



Chidiya

उड़

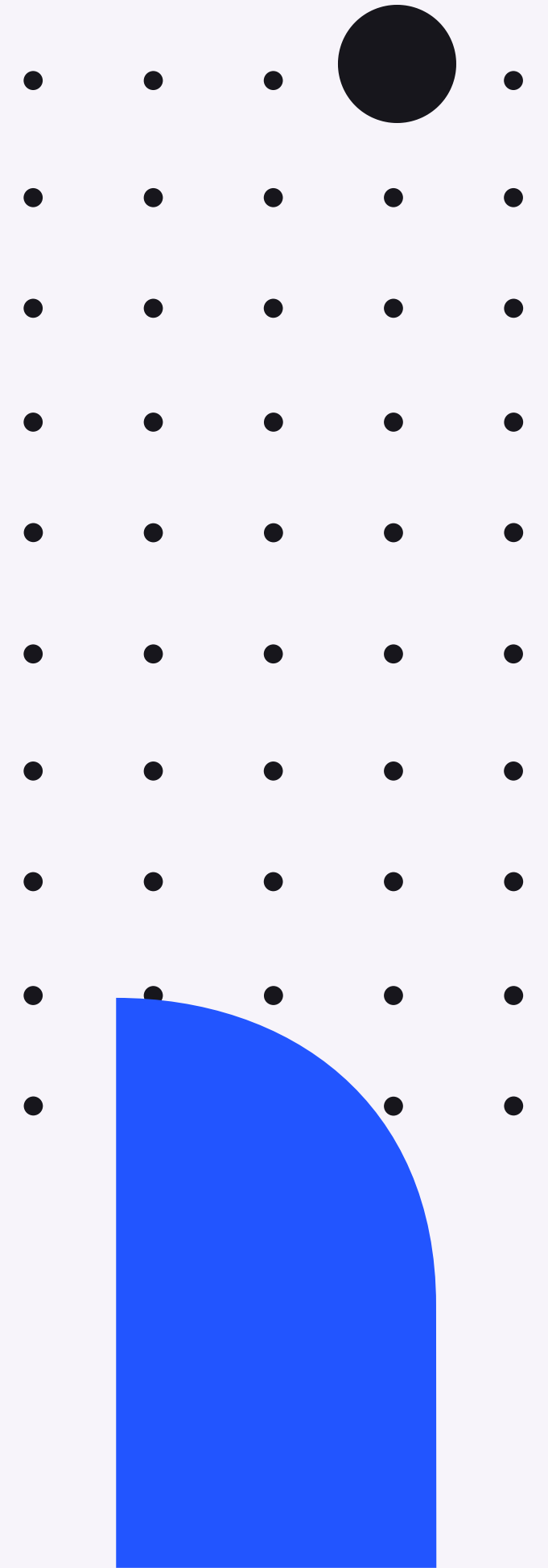
Relive the best of your moments with friends,
with a pinch of knowledge!

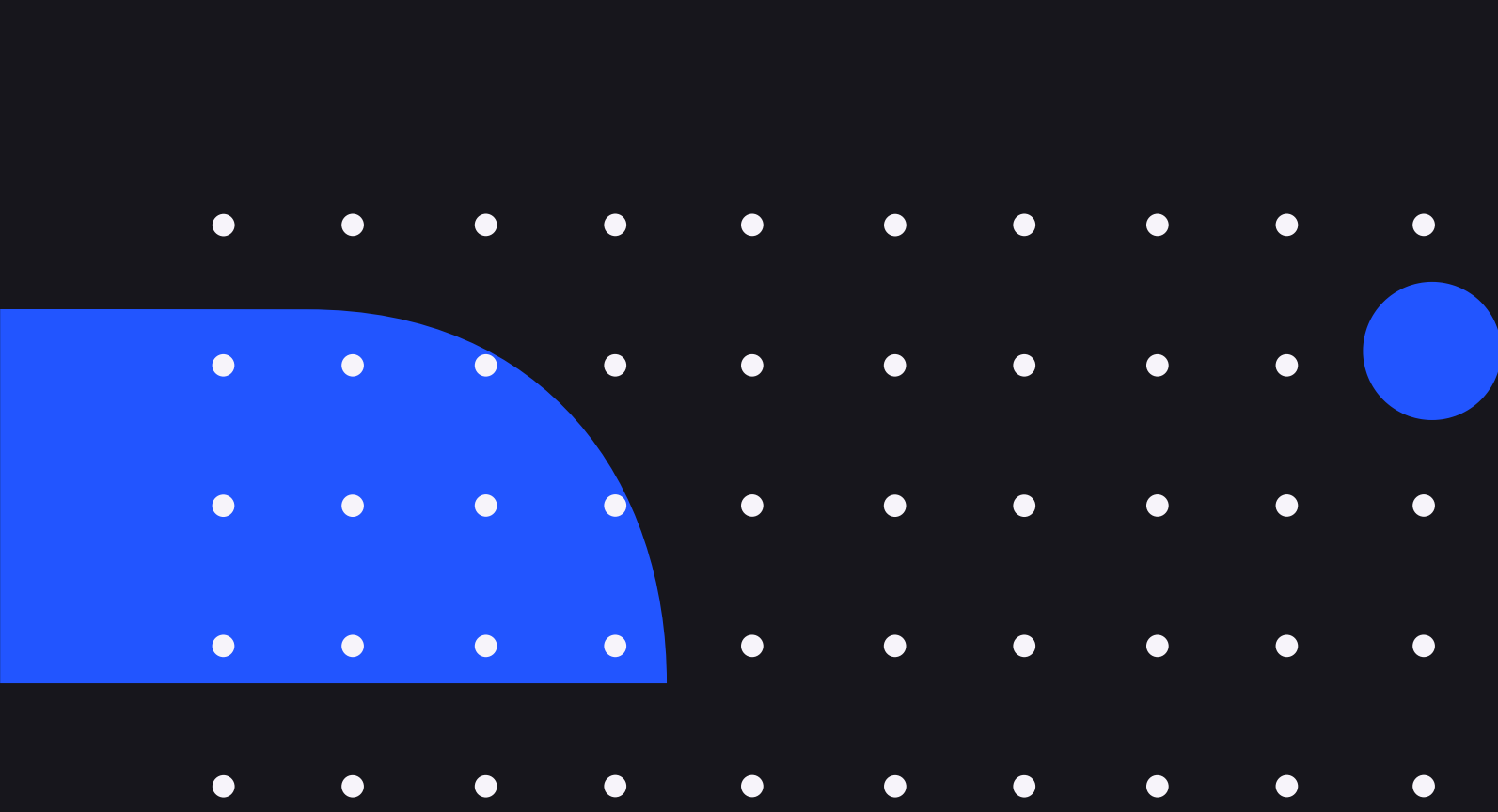
Our Idea

Chidiya ਤੜ brings a touch of knowledge to the iconic game of psychomotor skills.

Our application and physical model implements an automatic game of Chidiya ਤੜ with text to speech user interaction, fast-paced action, and a dynamic leaderboard.

Most importantly in addition to this game mode, there is a Quiz mode for educational purposes. The user can select from an array of topics like Indian Culture, General Knowledge, and Coding.





Structure of the mobile application

Our engaging mobile application has a user-friendly interface suitable for kids of age between 6-14 years.

1

**User
Login/Signup**

2

**Mode
Selection**

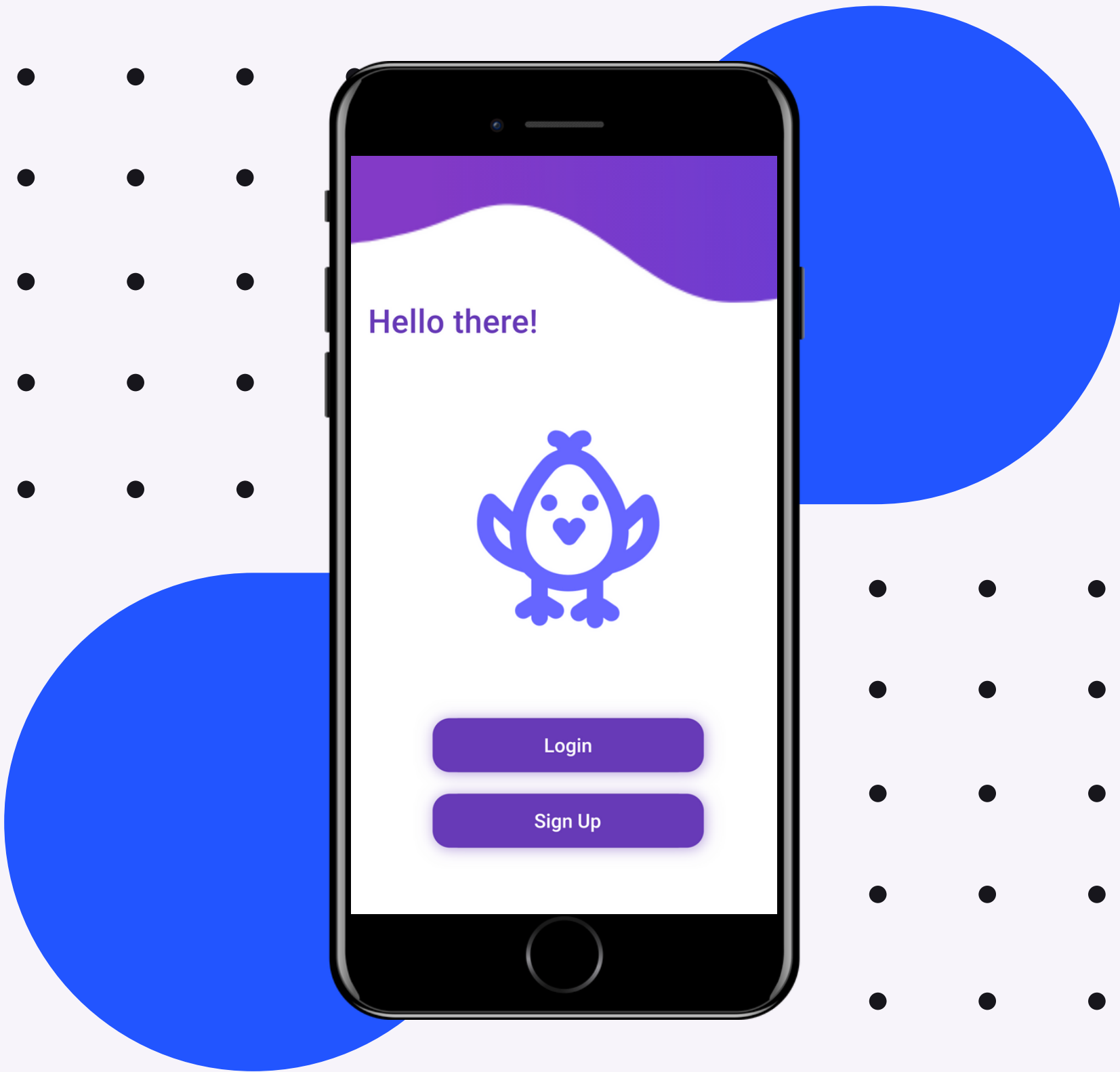
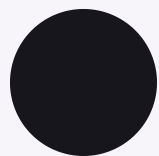
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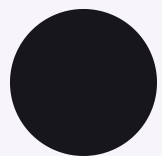
**Quiz/Game
Leaderboards**

4

**User Profile &
Database**



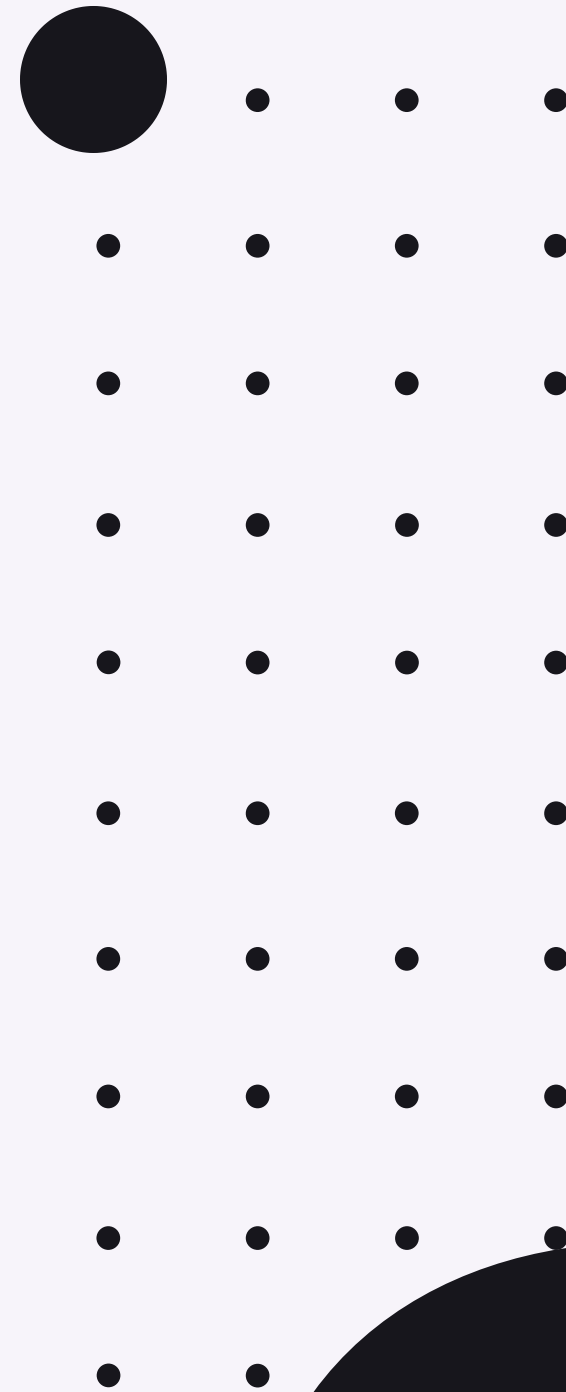
A mobile app sign-up screen. It features a purple header bar with a white wavy line. Below the header, the text "Get Started!" is displayed in a purple font, preceded by a small blue penguin icon. There are three input fields: "Name", "Email", and "Password", each with a light gray border. Below the input fields is a purple rounded rectangular button labeled "Sign Up". The background is white with a large blue circle on the left and a grid of black dots on the right.



The Fun Mode

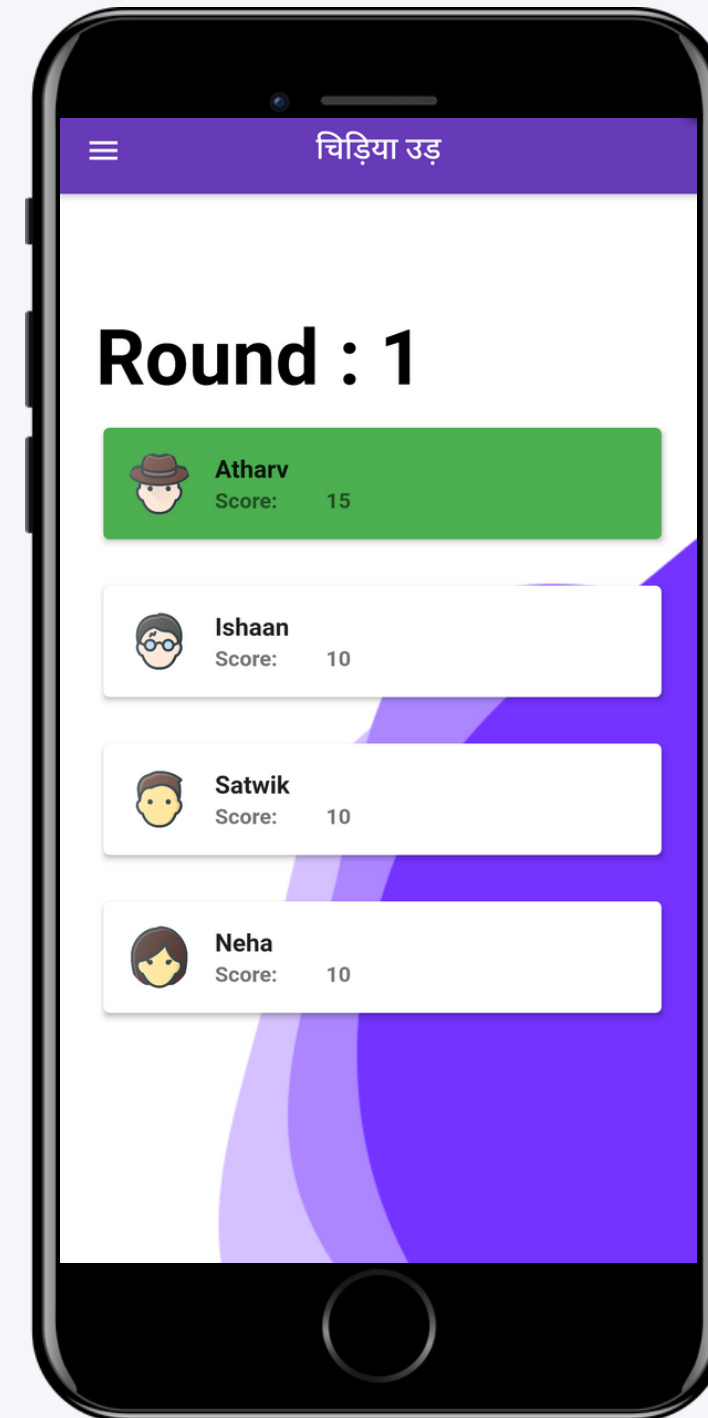
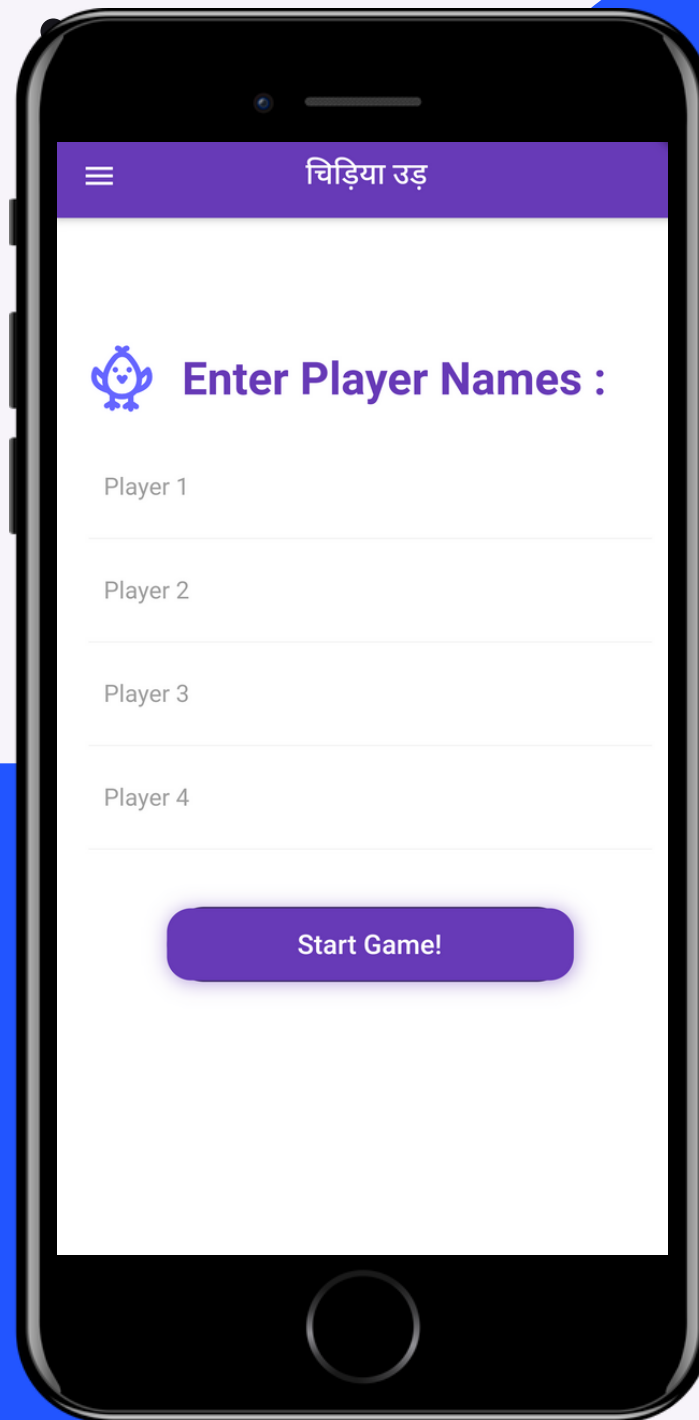
Chidiya उड़ is one of India's most popular childhood games, a fun way to induce psychomotor skills like reflexes in children.

An epitome of Indian culture, our toy eliminates the need for a sharp eye to see who lifted their finger and keeps constant track of the leaderboard.



Chidiya उड़

A model of Indian Culture and
Heritage.





Quiz Mode

As much as entertainment, education is also one of the toy's key points of focus.

Touch inputs from the users can be used as inputs to True/False questions across a variety of domains.

Suitable for all ages

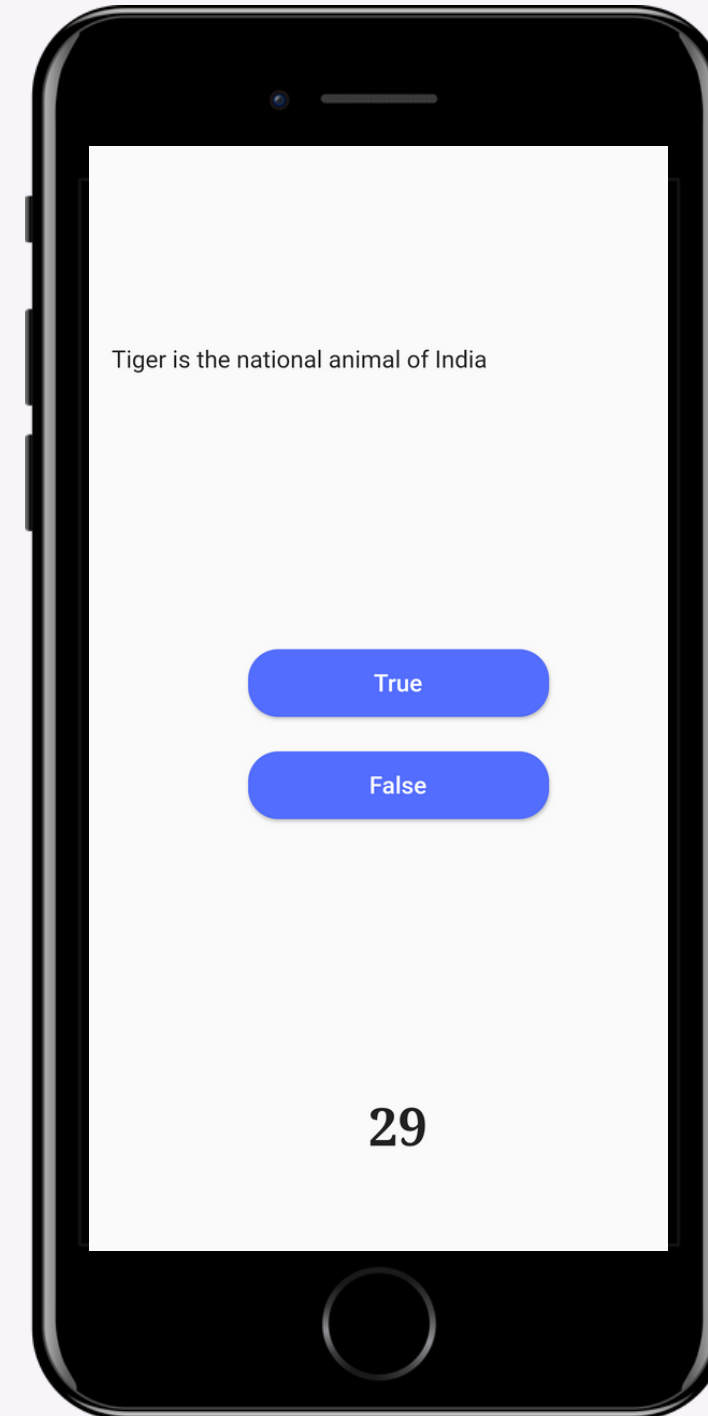
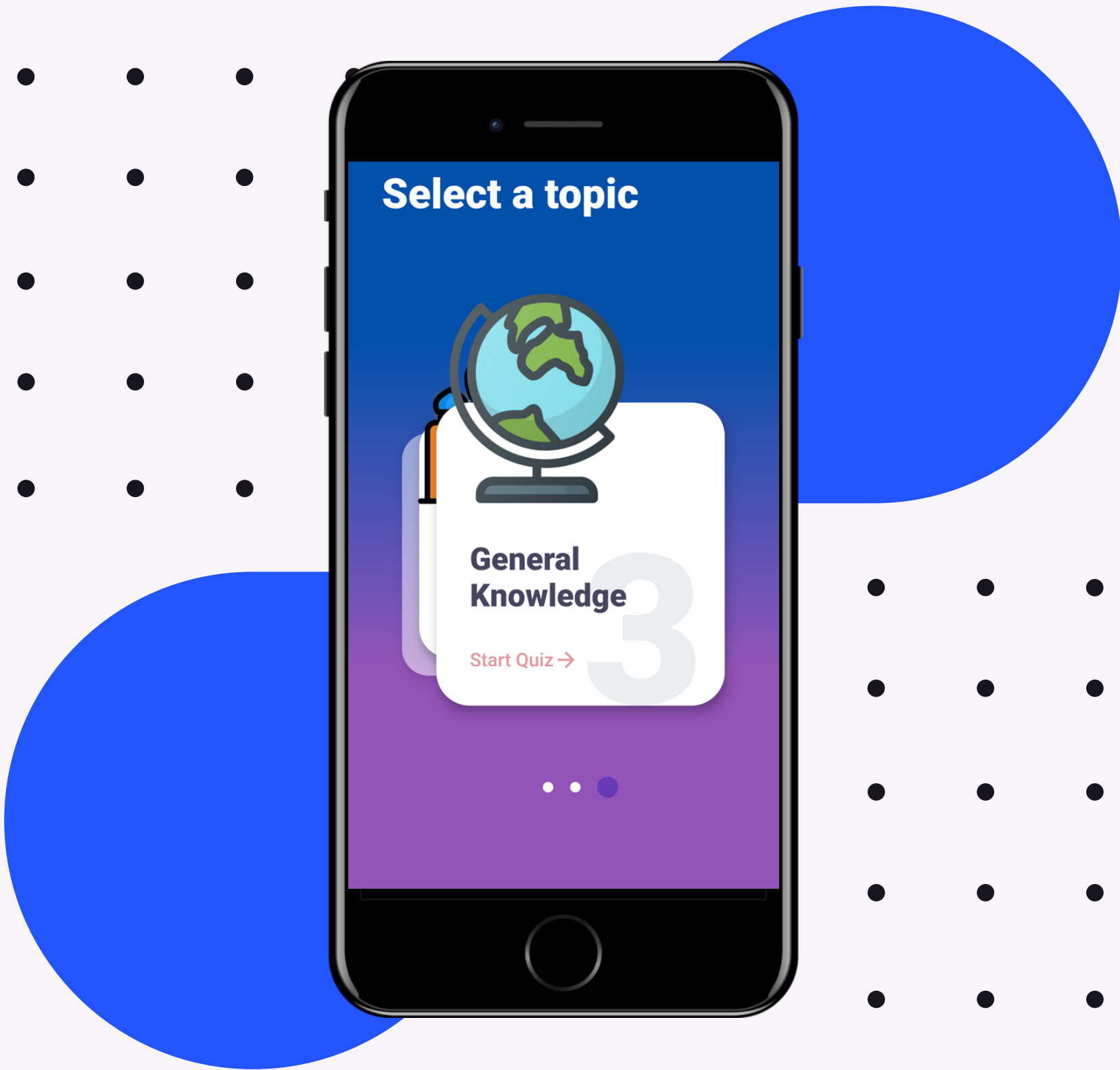
The topics for quizzes can vary from environmental studies to coding.

Compliance with NEP

The quizzes can accomodate topics from the entire syllabus specified in the National Education Policy.

Engaging

This mode makes the toy engaging, interactive and competitive while imparting knowledge.



Hardware

Chidiya ਝੜ uses recyclable and OEM parts to portray an environment and child-friendly product. The small toy has no sharp edges and is also cost-effective and easy to manufacture.

Arduino

Infrared Sensors

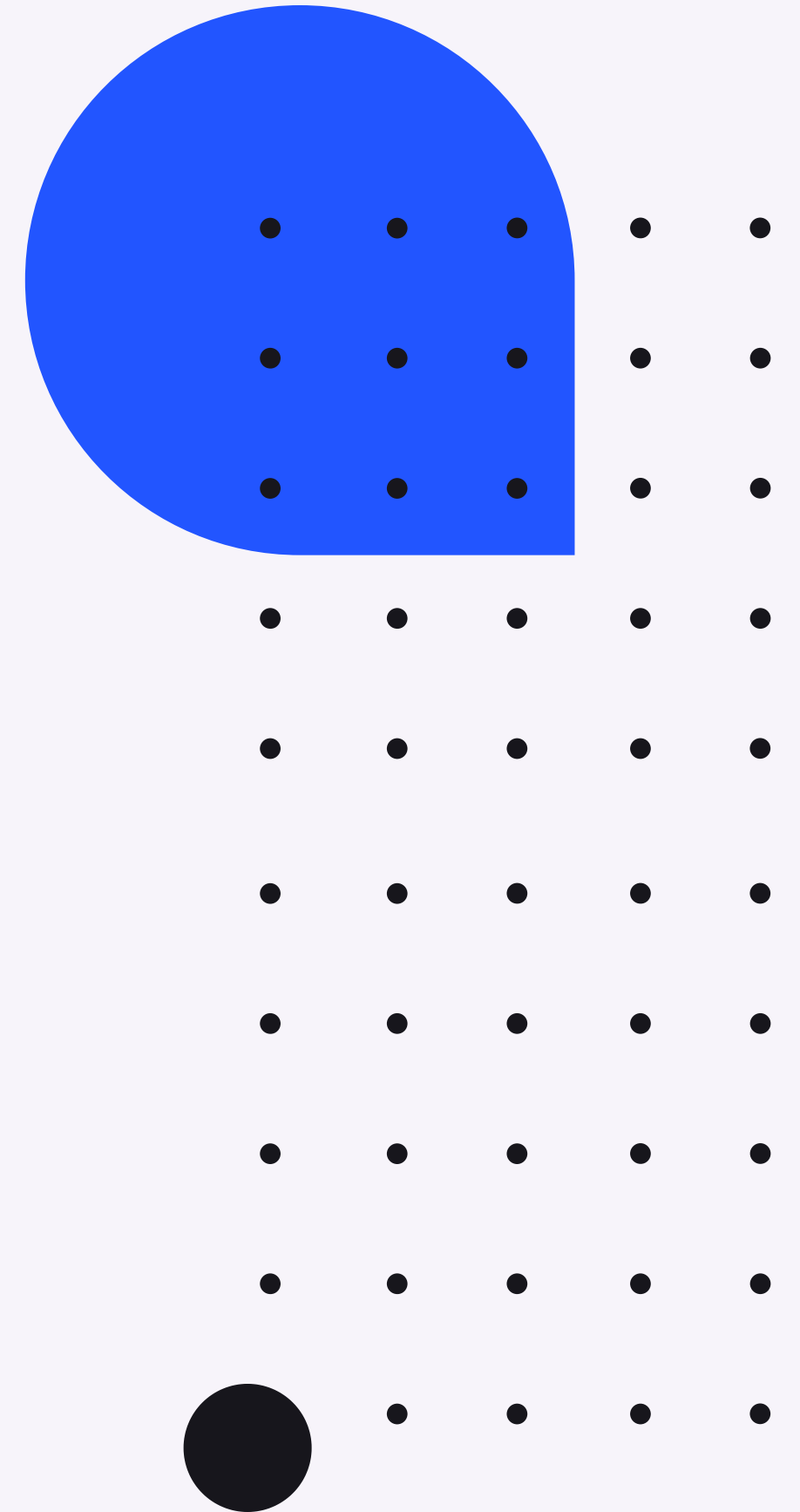
NodeMCU

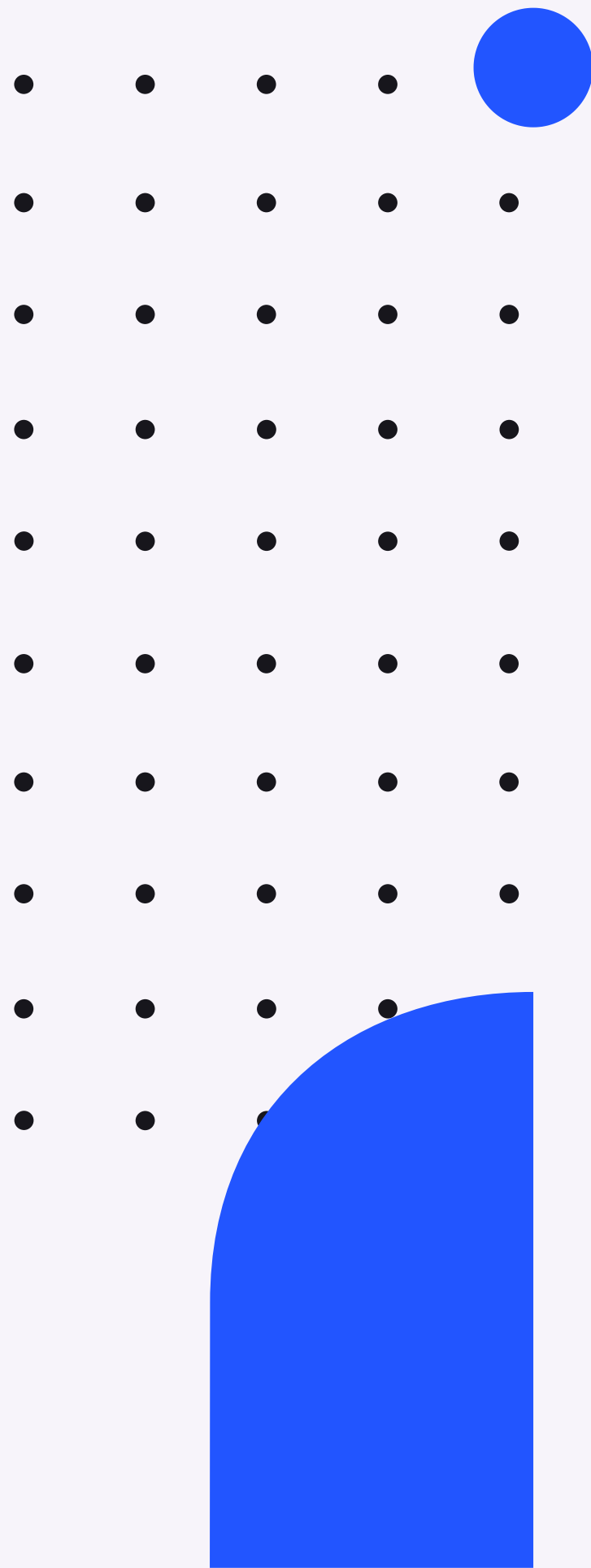


Hardware Parameters

Our toy has -

1. No sharp edges
2. OEM parts which are widely available
3. Both Education and Entertainment modes
4. Feasible and cost-effective design
5. Aesthetic looks





Technologies Used



Flutter/Dart

The software is built on the Flutter framework, coded in Dart to provide a user-friendly UI.

Firebase

The user data of wins/losses and quiz scores are stored on a Firebase database.

Arduino

The hardware of the toy is coded on an Arduino board using touch sensors.

NodeMCU

A connection between the software and hardware is achieved over WiFi using NodeMCU.

Cost Benefit Analysis



Chidiya ਝੜ is a toy that uses widely and cheaply available OEM parts into a consolidated entertainment and education device.

The total cost of the device, manufactured individually is INR700, and with the parts being readily and easily available, the total cost of the product after production can be INR500.

The database over Firebase is essentially free as it allows 10000 users every month, covering the scalability factor of the product.



Our team

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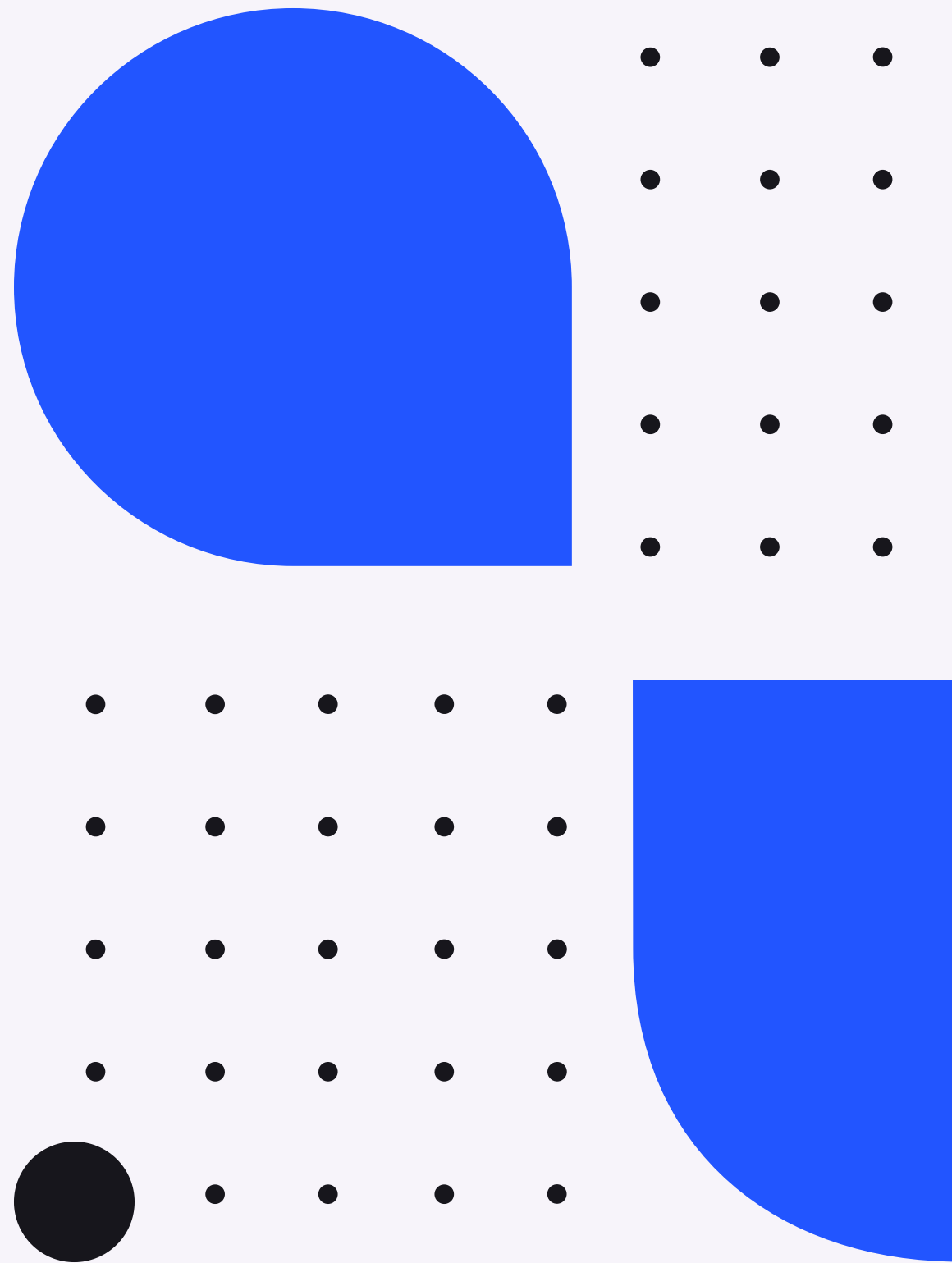
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Thank You

Team WhiteHatSr - Toyathon 2021