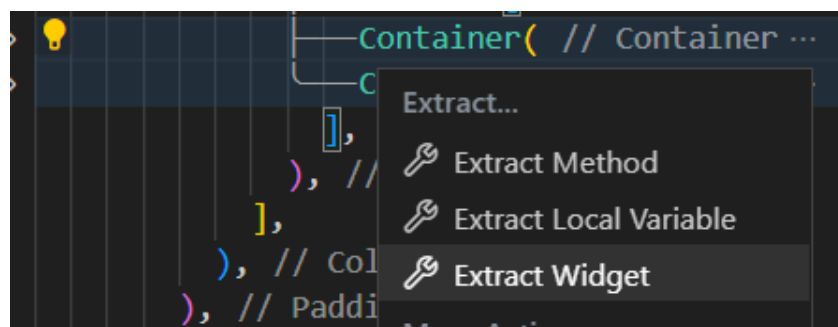


Flutter - 커스터마이징 된 위젯 만들기 (wallet ui)



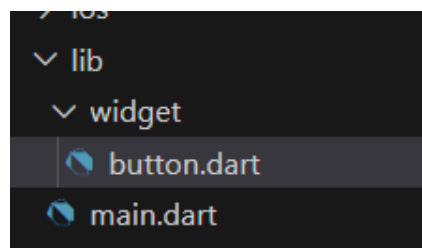
이 글자와 백그라운드 컬러 색만 다른 위젯을 만들기 위해! 복사 붙여넣기 하지 말고 위젯을 재사용해보자.

정말정말 쉽고 편한 방법은 일단 버튼 하나 만들어 둔 상태에서



위젯 내보내기를 하면... 애가 알아서 위젯을 만들어 줌.

근데!! 강의에서는 일단 Dart에 익숙해져야하니까 직접 작성하는 방법을 알려줄거래.



새 파일을 만들어 줍시다

그리고 안에 들어갈 내용을 작성해야하잖아

ㅋㅋ 이것도 단축키 있음



그러나 지금은 봉인해야 함 알고리즘 처음 배울 때 max min 함수 쓰지 않은 것처럼 하 알고리즘도 해야하는데 토 일 시험 끝내고 일요일부터 간다!!!!

▼ 위젯 코드

```
import 'package:flutter/material.dart';

class Button extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Container(
      decoration: BoxDecoration(
        color: const Color(0xFF1F2123),
        borderRadius: BorderRadius.circular(45),
      ),
      child: const Padding(
        padding: EdgeInsets.symmetric(
          vertical: 20,
          horizontal: 50,
        ),
        child: Text(
          "Request",
          style: TextStyle(
            fontSize: 20,
            color: Colors.white,
          ),
        ),
      ),
    );
  }
}
```

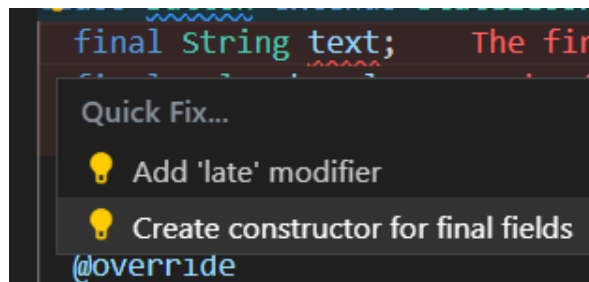
근데 위 코드처럼 하면 위젯을 재사용 못하잖아 그래서 텍스트 색, 배경 색, 텍스트 내용을 바꿔줄 수 있게 해야함

```
final String text;
final Color bgColor;
final Color txtColor;

Button({
  required this.text,
  required this.bgColor,
  required this.txtColor,
})
```

이렇게 적어주면 됨. 근데 이거 일일이 적는 거 불편하지 않나?

플러터는 이런 것도 대신 해줌



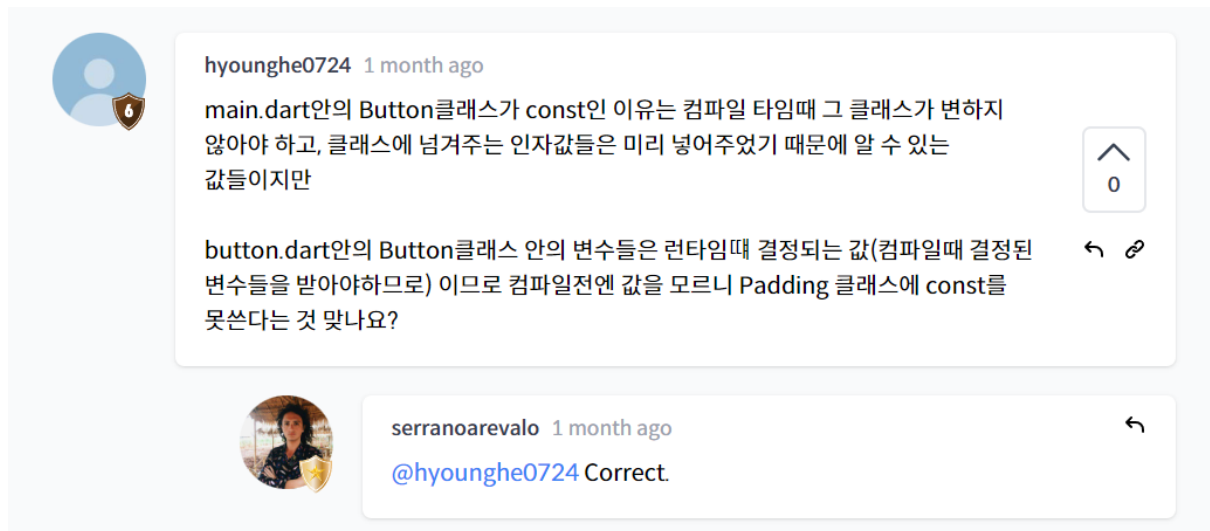
누르세요

```
final String text;
final Color bgColor;
final Color txtColor;

const Button({super.key, required this.text, required this.bgColor, required this.txtColor});
```

짤

그런데 왜 final을 쓰지? 미리 결정된 것이 아닌건가? 했는데



궁금한 점이 시원하게 해결되었어요!

근데 메인함수에서 사용할 때는 const임! 유의

```
const Row(
  mainAxisAlignment: MainAxisAlignment.spaceBetween,
  children: [
    Button(
      text: "Transfer",
      bgColor: Colors.amber,
      txtColor: Colors.black),
    Button(
      text: "Request",
      bgColor: Color(0xFF1F2123),
      txtColor: Colors.white)
  ],
),
```

여기서 잠깐... opacity 쓸 때는 const가 있으면 오류난다 앤 컴파일 할 때 알기 힘든 값인가봐

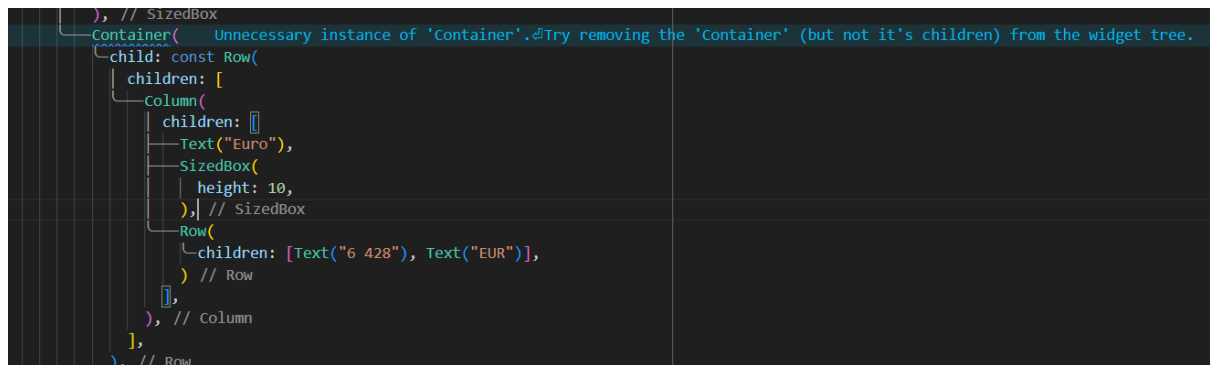


글자를 이렇게 아랫줄에 맞추고 싶고 떨어트려두고 싶다?

```
mainAxisAlignment: MainAxisAlignment.spaceBetween,  
crossAxisAlignment: CrossAxisAlignment.end,
```

이거 쓰시오

아래 파란 줄이 의미하는 것: 지금 컨테이너는 아무런 역할도 하고 있지 않아요

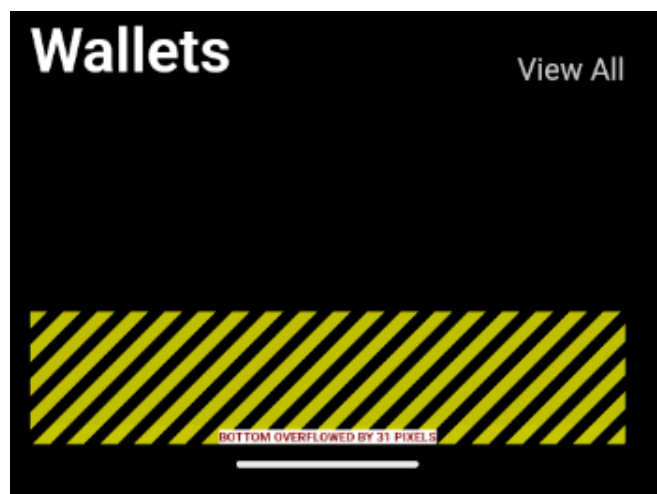


```
Container(  
  decoration: const BoxDecoration(color: Color(0xFF1F2123)),  
  child: const Row(  

```

데코레이션을 넣어줍시다~

ㅋㅋ 아무 생각없이 따라하다가 오버플로우 나서 sized box 강의랑 다르게 조절함



radius 쓸 때도 const 쓰면 안되나봐 유의

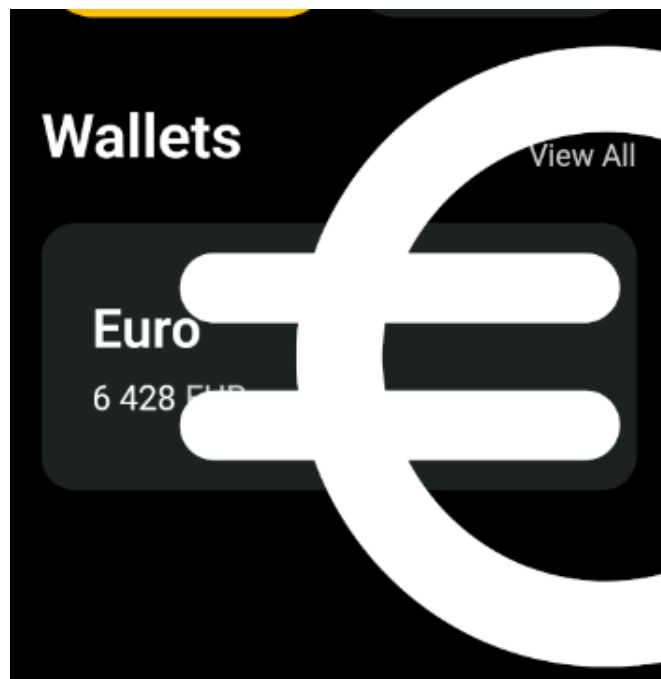
```
), // SizedBox
Container(
  decoration: const BoxDecoration(
    color: Color(0xFF1F2123),
    borderRadius: BorderRadius.circular(20), // The constructor being called isn't a const constructor
  ), // BoxDecoration
  child: const Padding(
    padding: EdgeInsets.all(20),
```

icons

```
mainAxisAlignment: MainAxisAlignment.spaceBetween,
children: [
  Column( // Column ...
    const Icon(
      Icons.euro_rounded,
      color: Colors.white, // euro_rounded
      size: 98, // euro_symbol_rounded
    ), // Icon // exposure_zero_rounded
  ],
), // Row
), // Padding
) // Container
```

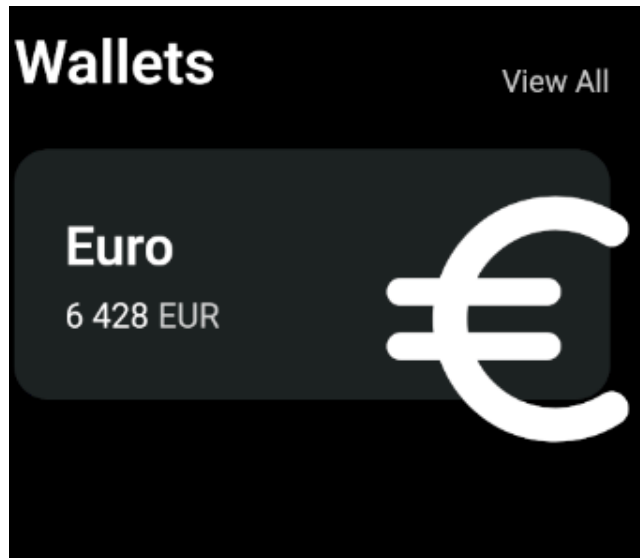
IconData
material icon named "euro" (round).

다운 안 받아도 쓸 수 있어!!woooooooooow



카드 사이즈를 건드리지 않고 아이콘 크기만 위 처럼 키우고 싶다 그러면 transform을 사용하면 됩니다.

```
Transform.scale(
  scale: 5,
  child: const Icon(
    Icons.euro_rounded,
    color: Colors.white,
    size: 98,
  ),
)
```



만약 이렇게 살짝 아래로 내리고 싶다면~?

```
child: Transform.translate(
  offset: const Offset(8, 12),
  child: const Icon(
    Icons.euro_rounded,
    color: Colors.white,
    size: 88,
  ),
),
```

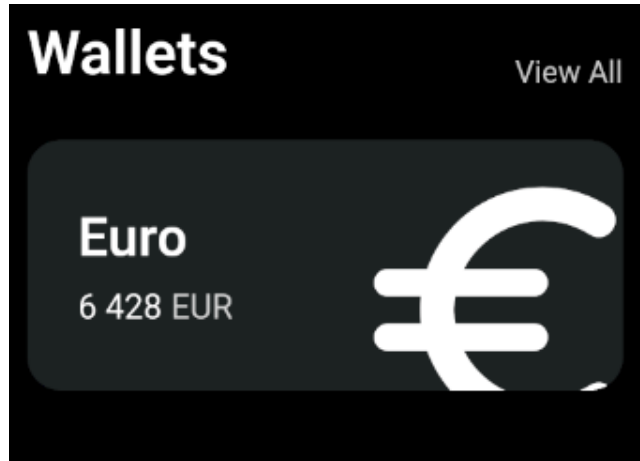
이렇게 하면 됩니다. `offset(dx, dy)`

근데 저렇게 카드 밖으로 넘치는 것이 보기 안좋지 않아? 카드에 맞춰서 잘라내보자

카드 컨테이너로 가서 `clipBehavior` 를 사용할건데, 이거는 안에 있는 요소가 오버플로우 됐을 때 어떻게 처리할 것인지를 설정하는 거야.

```
Container(
  clipBehavior: Clip.hardEdge,
  decoration: BoxDecoration(
```

Clip.hardEdge를 사용하면 넘치는 것을 안보이게 할 수 있음!!



짤(dx 조금 변경했음!)

```
final _blackColor = const Color(0xFF1F2123);
```

변수명 앞에 _를 넣으면 그것이 private하게 쓰인다는 뜻인가봐요

▼ 카드 위젯 코드

```
import 'package:flutter/material.dart';

class CurrencyCard extends StatelessWidget {
  final String name, code, amount;
  final IconData icon;
  final bool isInverted;

  final _blackColor = const Color(0xFF1F2123);

  const CurrencyCard({
    super.key,
    required this.name,
    required this.code,
    required this.amount,
    required this.icon,
    required this.isInverted,
  });

  @override
  Widget build(BuildContext context) {
    return Container(
      clipBehavior: Clip.hardEdge,
```



```
decoration: BoxDecoration(
  color: isInverted ? Colors.white : _blackColor,
  borderRadius: BorderRadius.circular(20),
),
child: Padding(
  padding: const EdgeInsets.all(30),
  child: Row(
    mainAxisAlignment: MainAxisAlignment.spaceBetween,
    children: [
      Column(
        crossAxisAlignment: CrossAxisAlignment.start,
        children: [
          Text(
            name,
            style: TextStyle(
              color: isInverted ? _blackColor : Colors.white,
              fontSize: 32,
              fontWeight: FontWeight.w600,
            ),
          ),
          const SizedBox(
            height: 10,
          ),
          Row(
            children: [
              Text(
                amount,
                style: TextStyle(
                  color: isInverted ? _blackColor : Colors.white,
                  fontSize: 20,
                ),
              ),
              const SizedBox(
                width: 5,
              ),
              Text(
                code,
                style: TextStyle(
                  color: isInverted
                    ? _blackColor.withOpacity(0.8)
                    : Colors.white.withOpacity(0.8),
                  fontSize: 20,
                ),
              ),
            ],
          ),
        ],
      ),
      Transform.scale(
        scale: 2.2,
        child: Transform.translate(
          offset: const Offset(1, 12),
          child: Icon(
            icon,
            color: isInverted ? _blackColor : Colors.white,
            size: 88,
          ),
        ),
      ),
    ],
  ),
),
```

```

    );
  }
}

```

그런데 이 카드 위젯을 세 개나 썼더니



넘쳤다~~~~~

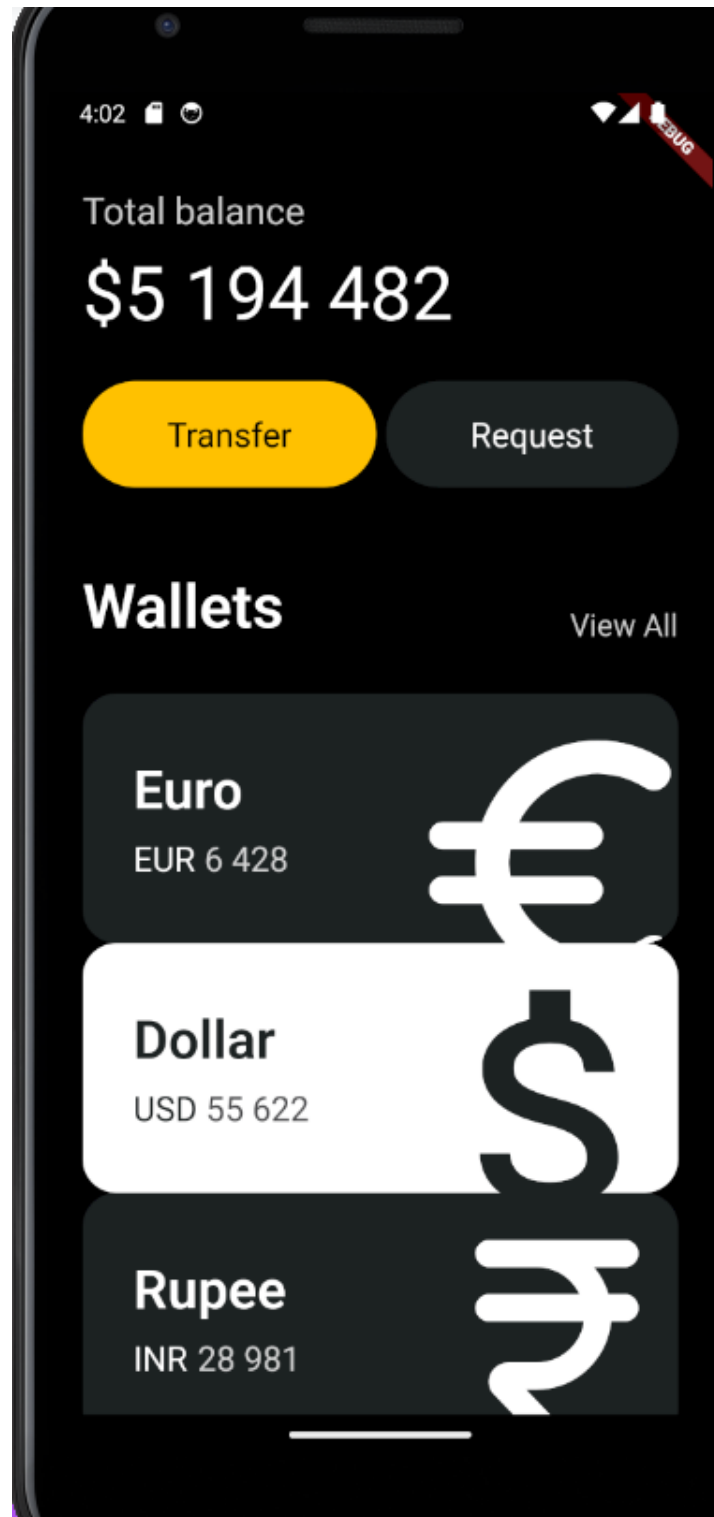
해결하기위해... 그러니까 스크롤이 되도록 만들기 위해!

```

@override
Widget build(BuildContext context) {
  return MaterialApp(
    home: Scaffold(
      backgroundColor: const Color(0xFF212121),
      body: Padding(
        padding: const EdgeInsets.all(20),
        horizontal: 20,

```

맨 위로 가서 single child scroll view라는 widget을 사용해 줍시다.



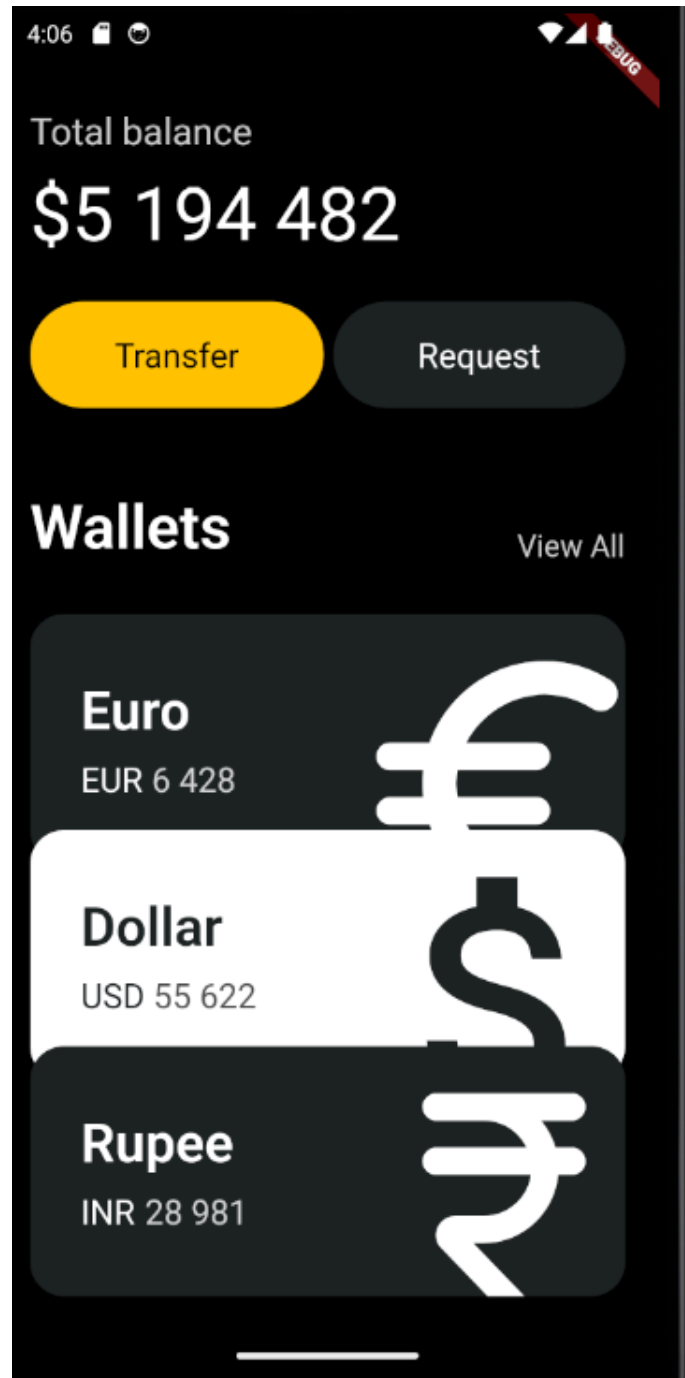
와~~ 스크롤이 돼요

```

), // Transform.translate
Transform.translate(
  offset: const Offset(0, -40),
  child: const CurrencyCard(
    name: "Rupee"
  )
)

```

이제 translate offset을 사용해봅시다



예쁘게 포개어졌다~~~

▼ 전체 코드

```
import 'package:flutter/material.dart';
import 'package:toonflix/widget/button.dart';
import 'package:toonflix/widget/currency_card.dart';

void main() {
  runApp(const App());
}

class App extends StatelessWidget {
  const App({super.key});

  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      home: Scaffold(
        backgroundColor: const Color(0xff18181818),
        body: SingleChildScrollView(
          child: Padding(
            padding: const EdgeInsets.symmetric(
              horizontal: 20,
            ),
            child: Column(
              crossAxisAlignment: CrossAxisAlignment.start,
              children: [
                const SizedBox(
                  height: 80,
                ),
                Row(
                  mainAxisAlignment: MainAxisAlignment.end,
                  children: [
                    Column(
                      crossAxisAlignment: CrossAxisAlignment.end,
                      children: [
                        const Text(
                          "Hey, Selena",
                          style: TextStyle(
                            color: Colors.white,
                            fontSize: 28,
                            fontWeight: FontWeight.w800,
                          ),
                        ),
                        Text(
                          "Welcome back",
                          style: TextStyle(
                            color: Colors.white.withOpacity(0.8),
                            fontSize: 18,
                          ),
                        ),
                      ],
                    ),
                  ],
                ),
                const SizedBox(
                  height: 80,
                ),
                Text(
                  "Total balance",
                  style: TextStyle(
```

```

        color: Colors.white.withOpacity(0.8),
        fontSize: 22,
      ),
    ),
    const SizedBox(
      height: 10,
    ),
    const Text(
      "\$5 194 482",
      style: TextStyle(
        color: Colors.white,
        fontSize: 44,
      ),
    ),
    const SizedBox(
      height: 25,
    ),
    const Row(
      mainAxisAlignment: MainAxisAlignment.spaceBetween,
      children: [
        Button(
          text: "Transfer",
          bgColor: Colors.amber,
          txtColor: Colors.black,
        ),
        Button(
          text: "Request",
          bgColor: Color(0xFF1F2123),
          txtColor: Colors.white,
        )
      ],
    ),
    const SizedBox(
      height: 50,
    ),
    Row(
      mainAxisAlignment: MainAxisAlignment.spaceBetween,
      crossAxisAlignment: CrossAxisAlignment.end,
      children: [
        const Text(
          "Wallets",
          style: TextStyle(
            color: Colors.white,
            fontSize: 36,
            fontWeight: FontWeight.w600,
          ),
        ),
        Text(
          "View All",
          style: TextStyle(
            color: Colors.white.withOpacity(0.8),
            fontSize: 18,
          ),
        ),
      ],
    ),
    const SizedBox(
      height: 30,
    ),
    const CurrencyCard(
      name: "Euro",
      code: "6 428",

```

```

        amount: "EUR",
        icon: Icons.euro_rounded,
        isInverted: false,
      ),
      Transform.translate(
        offset: const Offset(0, -20),
        child: const CurrencyCard(
          name: "Dollar",
          code: "55 622",
          amount: "USD",
          icon: Icons.attach_money_outlined,
          isInverted: true,
        ),
      ),
      Transform.translate(
        offset: const Offset(0, -40),
        child: const CurrencyCard(
          name: "Rupee",
          code: "28 981",
          amount: "INR",
          icon: Icons.currency_rupee_rounded,
          isInverted: false),
        ),
    ],
  ),
),
),
),
),
);
}
}

```

과제 ㅋㅋㅋㅋㅋㅋ

그러니까 카드에 각각 translate 붙이지 말고! 위젯화 시키라는 거임. 거기다가 오프셋도 1 2 3 에 따라 0 -20 -40 이렇게 적용되도록 해보자!!! 까짓거 해보자 해봐야해

끔이었다

▼ card widget

```

import 'package:flutter/material.dart';

class CurrencyCard extends StatelessWidget {
  final String name, code, amount;
  final IconData icon;
  final bool isInverted;
  final double offset;

```

```

final _blackColor = const Color(0xFF1F2123);

const CurrencyCard({
  super.key,
  required this.name,
  required this.code,
  required this.amount,
  required this.icon,
  required this.isInverted,
  required this.offset,
});

@override
Widget build(BuildContext context) {
  return Transform.translate(
    offset: Offset(0, -20 * offset),
    child: Container(
      clipBehavior: Clip.hardEdge,
      decoration: BoxDecoration(
        color: isInverted ? Colors.white : _blackColor,
        borderRadius: BorderRadius.circular(20),
      ),
      child: Padding(
        padding: const EdgeInsets.all(30),
        child: Row(
          mainAxisAlignment: MainAxisAlignment.spaceBetween,
          children: [
            Column(
              crossAxisAlignment: CrossAxisAlignment.start,
              children: [
                Text(
                  name,
                  style: TextStyle(
                    color: isInverted ? _blackColor : Colors.white,
                    fontSize: 32,
                    fontWeight: FontWeight.w600,
                  ),
                ),
                const SizedBox(
                  height: 10,
                ),
                Row(
                  children: [
                    Text(
                      amount,
                      style: TextStyle(
                        color: isInverted ? _blackColor : Colors.white,
                        fontSize: 20,
                      ),
                    ),
                    const SizedBox(
                      width: 5,
                    ),
                    Text(
                      code,
                      style: TextStyle(
                        color: isInverted
                          ? _blackColor.withOpacity(0.8)
                          : Colors.white.withOpacity(0.8),
                        fontSize: 20,
                      ),
                    ),

```



```

        ),
      ],
    ),
  ],
),
Transform.scale(
  scale: 2.2,
  child: Transform.translate(
    offset: const Offset(1, 12),
    child: Icon(
      icon,
      color: isInverted ? _blackColor : Colors.white,
      size: 88,
    ),
  ),
),
),
),
),
),
);
}
}

```

▼ main

```

import 'package:flutter/material.dart';
import 'package:toonflix/widget/button.dart';
import 'package:toonflix/widget/currency_card.dart';

void main() {
  runApp(const App());
}

class App extends StatelessWidget {
  const App({super.key});

  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      home: Scaffold(
        backgroundColor: const Color(0xff181818),
        body: SingleChildScrollView(
          child: Padding(
            padding: const EdgeInsets.symmetric(
              horizontal: 20,
            ),
            child: Column(
              crossAxisAlignment: CrossAxisAlignment.start,
              children: [
                const SizedBox(
                  height: 80,
                ),
                Row(
                  mainAxisAlignment: MainAxisAlignment.end,
                  children: [
                    Column(
                      crossAxisAlignment: CrossAxisAlignment.end,
                      children: [

```

```

        const Text(
          "Hey, Selena",
          style: TextStyle(
            color: Colors.white,
            fontSize: 28,
            fontWeight: FontWeight.w800,
          ),
        ),
        Text(
          "Welcome back",
          style: TextStyle(
            color: Colors.white.withOpacity(0.8),
            fontSize: 18,
          ),
        ),
      ],
    ),
  ],
),
const SizedBox(
  height: 80,
),
Text(
  "Total balance",
  style: TextStyle(
    color: Colors.white.withOpacity(0.8),
    fontSize: 22,
  ),
),
const SizedBox(
  height: 10,
),
const Text(
  "\$5 194 482",
  style: TextStyle(
    color: Colors.white,
    fontSize: 44,
  ),
),
const SizedBox(
  height: 25,
),
const Row(
  mainAxisAlignment: MainAxisAlignment.spaceBetween,
  children: [
    Button(
      text: "Transfer",
      bgColor: Colors.amber,
      txtColor: Colors.black,
    ),
    Button(
      text: "Request",
      bgColor: Color(0xFF1F2123),
      txtColor: Colors.white,
    )
  ],
),
const SizedBox(
  height: 50,
),
Row(
  mainAxisAlignment: MainAxisAlignment.spaceBetween,

```

```

        crossAxisAlignment: CrossAxisAlignment.end,
        children: [
          const Text(
            "Wallets",
            style: TextStyle(
              color: Colors.white,
              fontSize: 36,
              fontWeight: FontWeight.w600,
            ),
          ),
          Text(
            "View All",
            style: TextStyle(
              color: Colors.white.withOpacity(0.8),
              fontSize: 18,
            ),
          ),
        ],
      ),
      const SizedBox(
        height: 30,
      ),
      const CurrencyCard(
        name: "Euro",
        code: "6 428",
        amount: "EUR",
        icon: Icons.euro_rounded,
        isInverted: false,
        offset: 0,
      ),
      const CurrencyCard(
        name: "Dollar",
        code: "55 622",
        amount: "USD",
        icon: Icons.attach_money_outlined,
        isInverted: true,
        offset: 1,
      ),
      const CurrencyCard(
        name: "Rupee",
        code: "28 981",
        amount: "INR",
        icon: Icons.currency_rupee_rounded,
        isInverted: false,
        offset: 2,
      ),
    ],
  ),
),
),
),
);
}
}

```

▼ button

```
import 'package:flutter/material.dart';
```

```

class Button extends StatelessWidget {
  final String text;
  final Color bgColor;
  final Color txtColor;

  const Button(
    {super.key,
    required this.text,
    required this.bgColor,
    required this.txtColor});

  @override
  Widget build(BuildContext context) {
    return Container(
      decoration: BoxDecoration(
        color: bgColor,
        borderRadius: BorderRadius.circular(45),
      ),
      child: Padding(
        padding: const EdgeInsets.symmetric(
          vertical: 20,
          horizontal: 50,
        ),
        child: Text(
          text,
          style: TextStyle(
            fontSize: 20,
            color: txtColor,
          ),
        ),
      ),
    );
  }
}

```