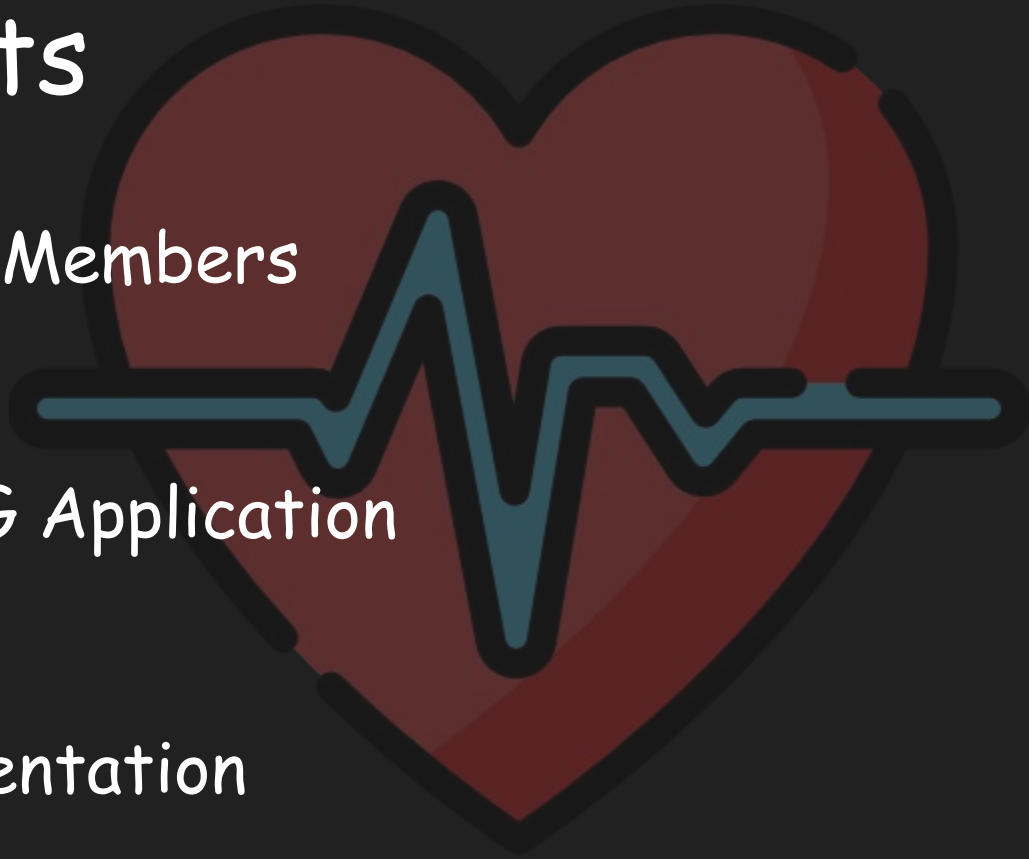# ECG Kit Application

조정희, 김준형, 최윤호, 박범순
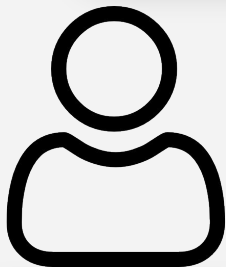
Contents

1. Project Members

2. Our ECG Application

3. Implementation
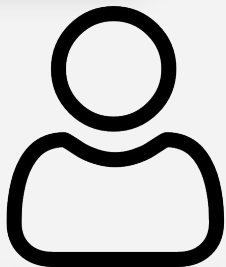
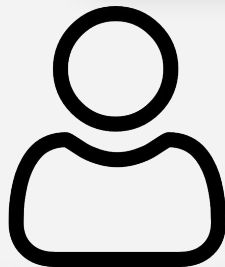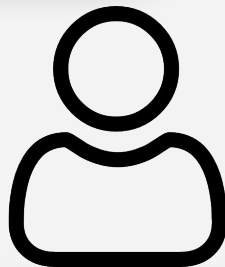# Project Members

Front-End

Yunho Choi

Beomsoon Park

HW & App Connection / UI

Back-End

JunHyeong Kim

JeongHui Cho

Server / Data Management

Our ECG Application

- Main Functions

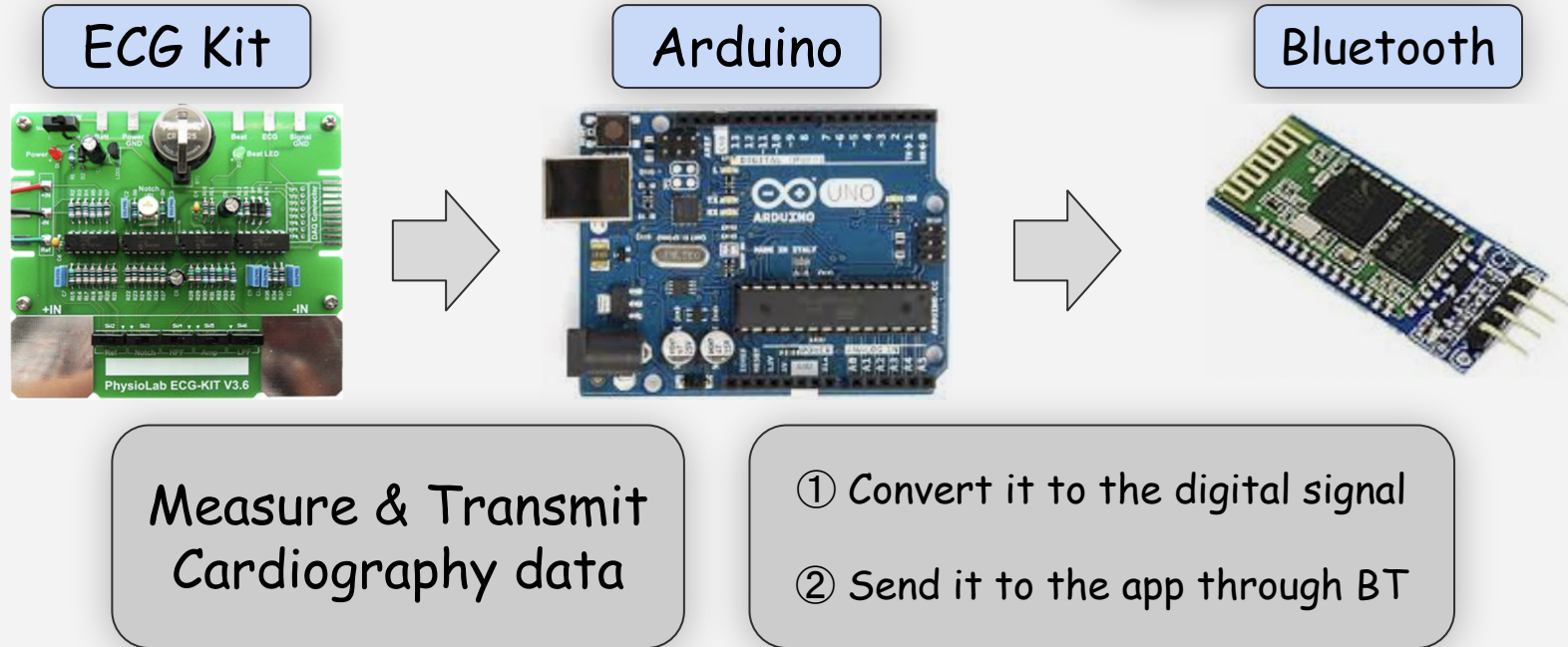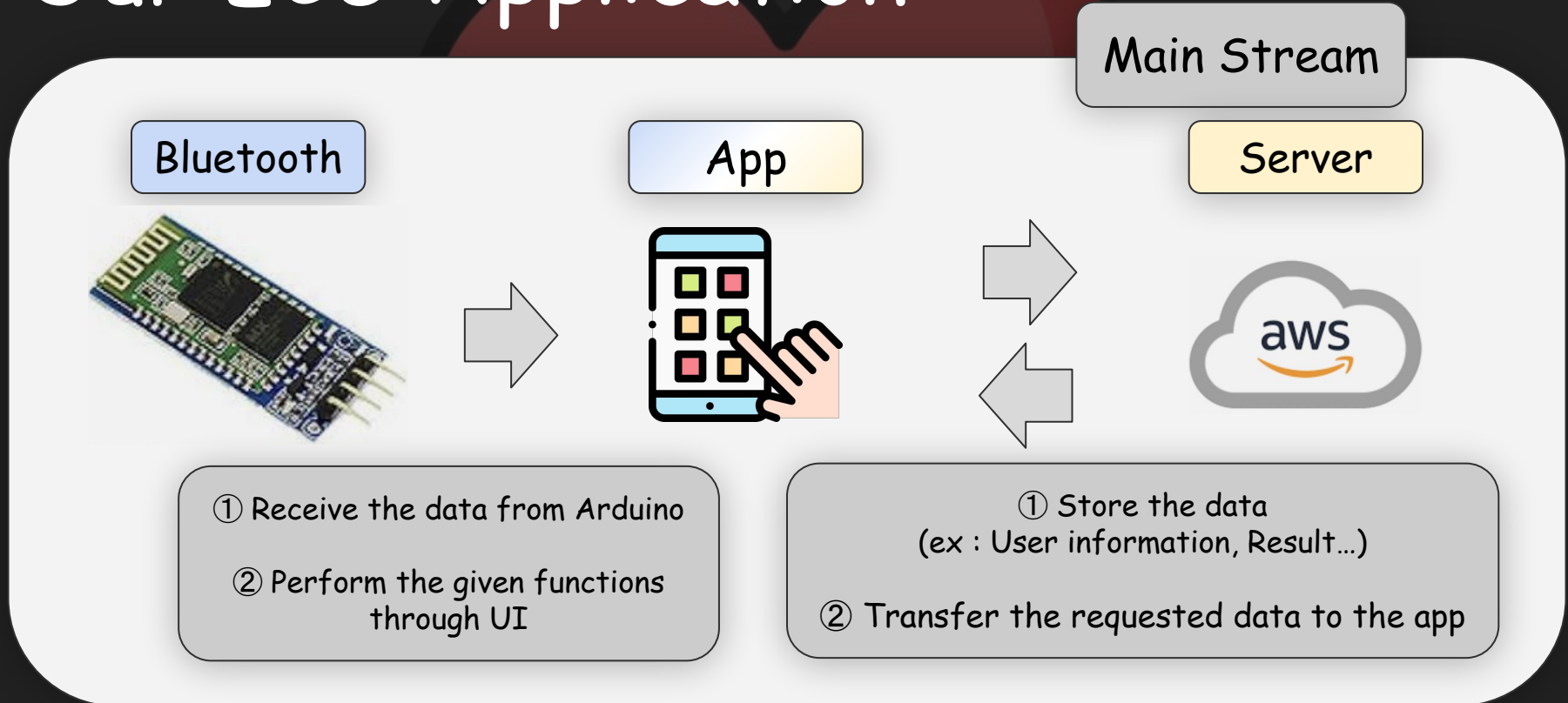| 1	로그인 기능을 통한 사용자 정보 다루기 Handling user information by implementing Login function
2	디지털 신호로 변환된 심전도 정보 그래프로 표현 Show the graph of the digital signal of cardiography data
3	서버를 통해 사용자별 심전도 정보 저장 및 불러오기 Store & Receive the measured data through the server

Our ECG Application

Main Stream

ECG Kit

Arduino

Bluetooth

Measure & Transmit Cardiography data

① Convert it to the digital signal

② Send it to the app through BT

Our ECG Application

Bluetooth

App

Main Stream

Server

① Receive the data from Arduino

② Perform the given functions through UI

① Store the data
(ex : User information, Result…)

② Transfer the requested data to the app

Implementation - Login

No user info? → Sign up
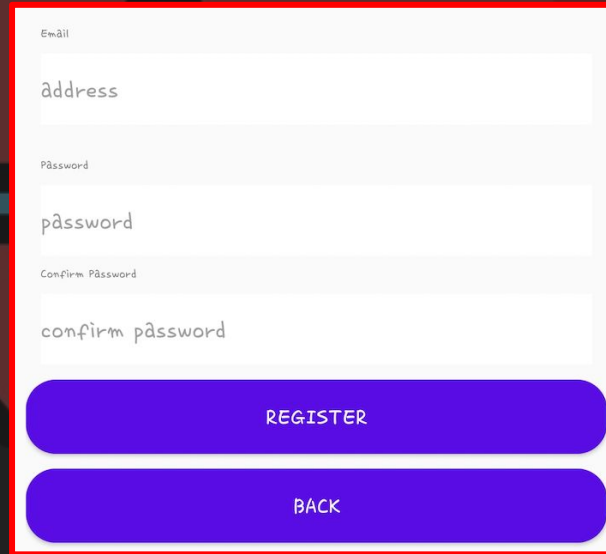
Already done Register?
Input Email & PW → Login

Implementation - Sign up

Input your ID & PW
→ CLick Register Button

(* If 2 typed PWs are
different, you cannot register)

Implementation - Main Page

BT connection status

BT On / Off Button

Show the list of paired devices

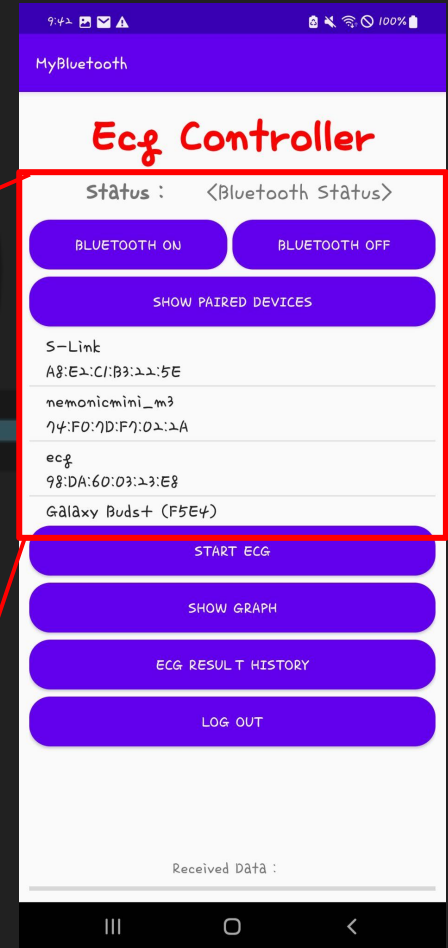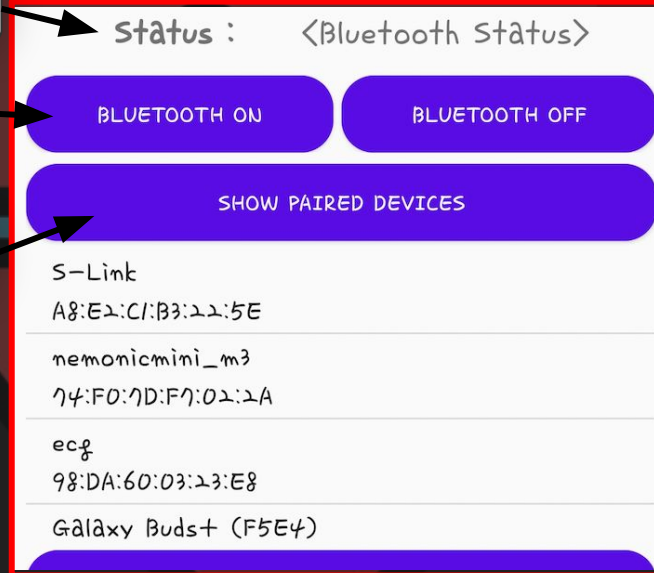Check the bluetooth status & Make connection with the selected paired device

MyBluetooth

Ecg Controller

Status : <Bluetooth Status>

BLUETOOTH ON   BLUETOOTH OFF

SHOW PAIRED DEVICES

S-Link
A8:E2:C1:B3:22:5E

nemonicmini_m3
74:F0:7D:F7:02:2A

ecg
98:DA:60:03:23:E8

Galaxy Buds+ (F5E4)

START ECG

SHOW GRAPH

ECG RESULT HISTORY

LOG OUT

Received Data :

Status :   <Bluetooth Status>

BLUETOOTH ON   BLUETOOTH OFF

SHOW PAIRED DEVICES

S-Link
A8:E2:C1:B3:22:5E

nemonicmini_m3
74:F0:7D:F7:02:2A

ecg
98:DA:60:03:23:E8

Galaxy Buds+ (F5E4)

Implementation - Main Page

Status
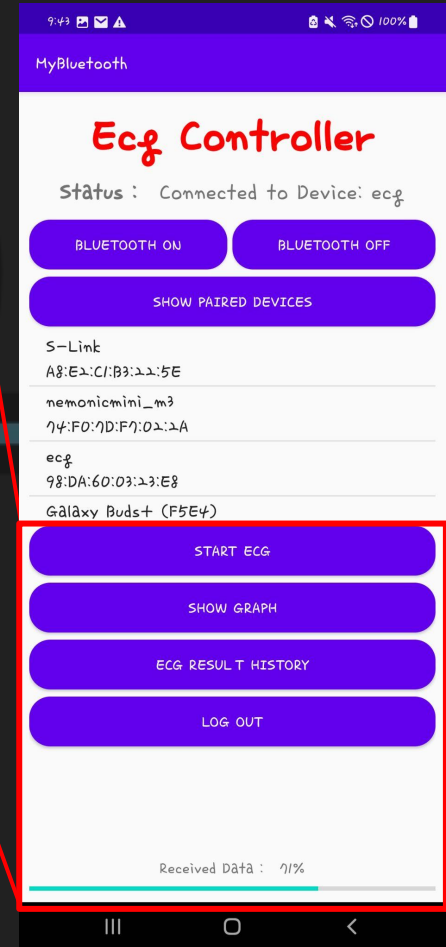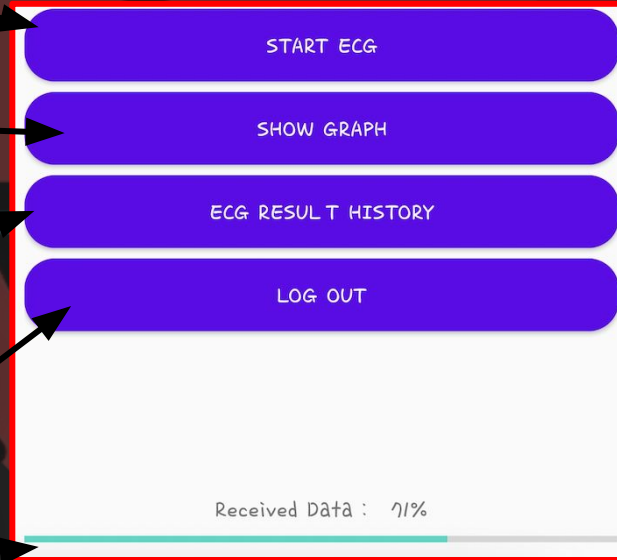- The connection (Arduino ~ App) Success
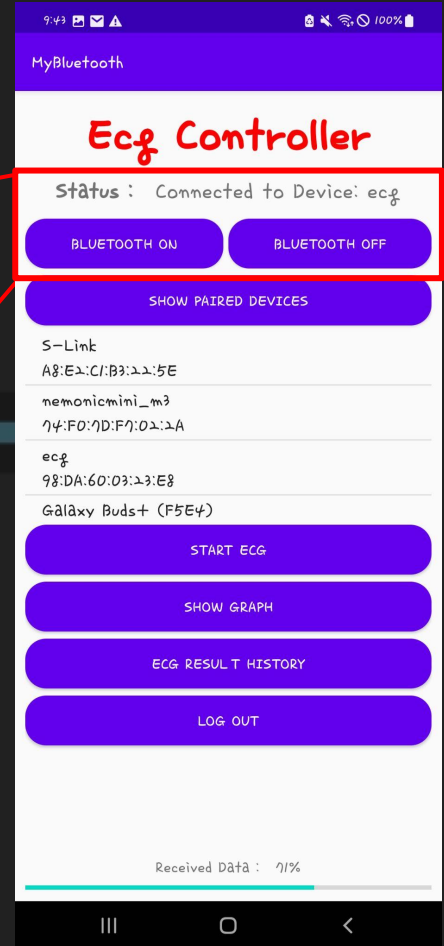
Implementation - Main Page

Get data from Arduino

Go to the result graph page
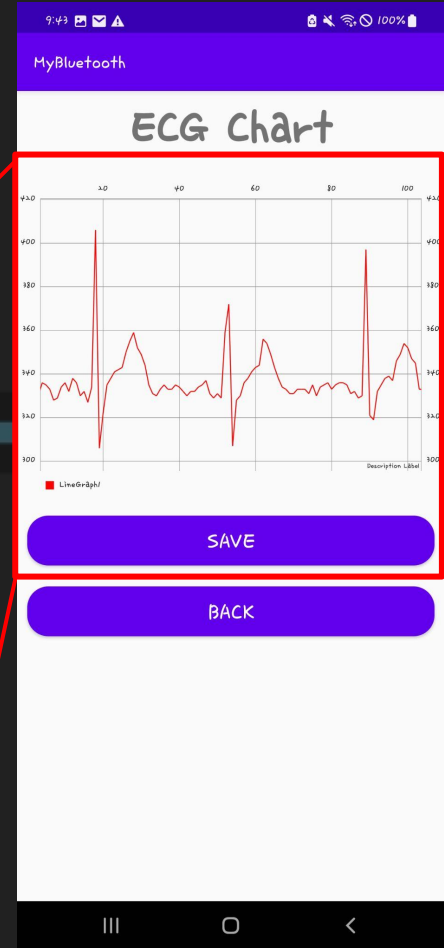
Show the list of previous result

Log out

Show the progress of transferring measured data

MyBluetooth

Ecg Controller

Status : Connected to Device: ecg

BLUETOOTH ON | BLUETOOTH OFF

SHOW PAIRED DEVICES

S-Link
A8:E2:C1:B3:22:5E

nemonicmini_m3
74:F0:7D:F7:02:2A

ecg
98:DA:60:03:23:E8

Galaxy Buds+ (F5E4)

START ECG

SHOW GRAPH

ECG RESULT HISTORY

LOG OUT

Received Data : 71%

START ECG

SHOW GRAPH

ECG RESULT HISTORY

LOG OUT

Received Data : 71%

Implementation - Graph Page

Graph of the result
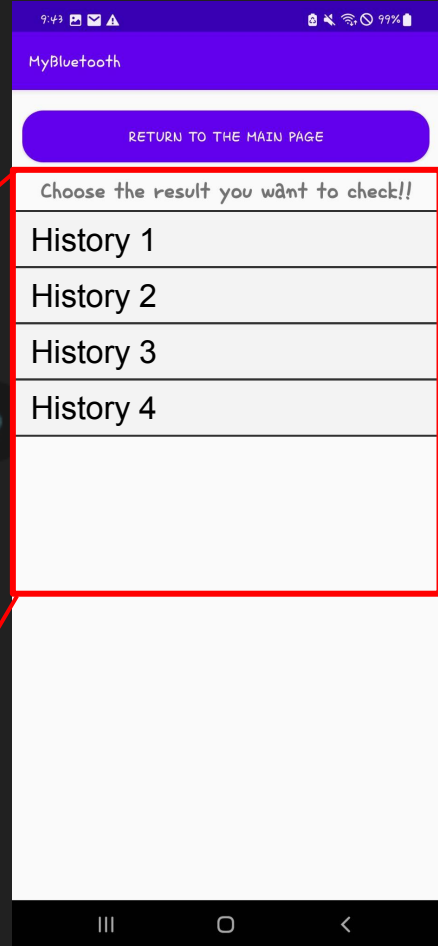(* The scale is settled, but
Zoom-in & Zoom-out available)

Send the data to the server

Implementation - History Page

The list of previous test results → Show the graph of the selected result

Choose the result you want to check!!

History 1

History 2

History 3

History 4

RETURN TO THE MAIN PAGE

Choose the result you want to check!!

History 1

History 2

History 3

History 4

See how our app works!
Thank you for listening!!