivity disorder (ADHD) is a developmental disorder marked by persistent symptoms of inattention and/or hyperactivity and impulsivity that interfere with functioning or development.

## SYMPTOMS

### HYPERACTIVITY

Inability to sit still, often needing to move around or shake parts of the body.



### IMPULSIVE BEHAVIOR

Behavior that is sometimes sudden and without warning, often without thought, and accompanied by some forgetfulness.



### POOR CONCENTRATION



## TARGET GROUP

This game targets individuals with ADHD, who often benefit from engaging, varied activities that help maintain focus. Quick, rewarding tasks and flexible gameplay support their unique needs.

## ENVIRONMENT

An ideal environment for ADHD players combines clear goals with flexibility. Instant feedback, calming visuals, and task-switching options create a dynamic space that enhances focus and enjoyment.

## LITERATURE

Non-pharmacologic treatments for ADHD in children and adolescents have weaker effectiveness.

The screenshot shows the abstract page of a PEDIATRICS article. The title is 'Nonpharmacologic Treatments for Attention-Deficit/Hyperactivity Disorder: A Systematic Review'. It includes authors' names, institutions, and a brief summary of the review's findings. The abstract states: 'Overall, the findings showed limited evidence for the effectiveness of these treatments, especially for omega fatty acids, which had no significant effect on ADHD symptoms.'

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The screenshot shows the abstract page of a Systematic Reviews article. The title is 'Synthesising the existing evidence for non-pharmacological interventions targeting outcomes relevant to young people with ADHD in the school setting: systematic review protocol'. It includes authors' names, institutions, and a brief summary of the review's findings. The abstract states: 'The researchers in the paper analyzed 54 studies including neurofeedback, cognitive training, behavioral therapy, parent training, omega fatty acid supplements and other dietary approaches.'

## QUESTIONAIR



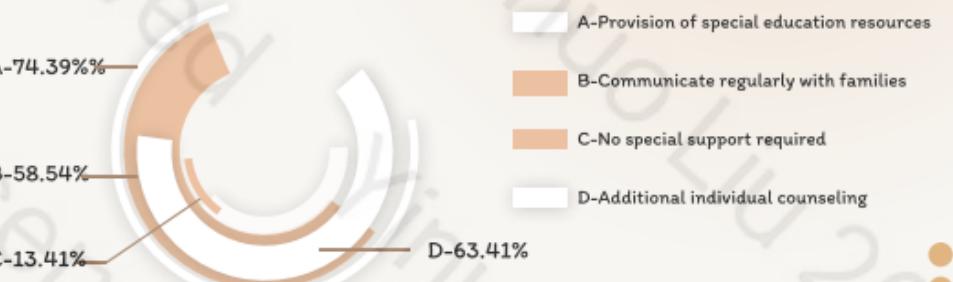
41.46%

Some people don't understand ADHD at all.

79%

believe that ADHD cannot be effectively treated through medicine.

In your opinion, what can schools do to help children with ADHD?



What are the main areas in which ADHD affects children?

Study	69.51%
Emotional Management	65.85%
Family Life	60.98%
Socializing	56%

Believe that children with ADHD can live a normal school life on campus when they receive appropriate support.

51%

## CONCEPT

## STORYBOARD

## GAME FLOW

### CORE IDEA

The game combines dual-task gameplay to engage ADHD players. While managing a wildlife sanctuary, players can switch to a simple rhythm mini-game for mental relief. This balance keeps activities varied and enjoyable.

### PLAYER ROLE AND SETTING

Players act as a wildlife conservationist, starting in a tent-based animal rescue center. The sanctuary is surrounded by diverse wilderness, where animals await rescue and care.

### GAMEPLAY MECHANICS

Simulation: Explore with a radar, treat animals, feed them, and maintain their habitats.

Rhythm Mini-Game: Earn resources like food and enrichment items, supporting sanctuary management.



Players discovered injured animals using radar!



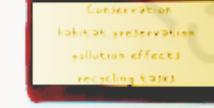
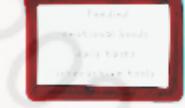
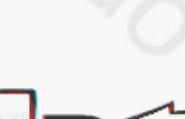
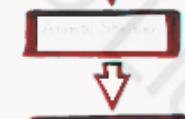
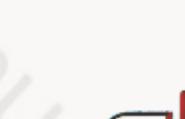
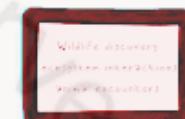
Through a boat ride mini-game, players gathered plenty of food!



Players brought the animals back but found no food!



Players fed the injured animals and helped them recover by take care of them!



## SCENE DESIGN



## DESIGN DETAIL

I researched animal species and their habitats, focusing on snowy tundra, desert, and grasslands ecosystems. Each habitat includes representative animals—lions, elk, and lizards—to enhance realism and appreciation for diverse ecosystems.



## UI DESIGN

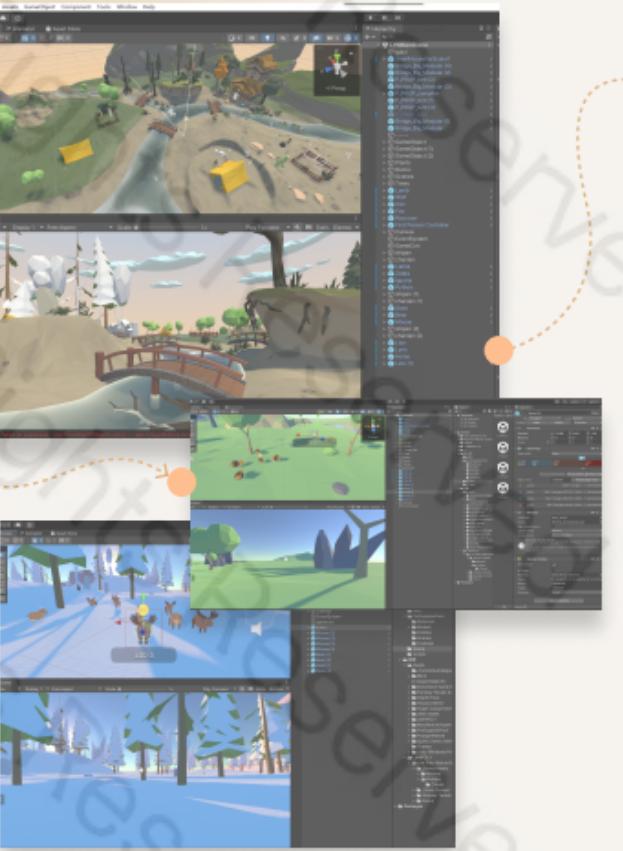
I designed visually-centered UIs with clear images and rounded, vibrant borders. Expressive emojis and animal actions help children quickly understand each animal's mood.



## MAP DESIGN



## PROCESS



## CODING

The screenshots show the following game commands:

- Click the mouse  
Open the refrigerator  
Open the cabinet  
Selecting props
- Snow, click deer
- Desert, click camel
- Animals come to eat within the range of the bowl
- Forest, click lion

```
public class AssemblyChop : MonoBehaviour
{
    void Start()
    {
        addInFirst();
    }
    void addInFirst()
    {
        addInFirstBeforeTheFloorFromUpdate();
        addSnow();
    }
    void addInFirstBeforeTheFloorFromUpdate()
    {
        if (tag == "Floor")
        {
            if (name == "Floor")
            {
                addSnow();
            }
        }
    }
    void addSnow()
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## OUTCOME



Video link: <https://youtu.be/6epJsGpXCSQ>

