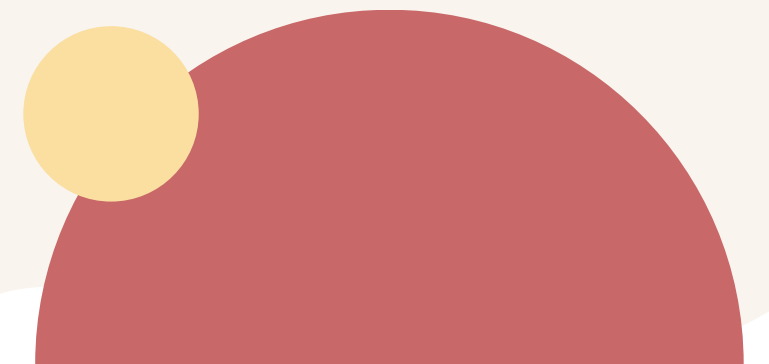
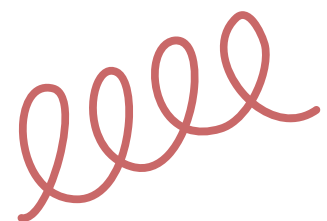


KIDDIE CLOSET

nickname "Fayroza & Zarifa"

By: Nour Sabri & Dima Shanti
Supervisor: Dr. Emad Natsheh



PROBLEM STATEMENT



Problem 1

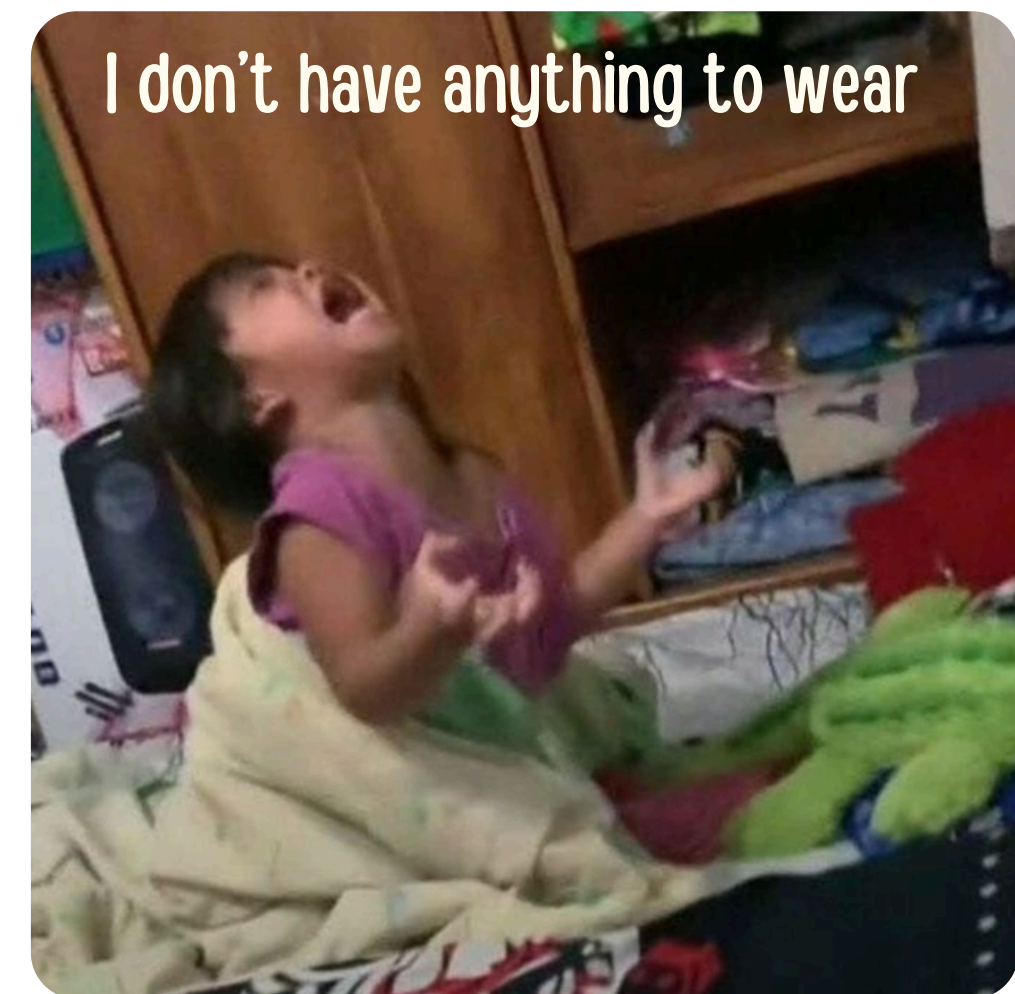
Children are highly exposed to technology, yet clothing organization and outfit selection remain manual and parent-dependent processes.

Problem 2

Parents' busy schedules limit their ability to consistently support these daily routines.

Problem 3

This results in disorganized closets and reduced independence for children.



OBJECTIVES

1

To enable children to independently choose suitable outfits.

2

To organize clothes into clear and accessible sections.

3

To provide simple visual and audio guidance for children.

4

To integrate hardware and software through a cloud-based system.

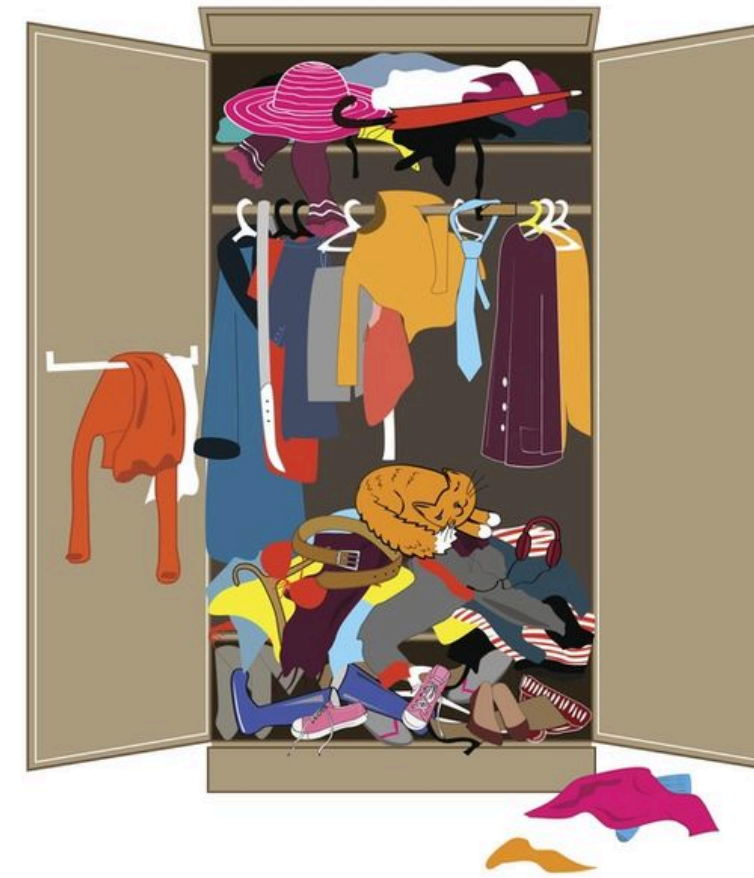
5

To help children detect missing items and return them correctly.

6

To allow parents to manage and configure closet data via a mobile app.

Before



After



FEATURES



SETUP

ADDING, REMOVING &
CONFIRMING

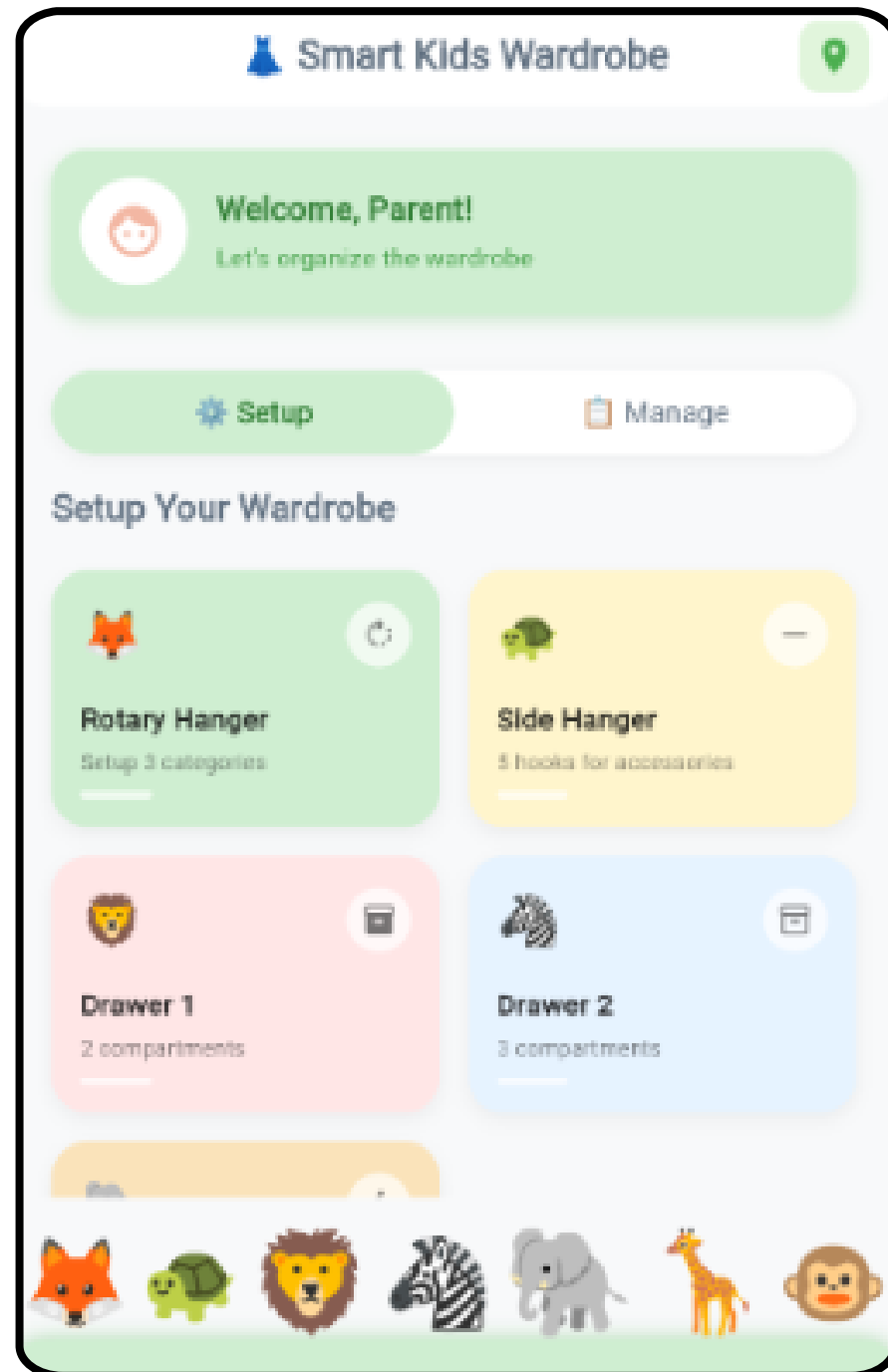
CHOOSING OUTFIT

RETURN MISSING ITEMS

GET OUTFIT IDEAS



USER INTERACTION

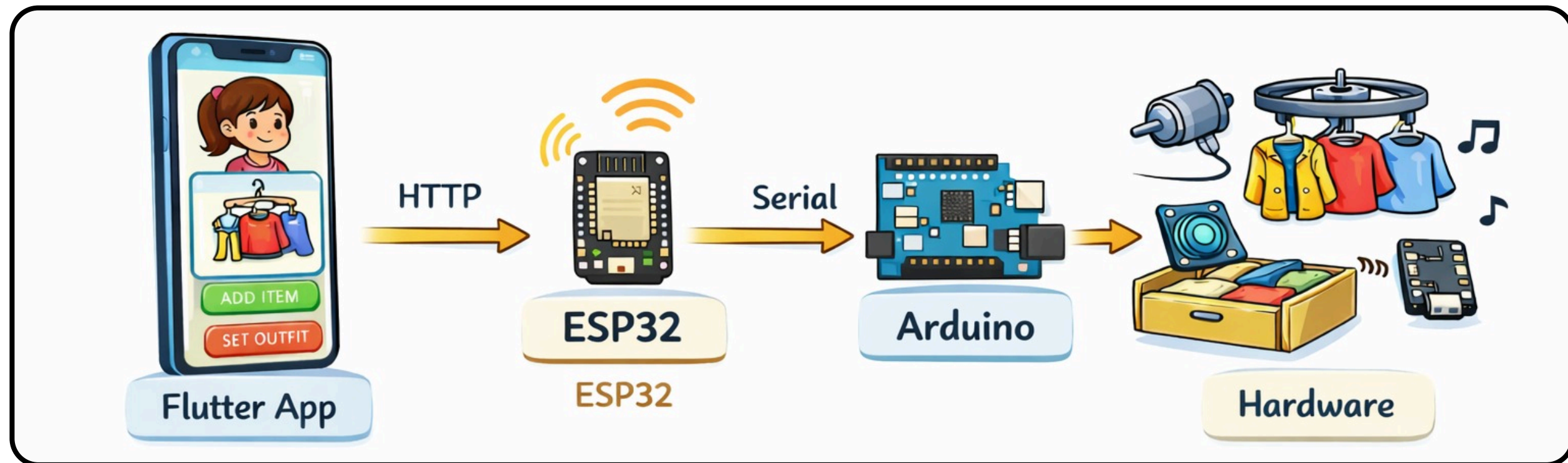


Mobile Application



Nextion Screen

HOW DOES IT WORK?



CLOSET STRUCTURE





HARDWARE COMPONENTS



NEMA23 Stepper Motor



Microstep Driver (3.5A)



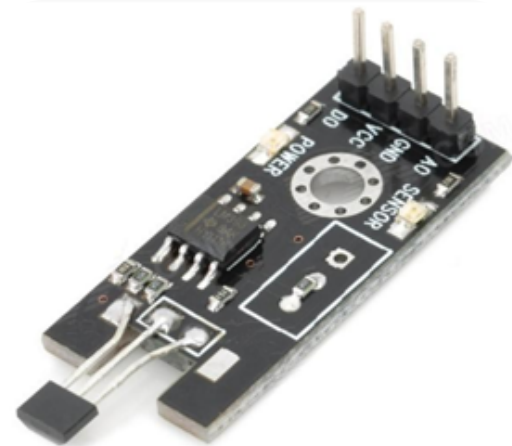
Limit Switch



Load Cell Sensor (20 kg)



DFPlayer Mini MP3



Hall Effect



Ultrasonic Sensor



MFRC522 RFID





HARDWARE COMPONENTS



Bearing Housing



Lead Screw Rail



SpotLight



12V DC Pilot Lamp LED



5V Relay Module



12V Blue LED Strip



12V 3K LED Strip

CONSTRAINTS



1

Limited hardware availability.

2

Rotary hanger precision requirement.

3

Complex child interaction scenarios.

4

Limited touchscreen flexibility.

5

Unreliable mechanical detection.

6

Short RFID reading range.



FUTURE WORK



1

Integrate a camera to identify outfit styles and provide smart suggestions.

2

Adapt the closet to the child's age, allowing it to remain useful as they grow.

3

Increase flexibility so the closet can be used by multiple users or family members.

4

Add a feature that allows parents to choose outfits for the child for specific occasions.



THANK
YOU

