

Wawa Hackathon 2019

Speedy Sandwich

Problems

- Long lines at the kiosk at peak times
- People have to repeatedly re-enter their favourites all the time
- People forget how they ordered the last time
- Very few kiosk users also use the app
- Even app users also use the kiosk
- People are not ordering ahead or using the app all the time

App vs Kiosk

	APP	KIOSK
Pros	<ul style="list-style-type: none">● PreOrdering● Already Paid● Easy to Reorder● Easy to keep track of orders	<ul style="list-style-type: none">● Easy to pay cash● Easy combine with other inventory● Easy to order with others● Easy to navigate● Always on and working
Cons	<ul style="list-style-type: none">● Hard to use cash● Hard to order with others● Still have to pay to get other inventory● Phone could be dead or utilized already	<ul style="list-style-type: none">● Can be busy at times● Have to pay at register● Wait to order and wait to pick up

Solution

- Unite the two with QR codes
- Make sharing data between app, kiosk, and receipts fast and easy
- Make it easy to share or add to orders

QR Codes are Cool ...Again



And of course...

Buffalo Chicken
Cheesesteak w/
Banana Peppers,
Pepper Jack &
Blue Cheese

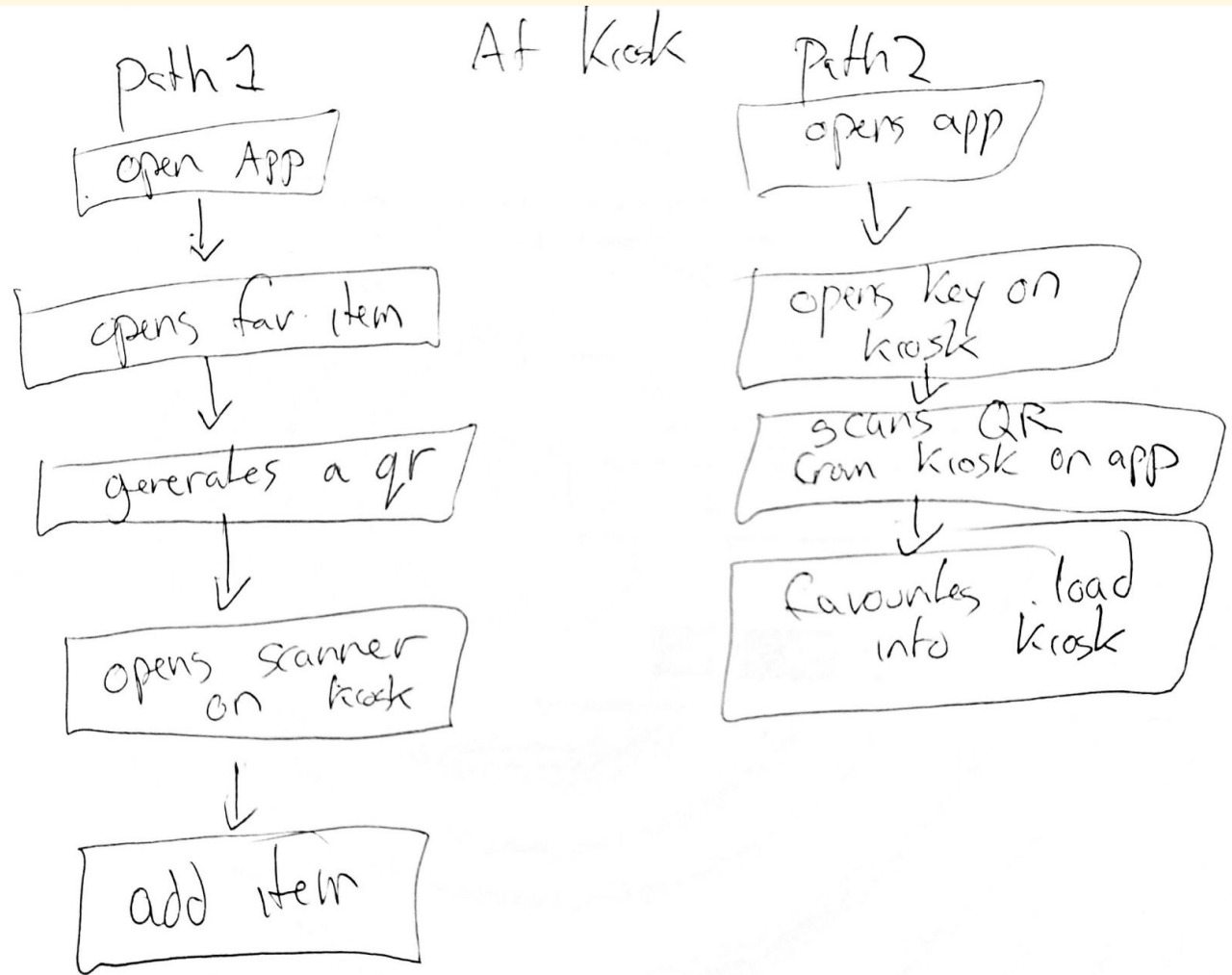


Validation

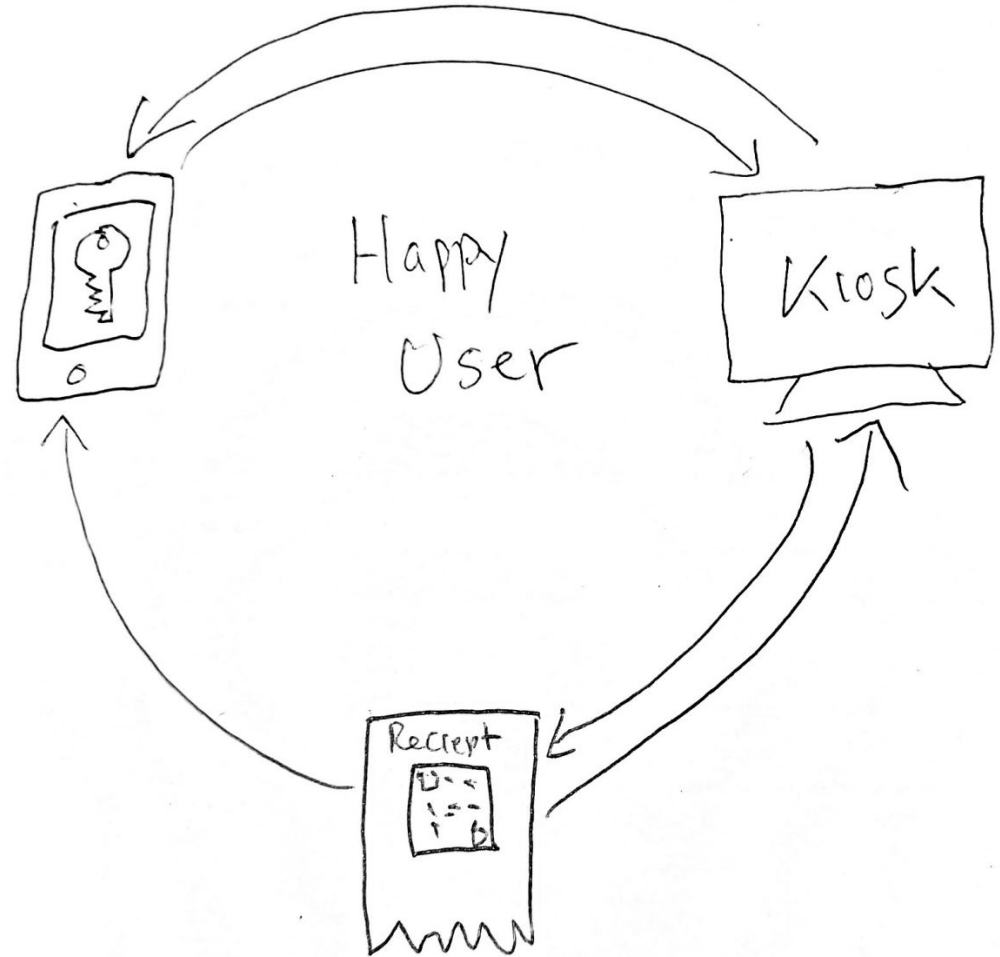
QRs already common for identity authorization between devices such as:

- Security Apps: Google Authenticator, LastPass
- Financial Apps: Coinbase, Bank Apps, Crypto Wallets
- Messaging apps: WhatsApp, Messenger for Google, We Chat
- And are seen on products, billboards, television, and more.

User Journey



Data Flow



Technology

Frameworks Used:

- Build with node, npm, firebase cli, react-scripts in a Docker dev container
- React frontend (latest using components & webhooks)
- Firebase backend - not utilised though
- QR generator and scanner packages

Notes For Build:

- Serverless makes it easy to bridge (using Firebase bind data between 2 apps)
- QR scanner in app & kiosk if desired
- QR generator in app & kiosk if desired
- Camera or barcode reader for kiosk if desired
- Print QRs on receipts

Additional Benefits

- More app usage
- Understand more purchase behavior of users
 - Where and when they make orders on kiosks by abstracting data when:
 - They add a previously ordered item added via an app
 - Session initiated on kiosk
- Easier for people to share their favorites in ways that encourage action
 - To make a purchase

The Future

- Utilize serverless better
 - AWS Lambda Functions! ⇐ the future
 - Utilize infrastructure as code. Consider tools such as
 - Stackery
 - Begin.com architecture
- More personalized push notifications
- Better pick up on patterns. Alert people who have a high prob of ordering a limited resource about the possibility of running out.