

Flutter Engineer Assignment: QR Code Application

Objective

Develop a Flutter application named **kineticQR** that allows users to scan and generate QR codes. The application should be user-friendly, efficient, and provide a seamless experience on both Android and iOS platforms.

Assignment Tasks

1. Scan QR Codes

- Implement a feature that allows users to scan QR codes and barcodes using the device's camera.
- The application should automatically detect and process the QR code without requiring the user to press any additional buttons.
- Display the scanned information in a readable format. If the QR code contains a URL, provide the option to open it in a browser.
- Provide support for scanning QR codes from various surfaces such as screens, posters, or product packaging.

2. Create Custom QR Codes

- Implement a feature that enables users to generate QR codes based on different types of data inputs:
 - URLs (e.g., websites, YouTube videos)
 - Text (e.g., messages, notes)
 - Contact information (e.g., vCards)
 - Wi-Fi network details (e.g., SSID and password)
- Allow users to export the generated QR codes as images (e.g., PNG or JPG).
- Implement a sharing functionality to easily share the generated QR codes via messaging apps, email, or social media.

Note: For guidance on generating QR codes in Flutter, you may refer to [this article](#) on Medium.

Additional Requirements

- **UI/UX Design:** Focus on creating a clean, intuitive, and visually appealing user interface. The app should be easy to navigate, and the features should be accessible without a steep learning curve.
- **Performance:** Ensure the app is responsive and works smoothly on a variety of devices.
- **Documentation:** Provide a brief README file that explains how to run the app and a high-level overview of the code structure. Include comments in the code where necessary to explain complex logic.

Bonus Points

- Implement dark mode support.
- Add animations or transitions that enhance the user experience when scanning or generating QR codes.
- Implement a feature to detect and notify users if a scanned QR code leads to a potentially harmful website.

Submission

- Provide the source code in a GitHub repository with clear instructions on how to build and run the app. Share the repository link and send it via email to **assignmentdesk@kineticvpn.com**.
- Include a video or GIF demo showcasing the app's features.