

Ondokuz Mayıs Üniversitesi Mobil Programlama Ödev 5

Kodlar

```
// main.dart

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

void main(List<String> args) {
  runApp(const App());
}

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

  @override
  Widget build(BuildContext context) {
    return const MaterialApp(
      title: 'Responsive and Adaptive Apps',
      home: Screen1(),
      debugShowCheckedModeBanner: false,
    );
  }
}

// screens/screens.dart

export "screen1.dart";
export "screen2.dart";
export "screen3.dart";

// screens/screen1.dart

import 'package:flutter/material.dart';

class Screen1 extends StatefulWidget {
  const Screen1({super.key});

  @override
  State<Screen1> createState() => _Screen1();
}

class _Screen1 extends State<Screen1> {
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(),
      body: OrientationBuilder(
        builder: (context, orientation) {
          return orientation == Orientation.portrait
```

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        ? _buildVerticalLayout(orientation)
        : _buildHorizontalLayout(context, orientation);
    },
  ),
);
}
}

Widget account(Orientation orientation) {
  var customText = orientation == Orientation.landscape
    ? const Center(
        child: Text(
          "Deven Joshi",
          style: TextStyle(fontSize: 30, fontWeight: FontWeight.bold),
        ),
      )
    : const Text(
        "Deven Joshi",
        style: TextStyle(fontSize: 30, fontWeight: FontWeight.bold),
      );

  return Padding(
    padding: const EdgeInsets.all(14),
    child: Column(
      crossAxisAlignment: CrossAxisAlignment.start,
      children: [
        const Center(
          child: Padding(
            padding: EdgeInsets.symmetric(vertical: 8.0),
            child: Icon(
              Icons.account_circle,
              size: 120,
            ),
          ),
        ),
        customText,
      ],
    ),
  );
}

Widget demoDatas({text = "Demo Data", textSize = 20, itemLength = 20}) {
  return ListView.builder(
    itemBuilder: (BuildContext context, int index) {
      return ListTile(
        title: Text(
          text,
          style: TextStyle(fontSize: textSize),
        ),
      );
    },
    itemCount: itemLength,
  );
}

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```
Widget _buildVerticalLayout(Orientation orientation) {
  return Column(
    crossAxisAlignment: CrossAxisAlignment.start,
    children: [
      account(orientation),
      Expanded(child: demoDatas()),
    ],
  );
}

Widget _buildHorizontalLayout(BuildContext context, Orientation
orientation) {
  var size = MediaQuery.of(context).size;

  return Row(
    children: [
      SizedBox(width: size.width / 2, child: account(orientation)),
      Expanded(child: SizedBox(width: size.width / 2, child: demoDatas())),
    ],
  );
}

// screens/screen2.dart

import 'package:flutter/material.dart';
import 'package:responsive_adaptive_apps/widgets/widgets.dart';

class Screen2 extends StatefulWidget {
  const Screen2({super.key});

  @override
  State<Screen2> createState() => _Screen2();
}

class _Screen2 extends State<Screen2> {
  int number = 0;
  bool detailsOpened = false;

  void changeNumber(int number) {
    setState(() {
      this.number = number;
    });
  }

  void changeDetailsOpened(bool detailsOpened) {
    setState(() {
      this.detailsOpened = detailsOpened;
    });
  }

  @override
  Widget build(BuildContext context) {
    Size size = MediaQuery.of(context).size;
```

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return Scaffold(
  appBar: AppBar(
    leading: detailsOpened && size.width < 576
      ? IconButton(
        onPressed: () => changeDetailsOpened(false),
        icon: const Icon(Icons.arrow_back),
      )
      : null),
  body: OrientationBuilder(
    builder: (context, orientation) {
      return orientation == Orientation.portrait
        ? _buildVerticalLayout(
          [number, changeNumber],
          [detailsOpened, changeDetailsOpened],
          orientation,
        )
        : _buildHorizontalLayout(
          [number, changeNumber],
          orientation,
        );
    },
  ),
);
}
}

Widget _buildHorizontalLayout(
  dynamic numberHook,
  Orientation orientation,
) {
  return Row(
    children: [
      MasterListFragment(changeNumber: numberHook[1], orientation:
orientation),
      DetailFragment(number: numberHook[0], orientation: orientation),
    ],
  );
}

Widget _buildVerticalLayout(
  dynamic numberHook,
  dynamic detailsOpenedHook,
  Orientation orientation,
) {
  var details = detailsOpenedHook[0]
  ? GestureDetector(
    onTap: () => detailsOpenedHook[1](false),
    child: DetailFragment(
      number: numberHook[0],
      orientation: orientation,
    ),
  )
  : null;

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var masterList = MasterListFragment(
  changeNumber: numberHook[1],
  listItemClickAction: detailsOpenedHook[1],
);

return details != null
  ? Stack(
    children: [
      masterList,
      details,
    ],
  )
  : masterList;
}

// screens/screen3.dart

import 'package:flutter/material.dart';

class Screen3 extends StatelessWidget {
  const Screen3({super.key});

  @override
  Widget build(BuildContext context) {
    Size size = MediaQuery.of(context).size;

    var menu = Column(
      crossAxisAlignment: CrossAxisAlignment.start,
      children: [
        Center(
          child: Container(
            height: 150,
            color: Colors.green,
            child: const Center(child: Text("Raouf Rahiche")),
          ),
        ),
        const ListTile(title: Text("Home")),
        const ListTile(title: Text("Profile")),
        const ListTile(title: Text("Calls")),
        const ListTile(title: Text("Messages")),
      ],
    );

    return Scaffold(
      appBar: AppBar(),
      drawer: size.width < 576 ? Drawer(child: menu) : null,
      body: Row(
        children: [
          size.width > 576 ? Flexible(flex: 1, child: menu) : Container(),
          Flexible(
            flex: 3,
            child: Center(
              child: Text(
```

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        "Size ${size.width} * ${size.height}",
        style: Theme.of(context).textTheme.titleMedium,
      )),
    ),
  ],
),
);
}
}

// widgets/widgets.dart

// ignore_for_file: must_be_immutable

import 'package:flutter/material.dart';

class MasterListFragment extends StatelessWidget {
  MasterListFragment({
    super.key,
    this.orientation = Orientation.portrait,
    this.listItemClickAction = print,
    required this.changeNumber,
  });

  Orientation orientation;
  ValueChanged<int> changeNumber;
  Function(bool) listItemClickAction;

  @override
  Widget build(BuildContext context) {
    var size = MediaQuery.of(context).size;

    return Container(
      color: Colors.grey[100],
      height: size.height,
      width: orientation == Orientation.portrait ? size.width : size.width
/ 2,
      child: ListView.builder(
        itemCount: 20,
        itemBuilder: ((context, index) {
          return Padding(
            padding: const EdgeInsets.all(3.0),
            child: Card(
              child: ListTile(
                title: Text(
                  "$index",
                ),
                onTap: () {
                  changeNumber(index);
                  listItemClickAction(true);
                },
              ),
            ),
          );
        }
      );

```

```

        }},
      ),
    );
  }
}

class DetailFragment extends StatelessWidget {
  DetailFragment({
    super.key,
    this.orientation = Orientation.portrait,
    required this.number,
  });

  Orientation orientation;
  int number;

  @override
  Widget build(BuildContext context) {
    Size size = MediaQuery.of(context).size;
    double containerWidth =
      orientation == Orientation.portrait ? size.width : size.width / 2;

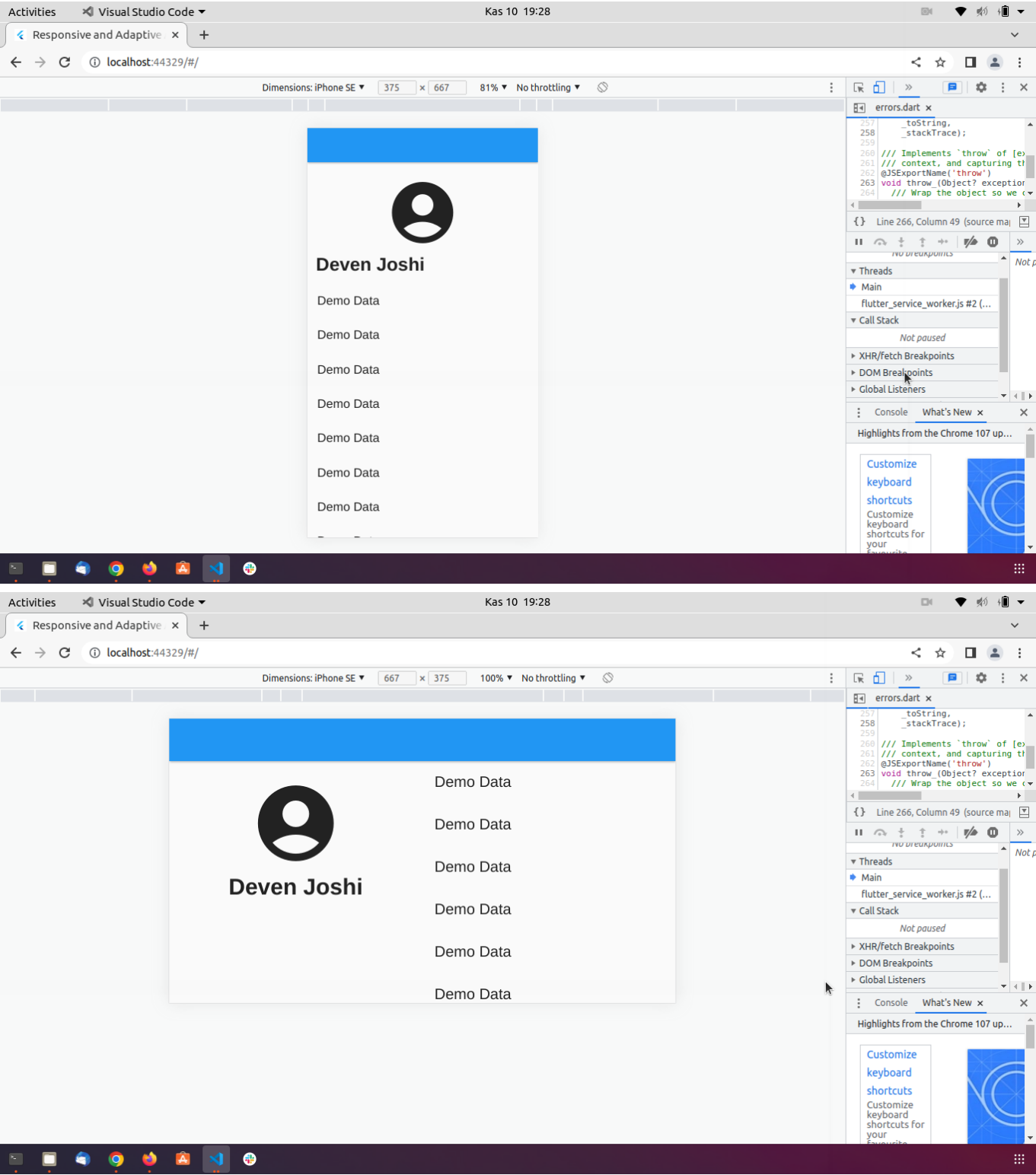
    Color primaryColor = Theme.of(context).primaryColor;
    Color containerColor = orientation == Orientation.portrait
      ? primaryColor.withAlpha(200)
      : primaryColor;

    return Container(
      color: containerColor,
      height: size.height,
      width: containerWidth,
      child: Center(
        child: Text(
          "$number",
          style: const TextStyle(
            color: Colors.white,
            fontSize: 40,
          ),
        ),
      ),
    );
  }
}

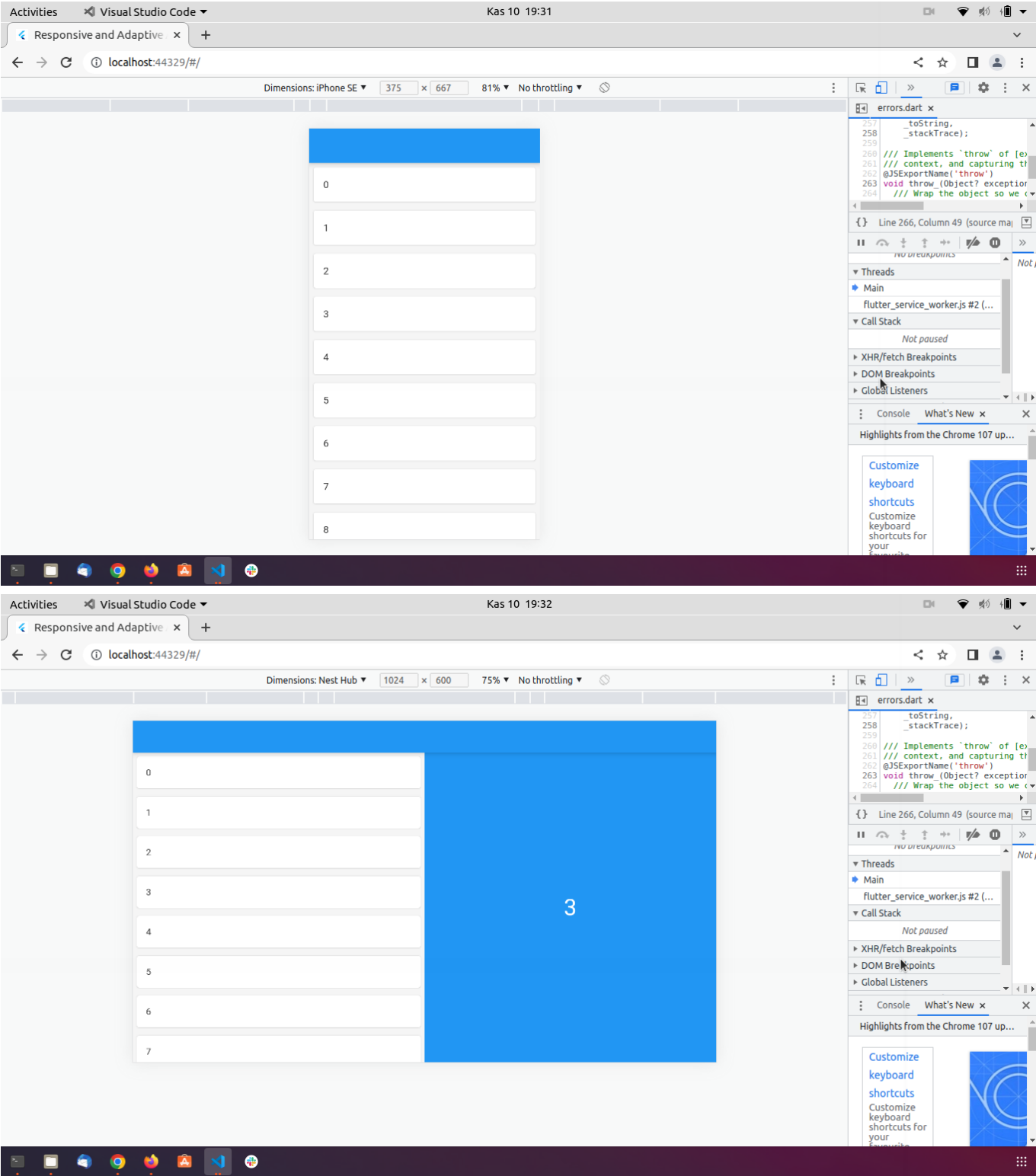
```

Ekran Görüntüleri

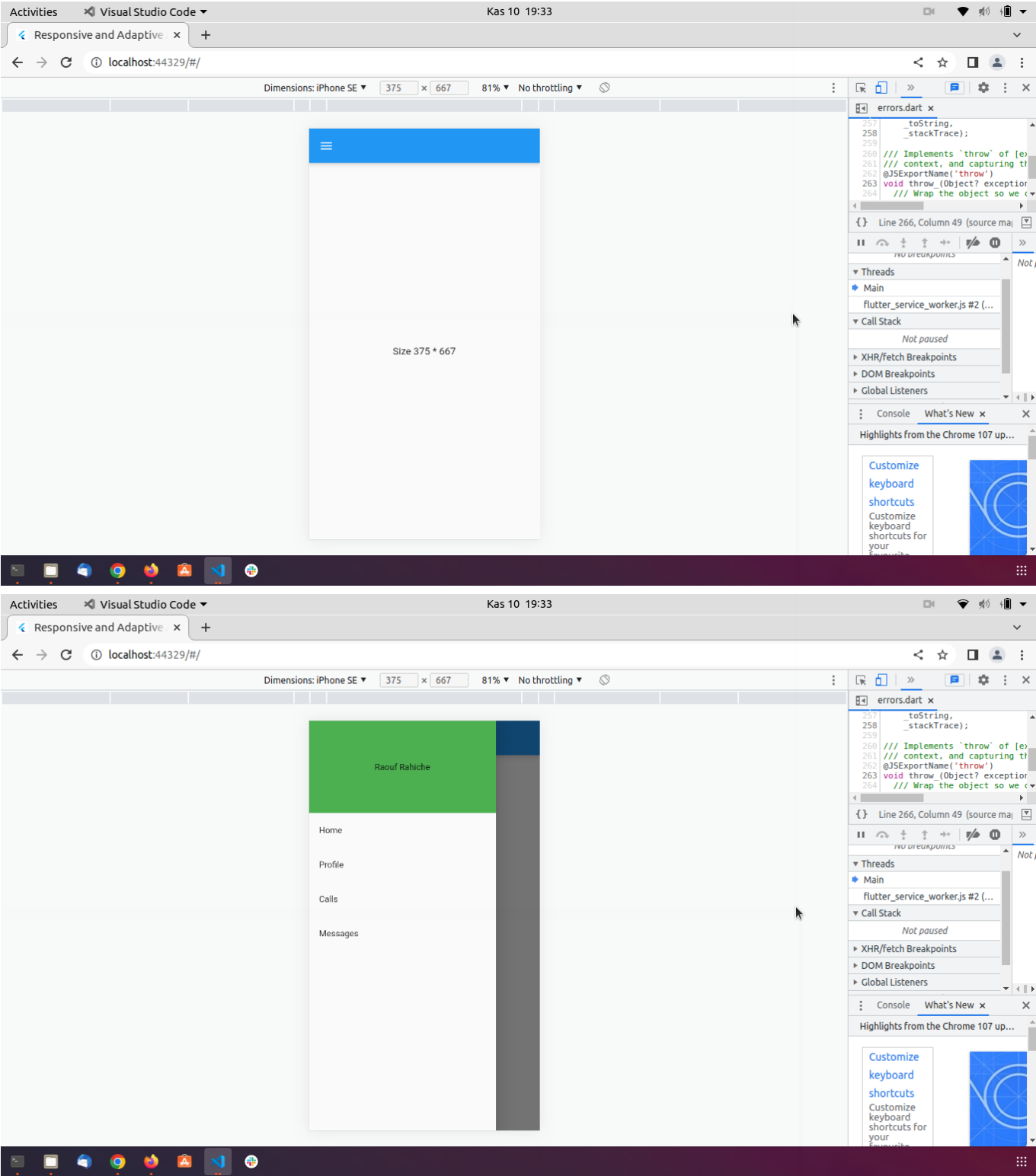
Screen 1

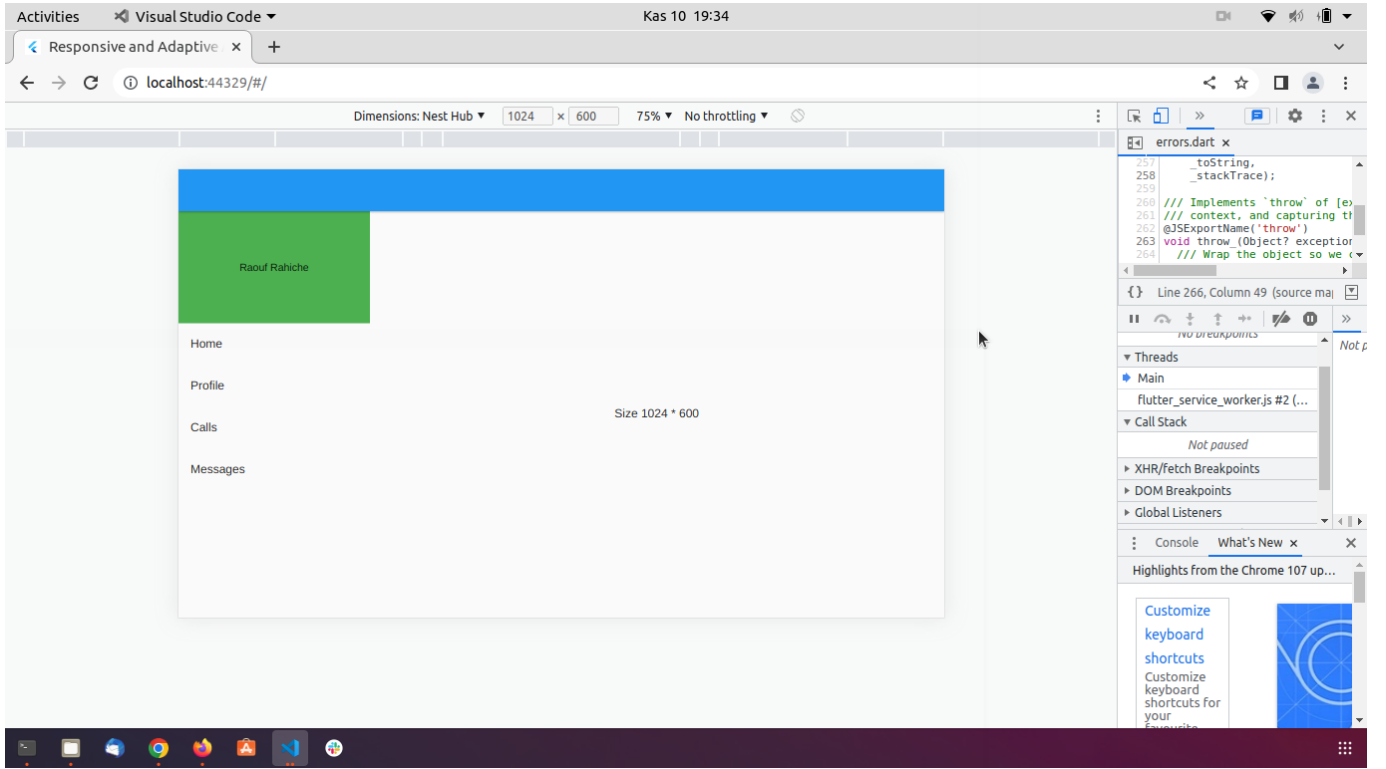


Screen 2



Screen 3





Ekran Videosu(Youtube)

- Screen1: https://www.youtube.com/watch?v=bo62EDk_3YI
- Screen2: <https://www.youtube.com/watch?v=83aw7abb6oY>
- Screen3: <https://www.youtube.com/watch?v=o97JKGOynrs>

Proje Github Link

https://github.com/bgebes/universityHomeworks-flutter/tree/master/responsive_adaptive_apps

Kaynaklar

- <https://medium.com/flutter-community/developing-for-multiple-screen-sizes-and-orientations-in-flutter-fragments-in-flutter-a4c51b849434>
- <https://medium.com/flutter-community/build-responsive-uis-in-flutter-fd450bd59158>

Öğrenci

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