

Design Specification for QR Encode and Decode App

Target User Audience:

The target audience for the QR Encode and Decode app primarily includes users who frequently need to share information quickly and efficiently. Examples of users can be meeting hosts or teachers, who will create a QR code with a link to a resource which will be needed for all the attendants to quickly have access to. The estimated needs are creating and decoding QR codes for various purposes, from sharing contact information to event check-ins. Preferences include an intuitive interface, ability to save generated QR images and the ability to select QR images from the device. Limitations may include varying levels of technological literacy and the need for accessibility features.

Scenario:

A business professional, attending a networking event, needs to quickly exchange contact information with multiple people. The app allows them to generate a QR code containing their contact details. During the event, they encounter QR codes on the event's web page, which they effortlessly scan to retrieve and save contact information on their device.

Functional Requirements:

QR Code Encoding: The app must allow users to input text and generate a QR code.

Image Selection and Decoding: The app should provide an option to select QR code images from device files for decoding.

Image saving: The app should provide an option to save generated QR code as an image.

Sharing: Users will be able to share the QR code via copying it to clipboard.

Offline Mode: The app should provide the capability to perform QR code encoding and decoding without requiring a constant internet connection.

User manual: The app should provide a manual for users to know how to use the app.

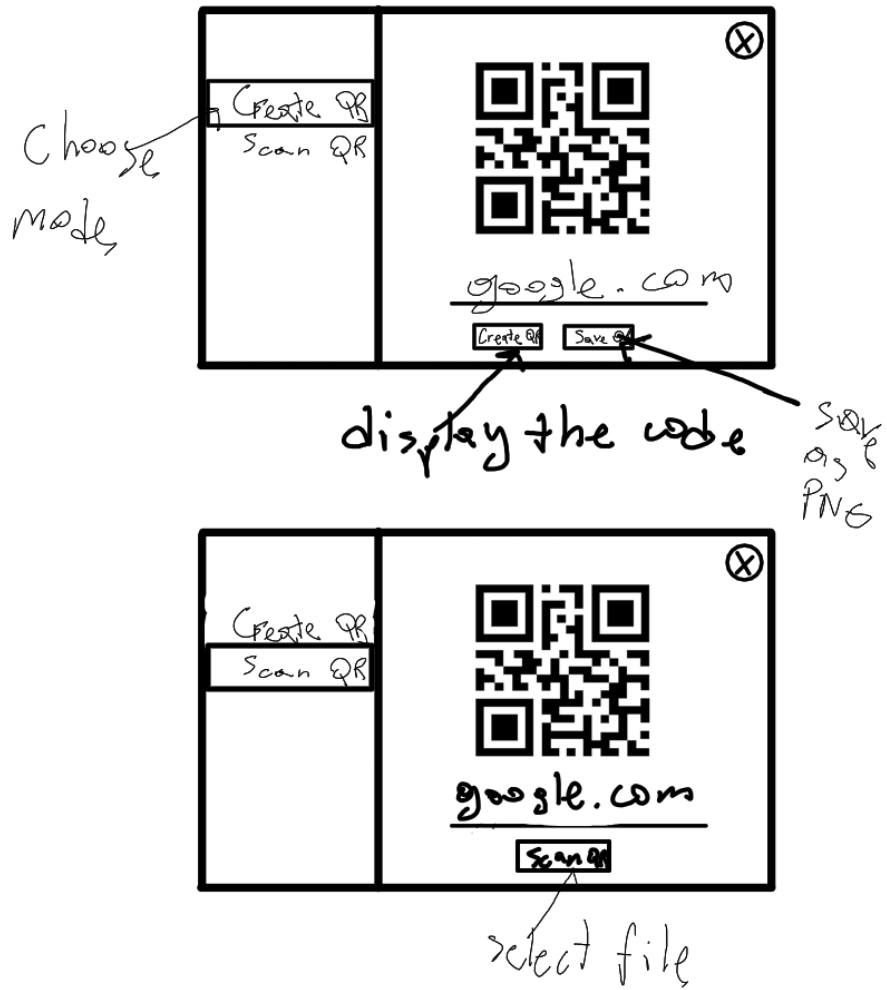
Non-Functional Requirements:

Performance: The app must have quick response times for encoding and decoding operations.

Accessibility: The app should have an intuitive and user-friendly interface, ensuring a positive user experience.

Error responses: The app should provide clear error messages to guide users in case of issues during encoding or decoding processes.

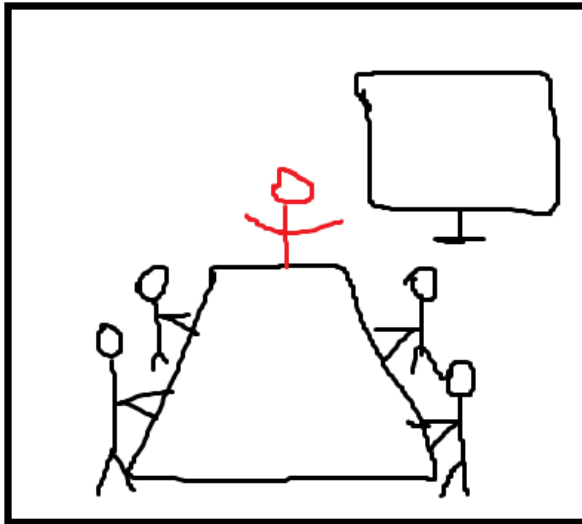
Initial sketch:



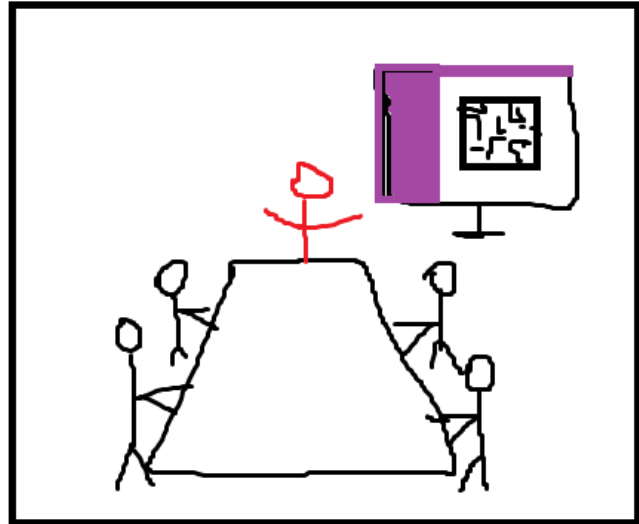
Final look:



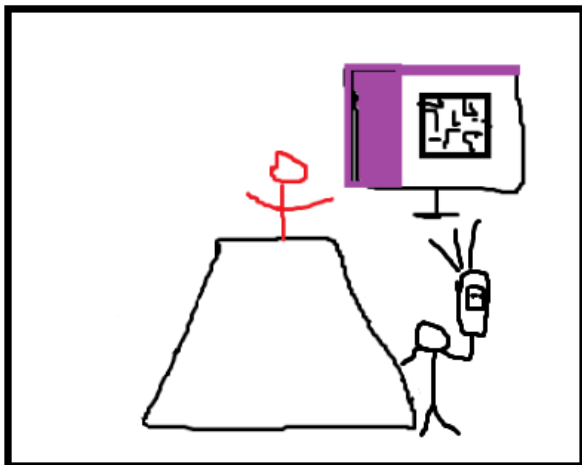
Storyboard:



A business meeting started. The host needs guest to access a specific internet resource with a long link.



The host opens QR Code Encode and Decode App, pastes the link and generates a QR code.



The attendants scan the QR code using their mobile phones.



Now all the attendants have access to the resource on their mobile phones without any complications.