Zagazig University
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Measurements Project Report

From :

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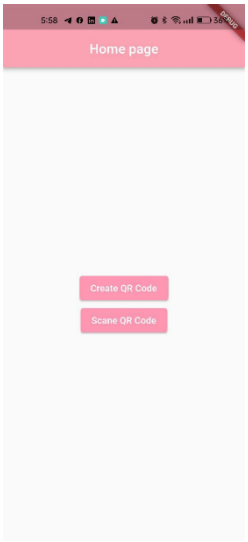
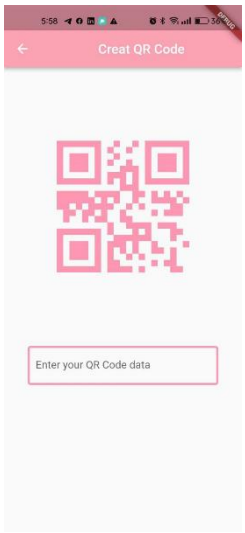
Application Description:

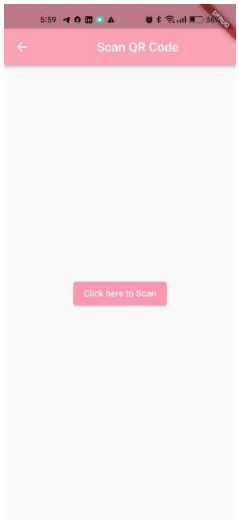
I developed a "QR Code" application using Flutter and android studio .

My application has two functions: Create qr code and Scan qr code .

The application has three screens - pages :



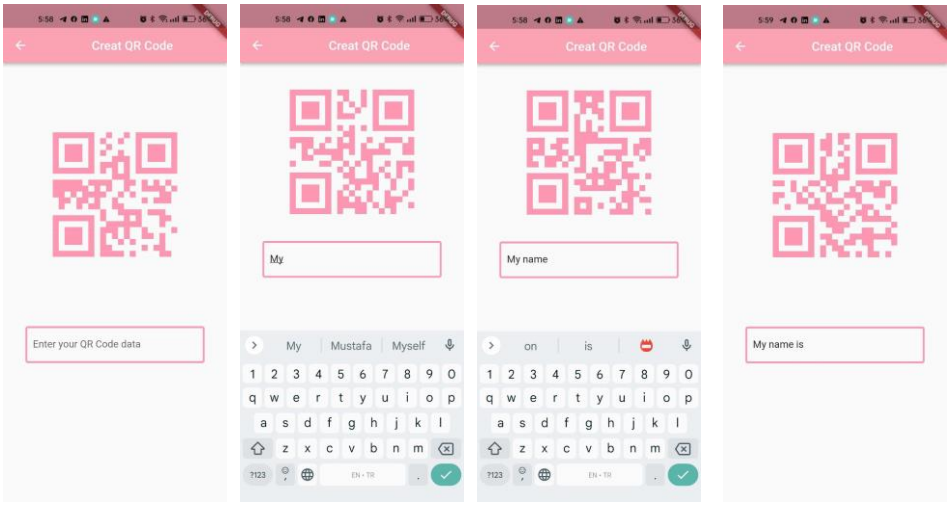




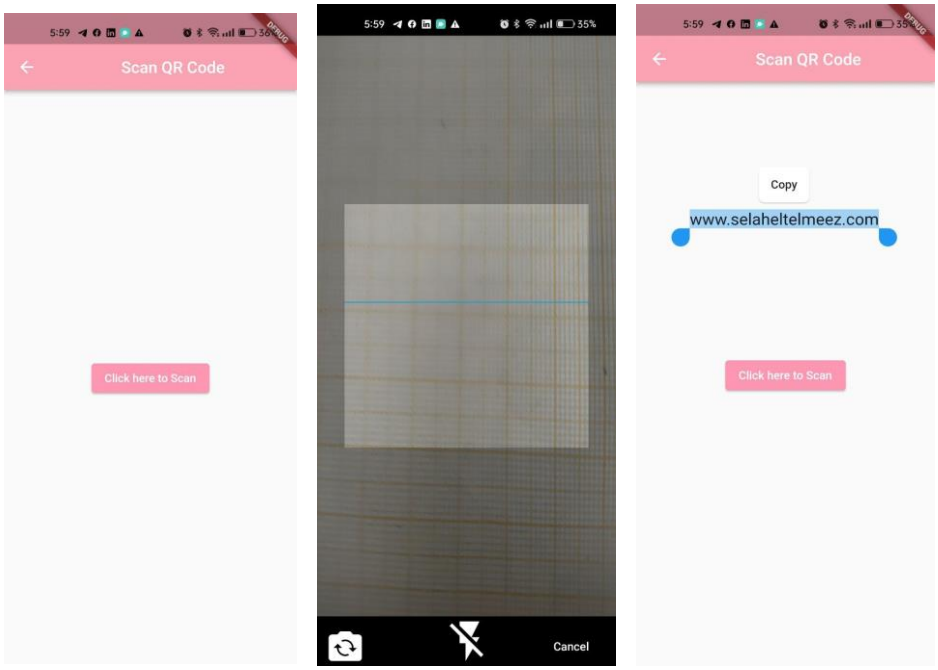
- **Home Screen :**
  This screen contains two buttons [Create QR Code] , [Scan QR Code] . Each button on clicked , take me to new screen .

- **Creat QR Code Screen :**
  This screen contains a qr code widget and a text filed to write my qr code data in . The qr code widget changes as I type the data in the text filed .

  - **Notice the changes in the code while typing the data.**



- **Scan QR Code Screen :**
  This screen contains a button [Click here to Scan] which open the camera (my sensor) and scan the qr code , then show the result data of the scanned qr code as a text and I can copy it and then open it at any browser .



Code analysis :

I start building the application with flutter by following some steps and implementing the widgets { statelesswidget , statefulwidget , MaterialApp , Scaffold , appBar , ElevatedButton , Textfiled , … }

I also used two flutter packages : ‘Flutter_barcode_scanner 2.0.0’ and ‘barcode_widget 2.0.3’ , to access the android sensor and to create and scan the qr codes .

```
Navigator.of(context).push(MaterialPageRoute(builder:(context)=>CreatQRScreen()));
```

This code line is used to navigate between the different screens .

```
Future<void> scan() async {
  try {
    FlutterBarcodeScanner.scanBarcode('#2A99CF', 'Cancel', true, ScanMode.QR)
        .then((value) {
      setState(() {
        qrData = value;
      });
    });
  } catch (e) {
    setState(() {
      qrData = 'Error!';
    });
  }
}
}
```

This function was written to control the scanner screen and give back the value of the scanned data to be shown in the application .