QR Craft Milestone #3 Requirements

This document outlines the requirements for the third development milestone (Milestone #3) 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=9-2643

Milestone #3 Goal

In this milestone, we introduce a new feature — the **Scan History screen**.

Users will now have access to a unified view of all their **scanned and generated QR codes**. This allows them to revisit previous results, re-open, copy, or share them with ease. The history is dynamically synced with user actions and adapts gracefully across different 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

📑 Scan Result Screen — Editable Title

In Milestone #3, the Scan Result screen has been updated to support editable titles. This allows users to personalize the name of each scanned or generated QR code.
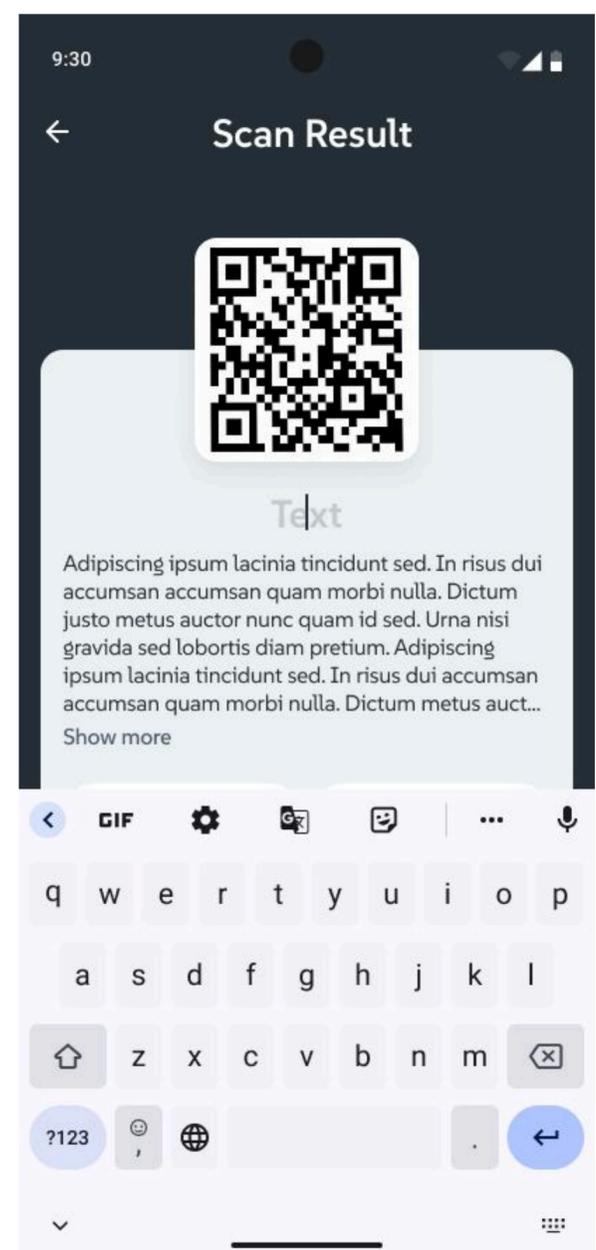
General Behavior:

- The title indicating the content type (e.g., "Text", "Link", "Contact") is now an **editable text field.**
- By default, the field is pre-filled with the detected content type.
- When the user taps on the title, it switches to edit mode:
  - When editing begins, the current title value is displayed as a hint inside the input field.
  - As soon as the user starts typing, the hint disappears and the field is populated with the new input.
  - The system keyboard appears.
  - The user can change, delete, or completely rewrite the title.
  - The value is automatically saved after the edit is finished or when leaving the screen.

Persistence:

- Edited titles are stored locally as part of the scan or generate history.
- If the user makes no changes, the default content type label is preserved.
- The title remains visually positioned as the centered heading of the content block.

Limitations:

- Maximum length: 32 characters.
- Empty values are not allowed: if the field is cleared, the default title is restored upon exit.

🗃️ Scan History Screen

The Scan History screen displays all saved QR codes, divided into two categories: **scanned** and **generated**.
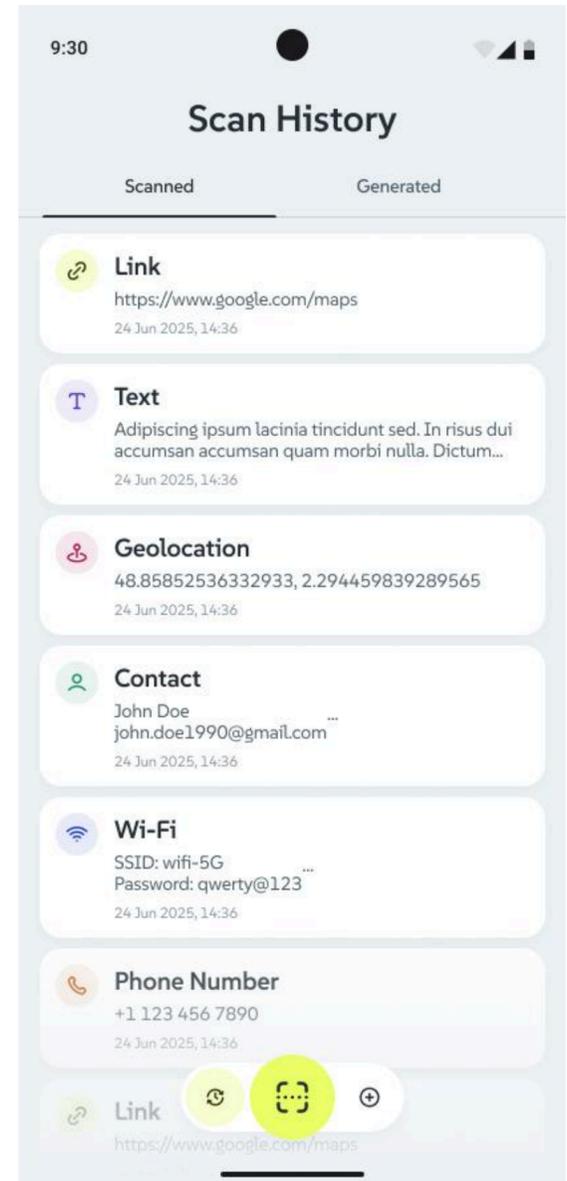
Title

- The screen title **Scan History** is displayed at the top, centered.

Tabs

- Two tabs are located below the title:
  - **Scanned** — shows all saved scan results.
  - **Generated** — shows all QR codes created by the user.
- The active tab is underlined with a bold indicator.

Bottom Navigation Bar

- A navigation bar is located at the bottom of the screen.
- The **History** button must appear **highlighted** to indicate the active screen.
- The **Scan** button is always visually emphasized, regardless of the current screen.
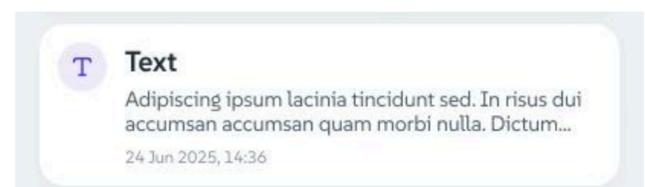
Visual Effects

- A **fade effect** is displayed at the bottom of the history list, overlapping the content.
- The fade uses a semi-transparent overlay that gradually fades upward.

History List Items

1. Each history entry contains the following elements:
   - **Type icon** — displayed on the left, representing the QR code type (e.g., Link, Text, Contact).
   - **Title** — placed to the right of the icon, bold and single-line. May have been edited by the user previously.
   - **Content preview** — displayed below the title, limited to **2 lines**, with ellipsis if truncated.
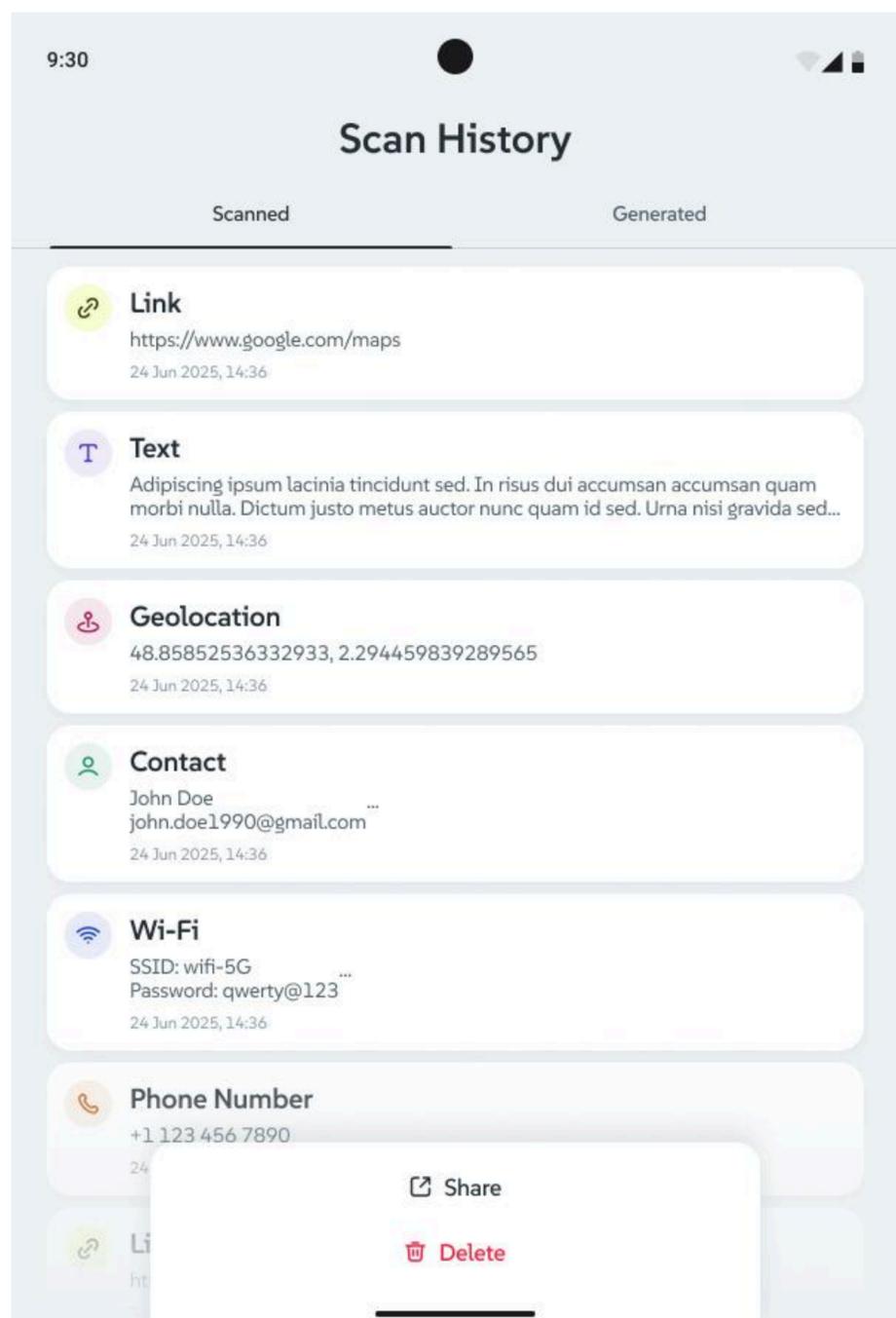   - **Date and time** — shown below the content in the format: dd MMM yyyy, HH:mm.
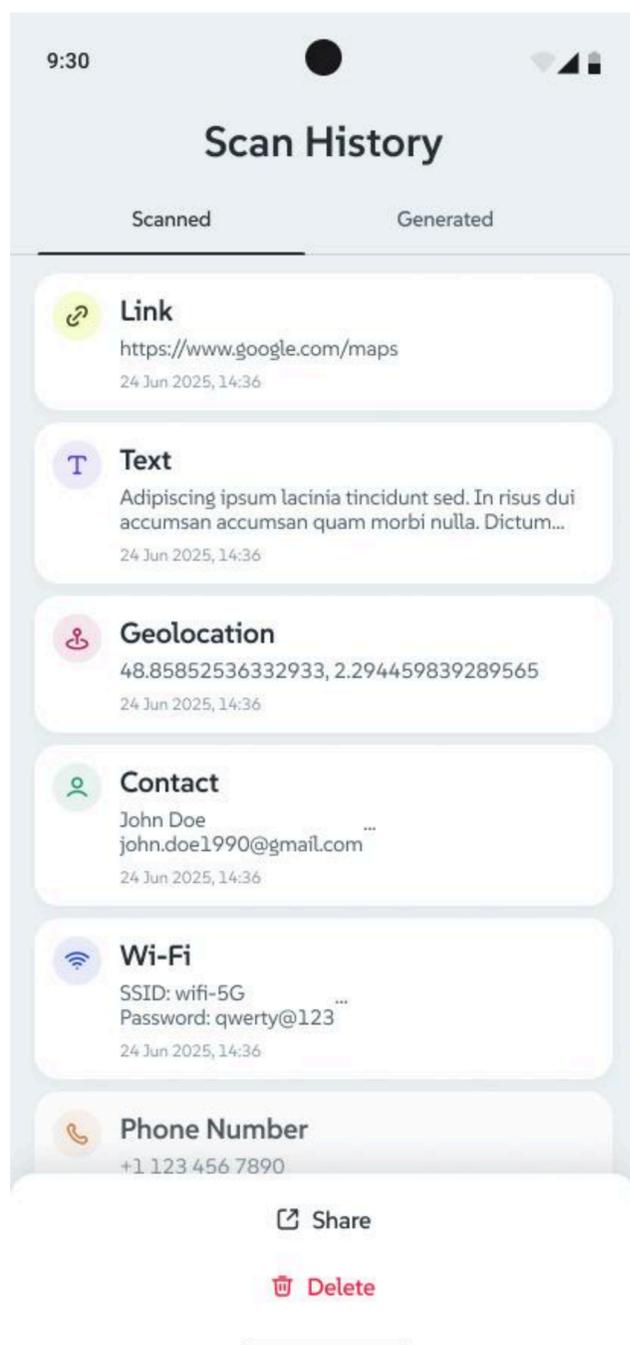
Interactions

- **Tap** on a list item opens the **Preview Screen**.
- **Long press** on a list item opens a **Bottom Sheet** with two actions:
  - **Share** — opens the system share sheet.
  - **Delete** — removes the item from history.
- Both actions are shown with icons; the **Delete** option uses a red color to indicate destructive action.

Adaptation for Larger Screens

- On devices with a width of **600dp or more**, the history list does not stretch across the full screen.
- **Each list item** has a fixed width of **552dp** and is horizontally centered on the screen.
- The **Bottom Sheet** modal, triggered by a long press, has a fixed width of **412dp**, also centered horizontally.
- These constraints ensure a consistent layout and improved usability on larger displays.

🔍 Preview Screen

After tapping a history item, the user is taken to the Preview Screen, where they can view the QR code, its content, and perform basic actions.

General Layout

- The screen title **Preview** is centered in the top app bar.
- A back arrow on the left returns the user to the previous history screen.
- The screen is not preserved in the navigation stack — it is removed upon return.

Content Block

- The content block is centered and contains:
  - **QR code** — displayed at the top of the block.
  - **Title** — editable by the user.
    - Follows the same editing rules as on the Scan Result screen.
    - Maximum 32 characters; empty values are not allowed.
  - **Main content** — varies depending on the QR type:
    - Links use a highlighted background.
    - Text is left-aligned, truncated to 6 lines, and includes a "Show more" button if needed.

Actions

- **Share** — opens the system share sheet.
- **Copy** — copies the QR content to the clipboard.
- Both buttons are placed horizontally below the content.

Adaptation for Larger Screens

- On devices wider than 600dp, the content block has a **fixed width of 480dp.**
- The block must be **horizontally centered** to maintain visual balance and avoid excessive stretching.