# Scenario

Imagine designing a digital educational and entertainment game called "Children Zoo Encyclopedia" aimed at children aged 3 to 10 years old. The primary goal of this game is to provide an engaging platform for young children to learn about the animal kingdom while fostering their creativity and problem-solving skills. The game will utilize interactive techniques to make learning fun and memorable. One of the core challenges within this game is for children to assign each animal to its appropriate habitat, such as a cave, cage, garden, or any other suitable environment.

1. kid named Layan Says she wants to try the system first.
2. Layan steps Infront of the laptop.
3. She is given instructions on how the first game works.

4-The Laptop Camera starts and detects her age from (4-7) and her emotion as happy.

5- A menu screen is then opened with start and exit buttons.

6- Layan presses with the mouse on start.

7- A green screen shows with 3 animals and 3 boxes with each animal’s name inside a box

8-the animals shown on the screen are Monkey, Chicken, and a Frog

9-on the bottom of the screen there are 3 boxes with each animal name in it.

10-Layan is a smart kid; she knows the names of the animals shown on the screen.

11-she puts her index finger Infront of the camera and the camera detects it.

12-The first animal (Monkey) is moving according to her finger position.

13-She drags the monkey inside the box, and the monkey stops in the centre.

14-Then the next animal (Chicken) starts moving with her finger.

15- She drags the chicken inside the labelled chicken box.

16- The third animal (Frog) starts moving.

17-She drags the frog inside the labelled frog box.

18-feedback is received from the game announcing that the first game is finished.

19-Layan is excited that she finished the first game quickly.

**Persona:**

-Layan Tamer, KG2

Layan is a 7-year-old girl in kindergarten, she is very social, and she likes to compete in events and games.

Layan is obsessed with cleaning and organizing things.

**Goal:**

Layan’s goals are to:

Organize and place the animals in their correct place as fast as she can to prove she is a smart and competitive child.

Be earful. Layan needs to understand instructions first in order.

to perform tasks efficiently.

1

# PACT

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| People | Activity | Context | Technology |
| -The primary user for the system is children in KG and Primary school.  - Parents may also be involved in monitoring and adjusting the game. | -Move the animal with the printed marker inside the rectangle labelled with the animal’s name. | - Physically, this activity takes place at any time of the day in an indoor environment (e.g. learning room in kindergarten).  - The animals with markers should be placed on a smooth surface and the TUIO (ReactVision) Server camera must be placed under the table capturing the movement of the markers. | -The controls are designed to be simple and intuitive for young children to use  effectively.  Tangible user interface  -Face Identification  -Facial expression |
| **Physical Aspects**  -System will be used by children from 3 years to approximately 12 years of age.  -There will be both male and female users. | -Move finger accordingly to organise the animal’s location inside the boxes. | - The kid’s finger must be placed Infront of the camera, considering good brightness and minimal light reflection to be able to effectively detect the coordinates of the index finger of the child. | -Mediapipe and Finger Detection |
| **Psychological Aspects**  **-**kids learning level may differ according to their age or their mental model of the system. | - display 3D objects of the animals in real life. | -The kid holds the Marker of the indicated animal Infront of the camera to display the animal in 3D. | - AR Technology and Camera. |

2