

User Manual

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Introduction

"Remote Billiard" is an IOT platform that provides everyday Billiard game experience via an online platform. Not all players can be in the same place to play a billiard game nowadays. Project "Remote Billiard" solves this problem. Players can play their game physically at their own places individually. Our product consists of two main sections; an electrically powered Remote Billiard device and a mobile app. The main game mode we offer to our clients is the Board Vs Board game mode.

The vision of the Product:

The vision of "Remote Billiard" is to give the experience of a live billiard game via an online platform. Our endeavor is to give people more human experience with the new next-generation Technology.

For more details visit our website.

<https://cepdnack.github.io/e17-3yp-remote-billiard/>



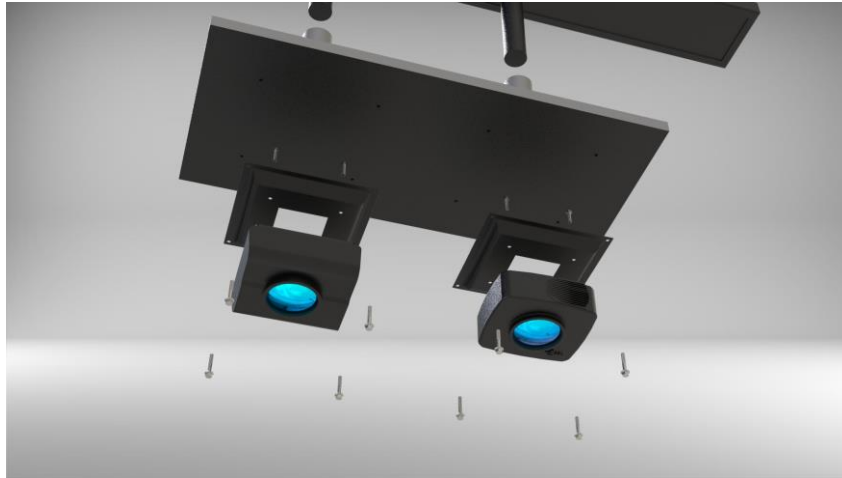
Content of the Package

The package you bought should contain the following items,

- A main unit that contains
 - Raspberry pi microcontroller
 - Raspberry pi power adapter
 - Raspberry pi camera module
 - A cooling fan
 - 3 Leds
- A mini projector

Components of Remote Billiard Device

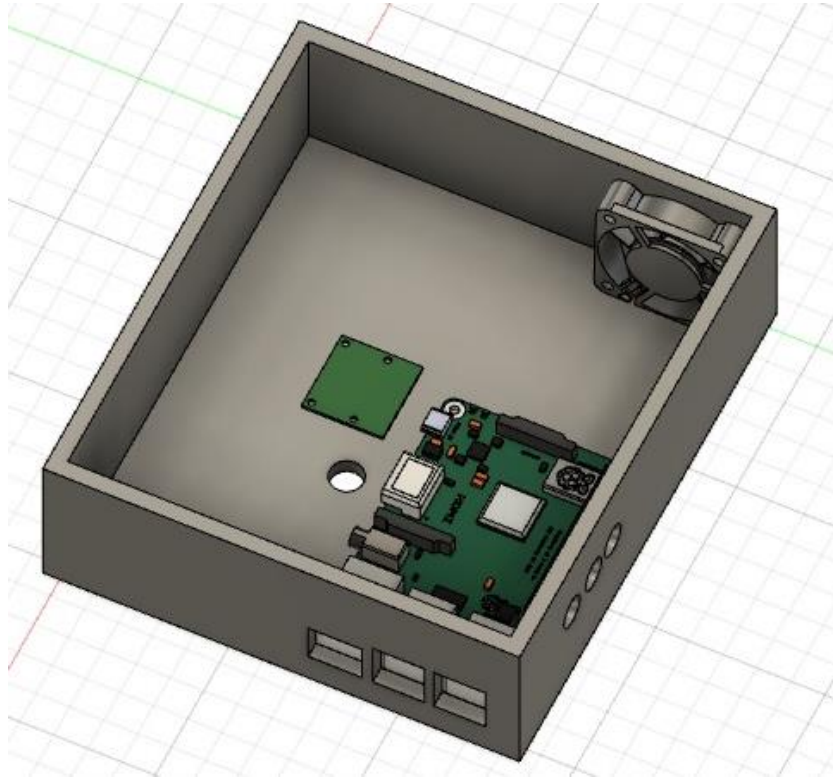
Main device and the projector with height adjustable supporter



Projector



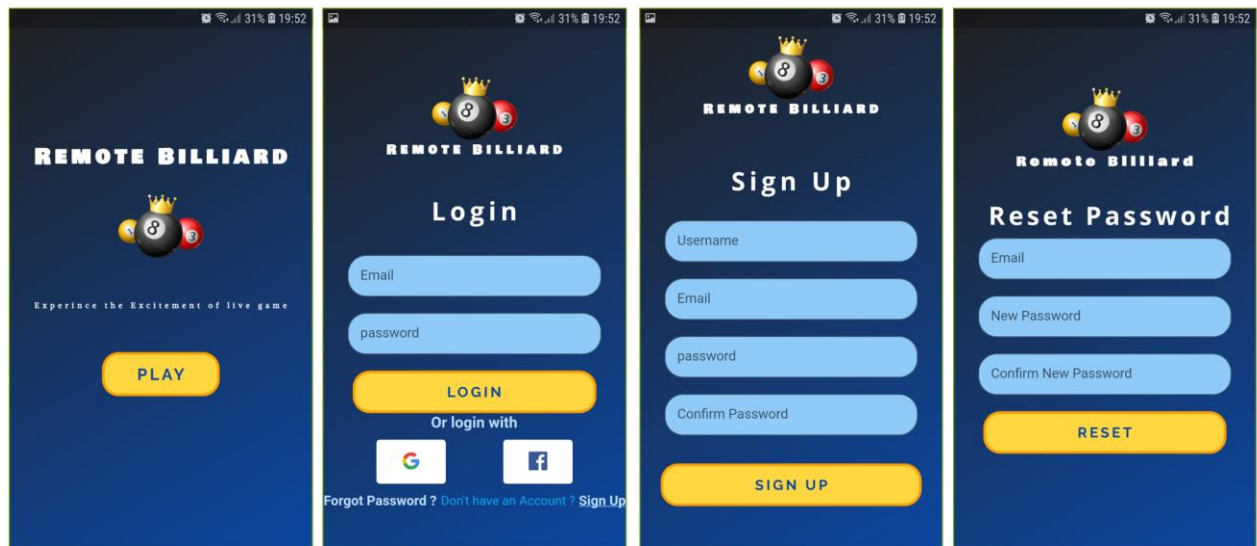
Inside of main Device



Connect with the Platform

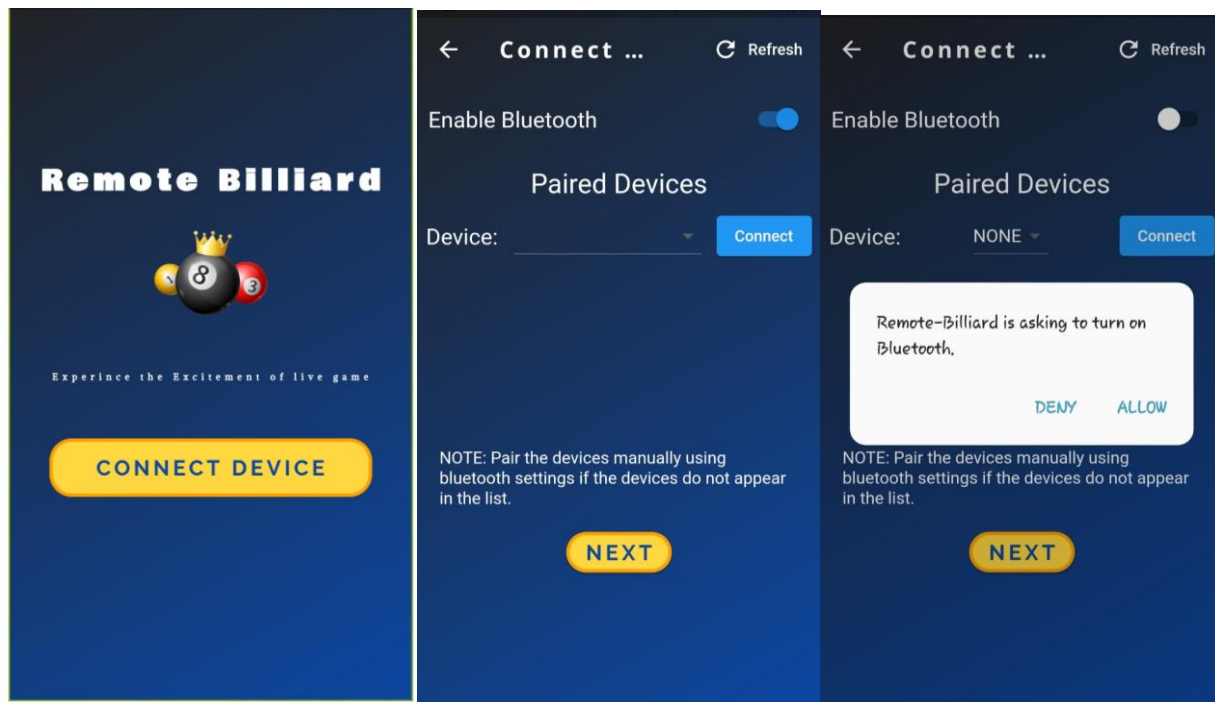
Follow these steps to connect to our platform

- Download the app from the Play Store
- Create your RemoteBilliard account
- Login to your account
- You can log in using your Google or Facebook accounts
- You can reset the password if it is forgotten



Connect with the Remote Billiard device

- Initially mount the remote billiard device to the supporter.
- Connect the power adapter of the device.
- Adjust the supporter until the height indicator turns green.
- Then using the mobile application connects to the device using the connect device option.



Play Game

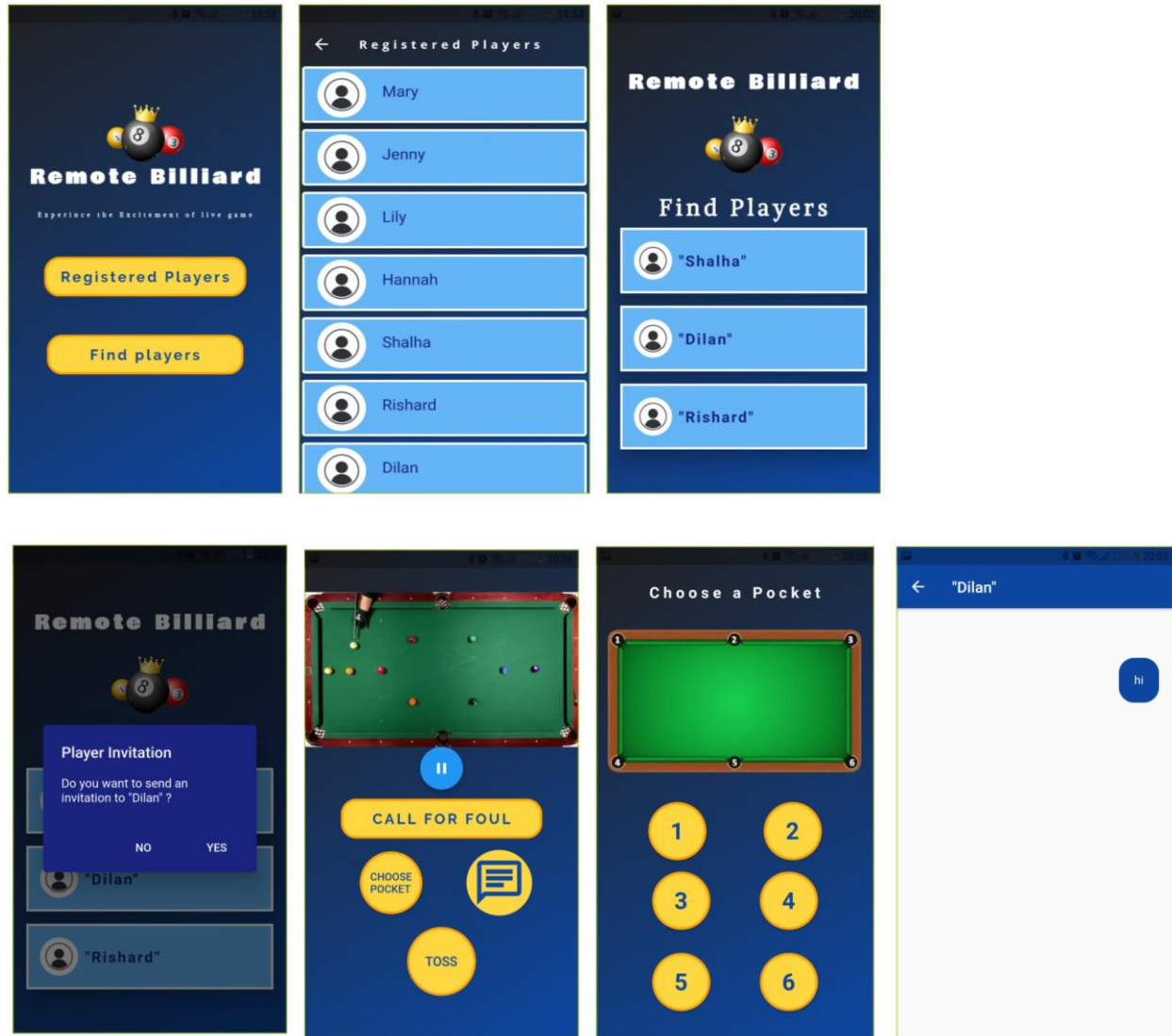
Once the mobile application is connected to the hardware device, next the user is prompted the play area. Here the user is given two options.

1. Registered player: Here the user can check all the other players who have signed up for the game. (subscribed to the game)
2. Find Players : Here the user can find all the players who are currently available , online and connected to the server. Then select a player from the list. If a player has selected you as their opponent, you will receive an invitation to the game. Here the user has the freedom to either accept the invitation or decline it.

- If the user accepts the invitation then he/she will be prompted into the main play image.

Initially before starting to play the game , the players will have to press the toss option.

- Based on this toss , the player can make his first shot , the other players can view / observe the live feed of the player who makes the shot. (Live feed - Future implementation)
- While observing the live feed , if anyone notices a foul play of the player , then there is an option called "call for foul" . Once that is pressed the player will be notified regarding the foul play request. Then the player can either accept the foul play or decline it. If the foul play was accepted by the player, then a pop up notification is sent to all other players regarding the foul play status.
- As per the rules of the game the players have the option to choose a pocket before they make a shot. Then this chosen pocket will be sent to all other players.
- In that case they can observe whether the player shoots the ball into the correct pocket or not.
- Additionally there is a chat option also given. Using this chat option the players can communicate with each other real-time.



LED Status Indications

Type of LED	Colour	Status
Bluetooth Indicator LED	Red	Connected to app via bluetooth
Projection area Indicator	Blue	Projection area is accurate
Height Indicator LED	Green	Indicates that the device is mounted at correct height

Maintenance of your Remote Billiard Device

- The height of the device from the pool board should be maintained at a consistent level. If it constantly changes then the image processing may be affected.
- Periodically wipe the lens of the mini projector and the camera module in the device using a damp cloth , preferably a microfiber cloth and glass cleaning liquid.
- In case the led indicators are burnt , replace them.
- If the device is not being used for a long time , make sure to turn off the power supply to the device.