25-FYP-203

Care Nest

Where Love Meets Technology

DEPARTMENT OF COMPUTER SCIENCE

Department of Computer Science

NATIONAL TEXTILE UNIVERSITY

BEYOND YOUR IMAGINATION

NTU — INNOVATE AND LEAD

Description

Our project CareNest, uses sensors and IoT technology to monitor the baby's temperature, diaper condition, air quality, presence, and surrounding noise. The system sends real-time alerts to parents through a mobile app and plays lullabies automatically if loud noise is detected. It also streams live video, helping parents ensure their baby's safety and comfort remotely.

Main Features

- Baby Presence Detection
- Live Video Streaming
- Air Quality Monitoring
- Lullaby Playback System
- Baby Cry Detection
- Body Temperature Monitoring
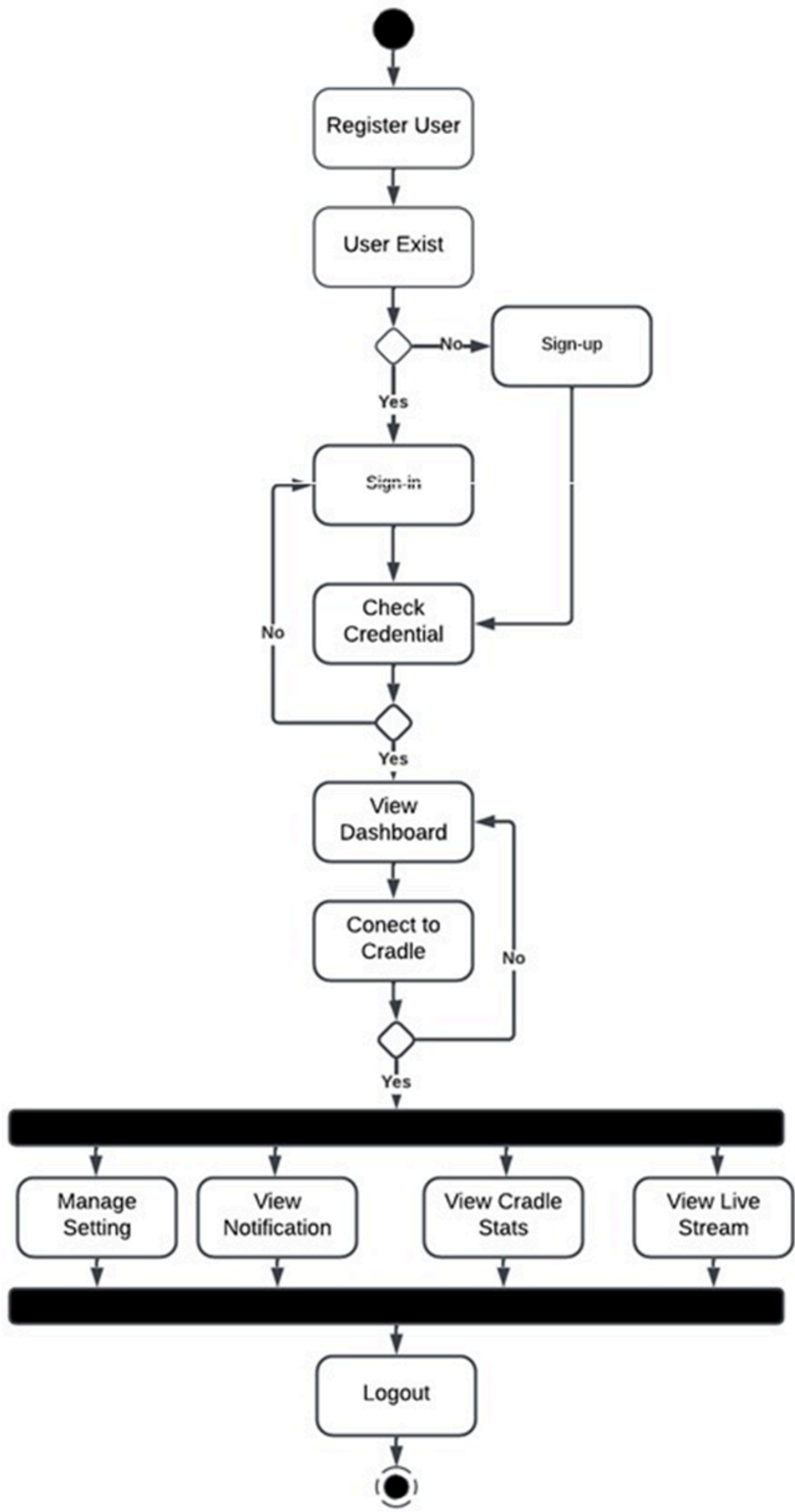- Real-Time Alerts & notifications
- Diaper Moisture Detection

Tools & Technologies

- ESP32 Micro controller & Cam
- Android Studio
- Flutter
- Arduino IDE
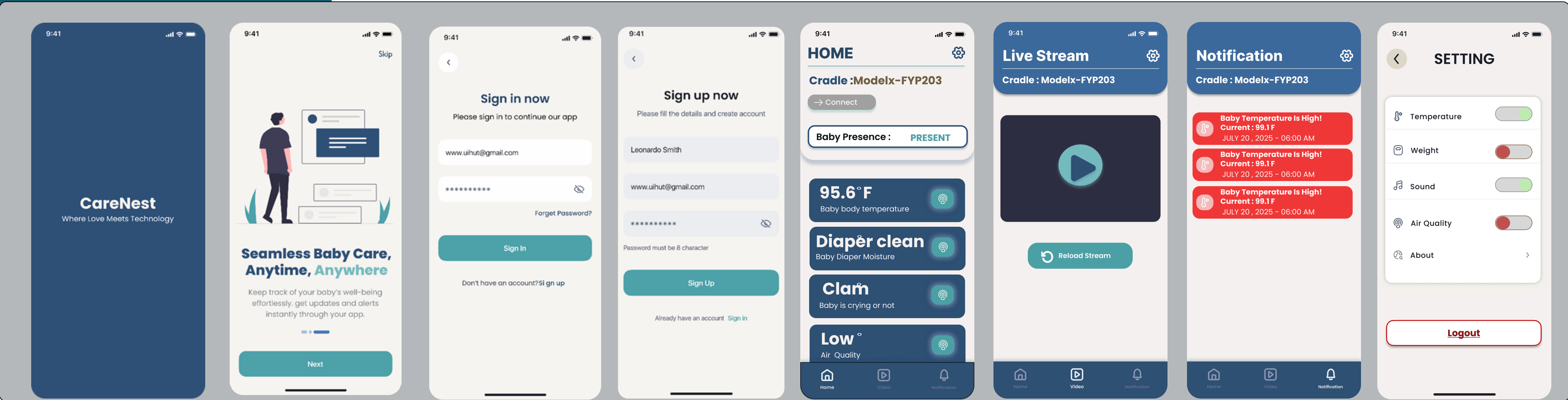- Firebase Realtime Database
- Platformio

Target Market

- New and working parents
- Daycare centers and nurseries
- Families in urban or polluted areas
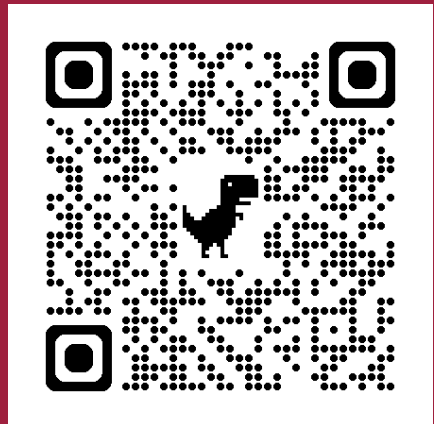
System Diagram

Screen Shots

Group Members

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FINAL YEAR PROJECT DISPLAY 2025

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