Zach Lefin, Jake Nichols, Helen Kim

Jackson Rhini, Max Graef

Professor Shreesha Nath

CSCI 3308

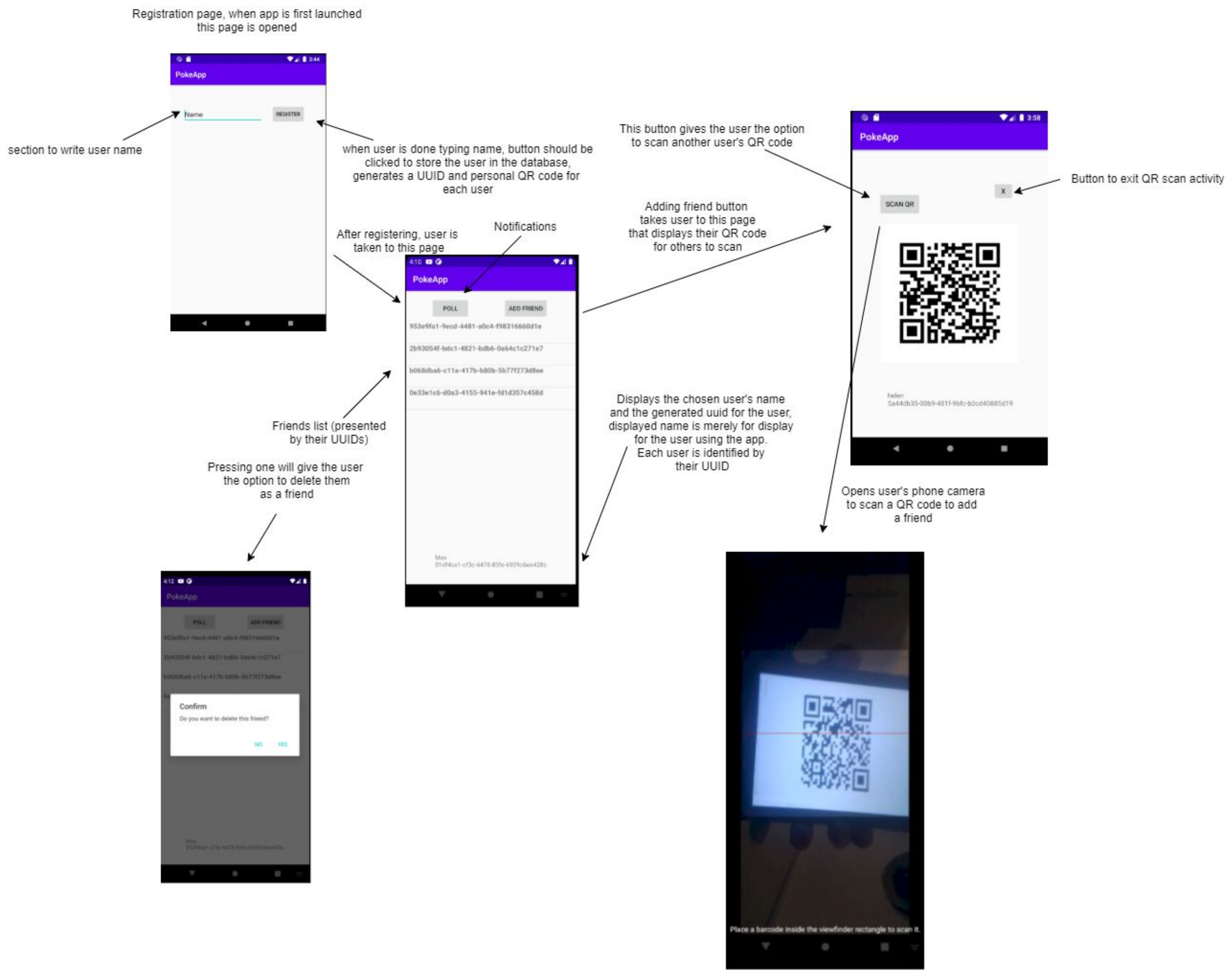
30 October, 2020

Team 1 Milestone #4

Revised List of Features:

- Registration
  - Upon opening the app for the first time, the user can register any name. That name and a unique ID/UUID are stored on the device until the app is uninstalled. This only happens once after app installation; if the user has already registered, they cannot change their name.
- Add/Remove Friends
  - Each user has a UUID and an associated QR code that can be displayed and scanned to add them as a friend.
- Friends List
  - The main view of the app is a list of friends. You can tap a friend to send them a “poke”, one of a set of premade short messages, or hold down on a friend to remove them from the list.
- Pokes
  - You can send pokes as described above from the friends list. When a friend sends a poke to you, if the app is open in the background or foreground, you will receive a notification with the sender and contents. Clicking the notification will open the app (if it isn’t open already).
- Notifications
  - These are the representations of received pokes. As mentioned, clicking one will automatically put the app in the foreground.

Front End Design:



Registration page, when app is first launched this page is opened

section to write user name

when user is done typing name, button should be clicked to store the user in the database, generates a UUID and personal QR code for each user

After registering, user is taken to this page

Notifications

Friends list (presented by their UUIDs)

Pressing one will give the user the option to delete them as a friend

Adding friend button takes user to this page that displays their QR code for others to scan

This button gives the user the option to scan another user's QR code

Button to exit QR scan activity

Displays the chosen user's name and the generated uuid for the user, displayed name is merely for display for the user using the app. Each user is identified by their UUID

Opens user's phone camera to scan a QR code to add a friend

PokeApp
Name
REGISTER
POLL
ADD FRIEND
953e9fa1-9ecd-4481-a0c4-f98316660d1e
2b93054f-bdc1-4821-bdb6-0a64c1c271e7
b068dba6-c11a-417b-b80b-5b77f273d8ee
0e33e1c6-d0a3-4155-941e-fd1d357c458d
Max
01df4ce1-cf3c-4478-83fe-6929c6ee428c
Confirm
Do you want to delete this friend?
NO
YES
SCAN QR
X
helen
5a44db35-00b9-4511-9bfc-b0cd40885d19
Place a barcode inside the viewfinder rectangle to scan it.

Also available in drive folder:
https://drive.google.com/drive/u/0/folders/1mZKWhlsWQrACFRrsw1pTgyehYlRh3gJp

Web Service Design:
(All endpoints must be accessed with POST requests)

- /poke/register
    - Args: name String
    - Returns: generated_uuid UUID
- /poke/update
    - Args: user UUID
    - Returns: name String, friends [[friend_name String, friend_uuid UUID], …]
- /poke/poke
    - Args: user UUID, target UUID, payload String
    - Returns: status String
- /poke/poll
    - Args: user UUID
    - Returns: pokes [[friend_uuid UUID, payload String], …]

- /poke/friends/add
    - Args: user UUID, target UUID
    - Returns: status String
- /poke/friends/delete
    - Args: user UUID, target UUID
    - Returns: status String

Database Design:
The Poke app database currently stores 2 tables:

1. User
    - uuid CHAR(36) PRIMARYKEY
    - name VARCHAR(36)
    - reg_date DATETIME
2. Friend - Stores all user-friend pairs, and the number of times poked
    - user_uuid CHAR(36)
    - friend_uuid CHAR(36)
    - added_date DATETIME
    - total_pokes INT

Individual Contributions:

- **Zach:** Refactor all requests functionality into 1 manager class. Add background update/polling threads to make network requests while the app is not in the foreground / active.
    - Most recent commit (as of writing)

- **Jake:** Mostly code cleanup with Zach since last milestone. Did not do as much work after finishing with client-side requests. Moving on to work on notifications/polling.

- **Max:** Implemented QR generation based on UUID. Implemented QR scan for add friend feature. Added listview to display friends. Added long press on friend to delete them. https://github.com/CSCI-3308-CU-Boulder/203_1_F20/tree/client_max

- **Helen:** Created app logo (not committed yet)

- **Jackson:** Created button functionality for long press and single taps for use with activities e.x. Friend’s list.

Challenges:

Background polling is difficult when the app is closed. In case we are unable to do this, the polling will just occur only when the app is running. It will still poll if the app isn’t currently open as long as the user hasn’t fully closed it.