

QR Craft Milestone #2 Requirements

This document outlines the requirements for the second development milestone (Milestone #2) of the QR Craft application.

Each milestone will be accompanied by a dedicated requirements document and an updated Figma file. All current milestones and design assets are available in the project's Discord community channel.

The mockups define the intended appearance and behavior of the app and its components. The app uses a custom visual theme and does not require support for light or dark modes.

While the mockups define layout and design, you are free to decide how to technically implement certain elements — for example, how camera permission dialogs, loading indicators, or error messages are displayed.

You can find the QR Craft **mockups here**:

<https://www.figma.com/design/cyboRIV1IOA5UQmhLGDAIE/QR-Craft?node-id=7-4748>

Milestone #2 Goal

Create Your Own Code: Let users generate their own custom QR codes with just a few taps.

In this milestone, QR Craft becomes more than just a scanner — it empowers users to create. We introduce a new flow that allows users to choose a QR code type (Link, Text, Contact, etc.), input relevant data, and instantly generate a shareable code. The process is simple, fast, and works consistently across screen sizes.

Icons

You may use Material Design icons where appropriate. If a suitable Material icon is not available, use the custom icons provided in the Figma mockups.

Adaptive Layouts

The mockups provide two layout versions:

- for mobile devices (**up to 600dp**)
- for wider screens (**from 600dp and above**)

Both versions must be implemented in the app as shown in the provided designs.

Technical Requirements

Main Screen — QR Code Scanning

This is the app's default screen that appears upon launch and handles QR code scanning.

Bottom Navigation Bar:

The navigation bar appears at the bottom of the screen and includes three buttons:

1. **History** — on the left. Currently inactive; tapping it does nothing in this milestone.
2. **Scan** — centered. This is the app's primary mode, and this button is always highlighted.
3. **Create QR** — on the right. Tapping this button opens the Create QR screen.

Highlighting Rules:

- The **Scan button** is always displayed in the primary color and does not change based on navigation.
- The **History and Create QR buttons** highlight only when the user is on their corresponding screens, indicating the current section.



NEW Create QR Screen

This screen appears when the user taps the “Create QR” button in the bottom navigation bar. It allows users to generate a custom QR code by selecting a type and entering the required data.

General Layout:

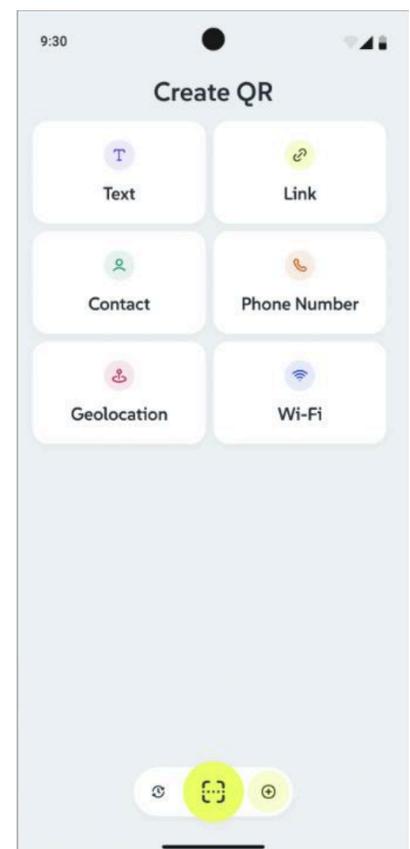
- Title: “**Create QR**”, centered at the top of the screen.
- The main content area displays six **QR code types**, each shown as a separate button with an icon and label.

QR Code Types:

1. **Text** — free-form text content.
2. **Link** — a web URL.
3. **Contact** — vCard contact details.
4. **Phone Number** — a phone number.
5. **Geolocation** — latitude and longitude coordinates.
6. **Wi-Fi** — Wi-Fi network settings.

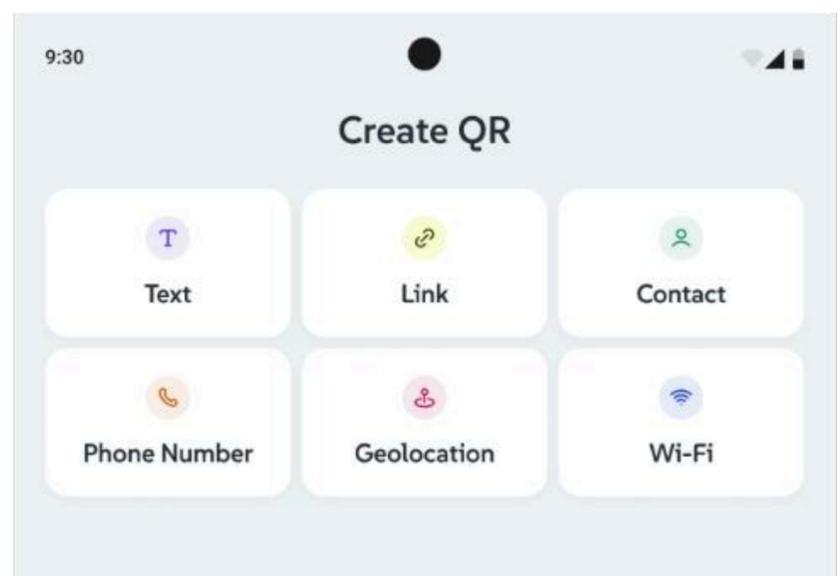
Each Button:

- Includes a unique icon and a label (e.g., “Text”, “Link”).
- Both the icon and the label are centered within the button.
- Tapping a button navigates to the corresponding input screen for that QR code type.



Responsive Layout:

- On mobile devices (up to 600dp): buttons are arranged in **3 rows of 2 buttons**.
- On larger screens (600dp and above): buttons are arranged in **2 rows of 3 buttons**.



Data Entry Screens for QR Code Creation

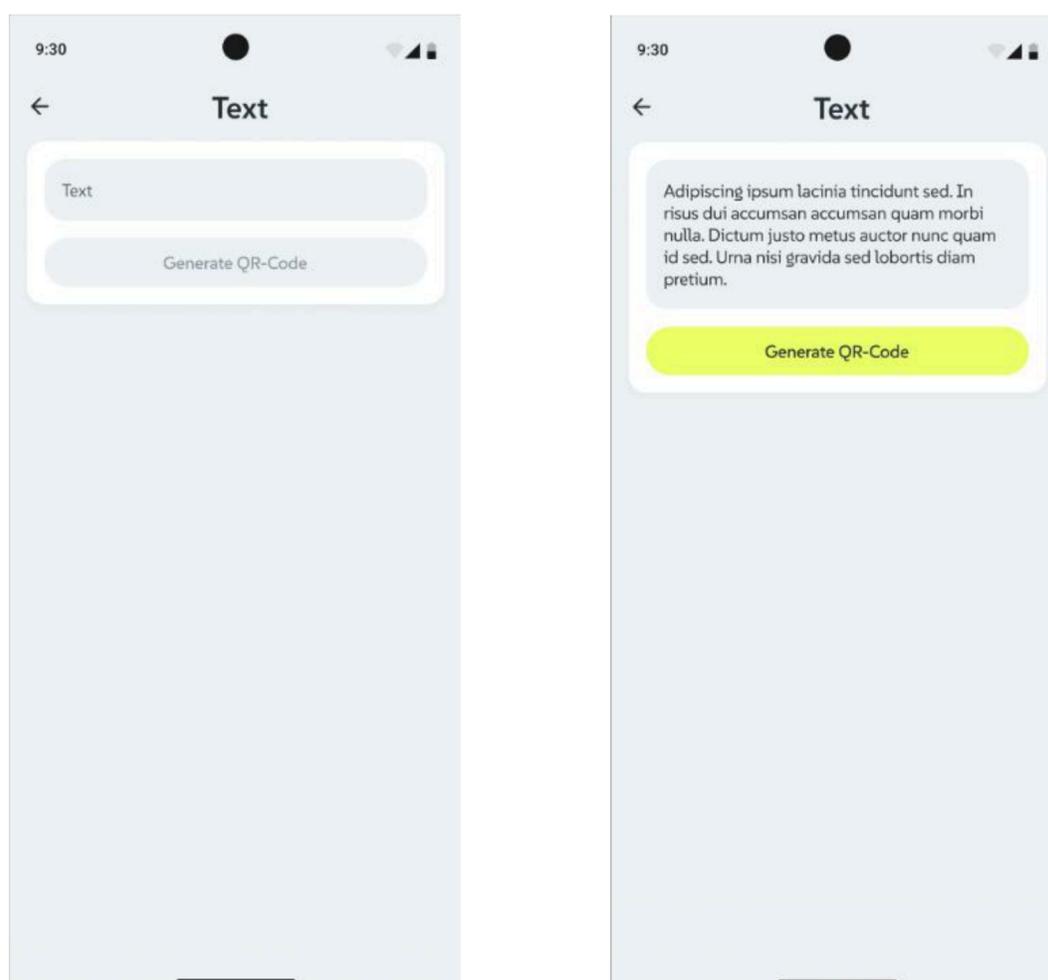
After selecting a QR code type (e.g., Text, Link, Wi-Fi), the user is taken to a dedicated data entry screen.

Top Bar

- Displays the name of the selected QR code type (e.g., “Text”, “Contact”), centered at the top.
- A back arrow on the left allows the user to return to the previous screen (QR type selection).
- When navigating back, the data entry screen is removed from the navigation stack.

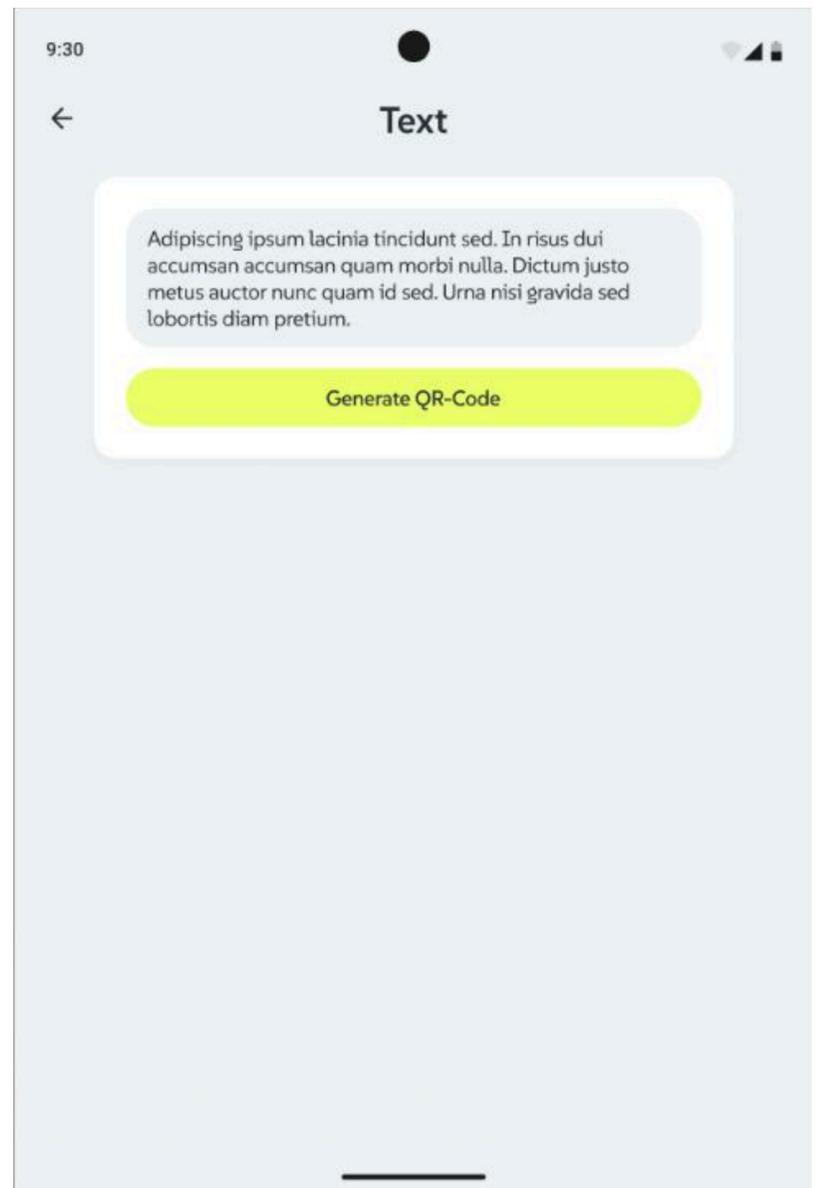
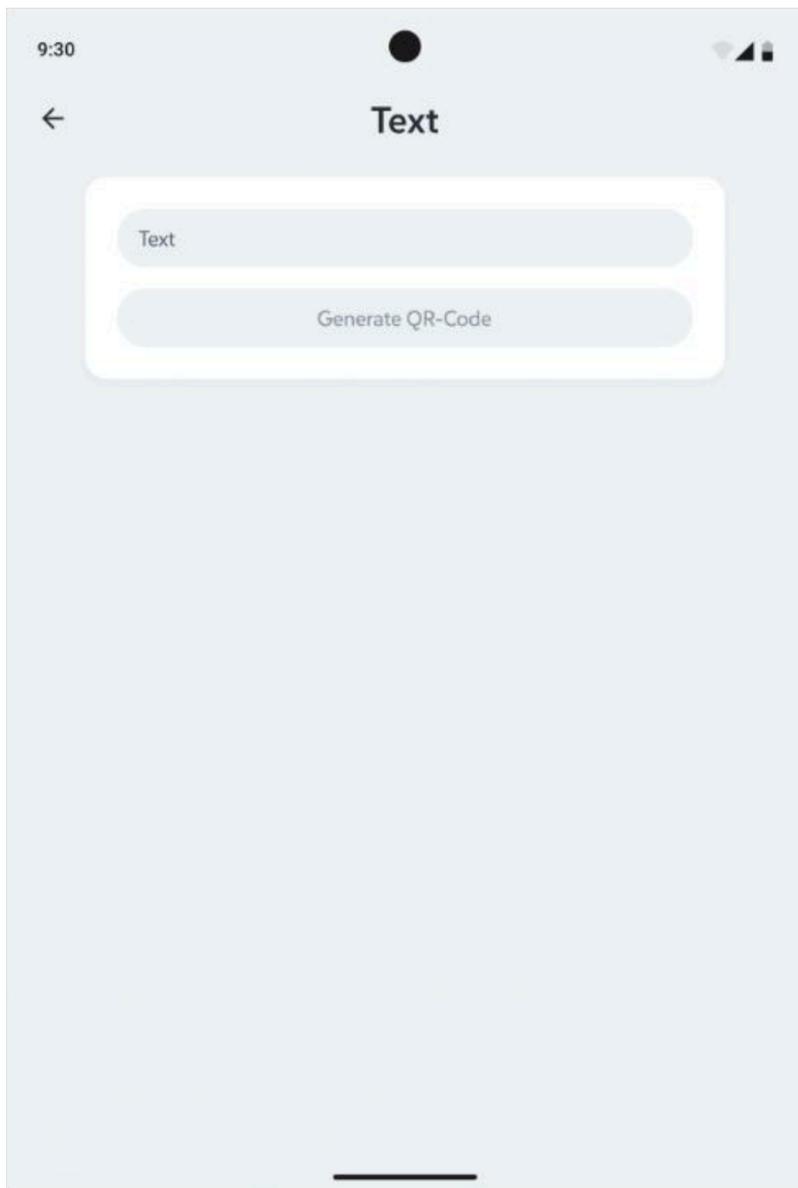
General Behavior

- Each screen shows a set of input fields depending on the selected type:
 - **Text:** single multiline text field
 - **Link:** one field for URL (e.g., <https://example.com>)
 - **Contact:** three fields — Name, Email, Phone Number
 - **Phone Number:** one field for phone number
 - **Geolocation:** two fields — Latitude, Longitude
 - **Wi-Fi:** three fields — SSID, Password, Encryption Type
- Below the input fields is the “**Generate QR Code**” button:
 - Initially disabled.
 - Becomes active once the required data has been entered.
 - Tapping the button opens the **Preview Screen**, which is added to the navigation stack.



Adaptation for Larger Screens

- On devices wider than 600dp:
 - The content area on both the data entry screen and preview screen has a **fixed width of 480dp**.
 - This content block is **horizontally centered** on the screen for a balanced layout.



🔍 QR Code Preview Screen

After generating a QR code, the user is taken to the preview screen to review and share the generated result.

Top Bar

- Title: "Preview", centered.
- A back arrow on the left returns the user to the previous **data entry screen**.
- Returning to the data entry screen allows the user to update or correct the input values and regenerate the QR code if needed.
- The preview screen is removed from the navigation stack upon return.

Main Content

- A generated QR code is displayed at the top.
- Below it is a content block that includes:
 - The content type label (e.g., “Text”, “Link”).
 - The actual encoded value, rendered with the same visual rules as on the Scan Result screen:
 - Links use a highlighted background.
 - Text is left-aligned, truncated to 6 lines, and includes a “Show more” button if needed.

Actions

- At the bottom, two action buttons are displayed:
 - **Share** — opens the system share sheet.
 - **Copy** — copies the content to clipboard.

Adaptation

- On larger screens, the preview content has a fixed width of **480dp**, horizontally centered on the screen.

