QUICK APPS: EASY CODING, FRICTIONLESS UX

CONF42

Conf42: JavaScript 2021
Martin Alvarez **@espinr**

HUAWEI

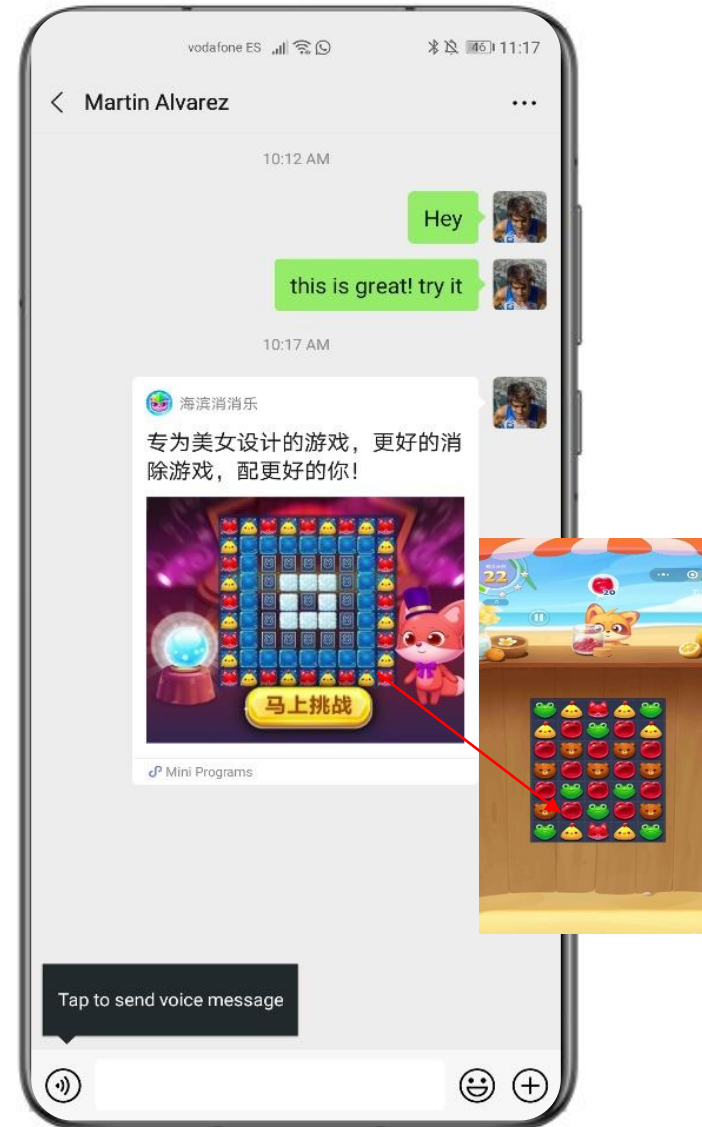# LIGHT APPS

NO INSTALLATION APPS
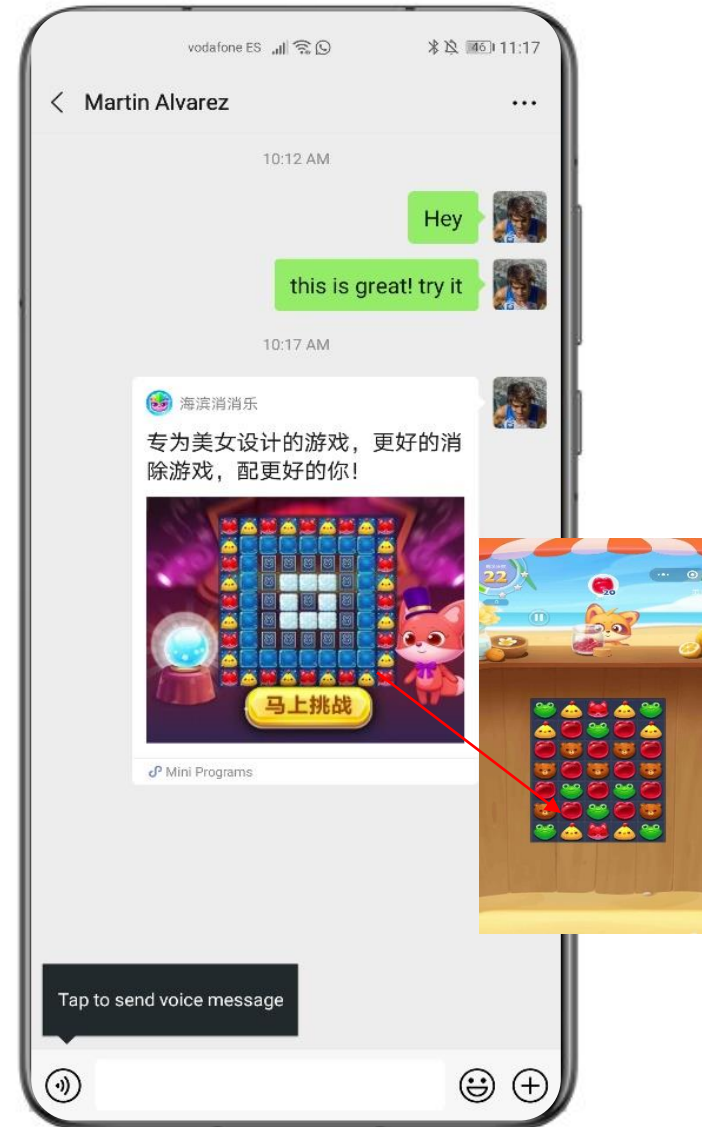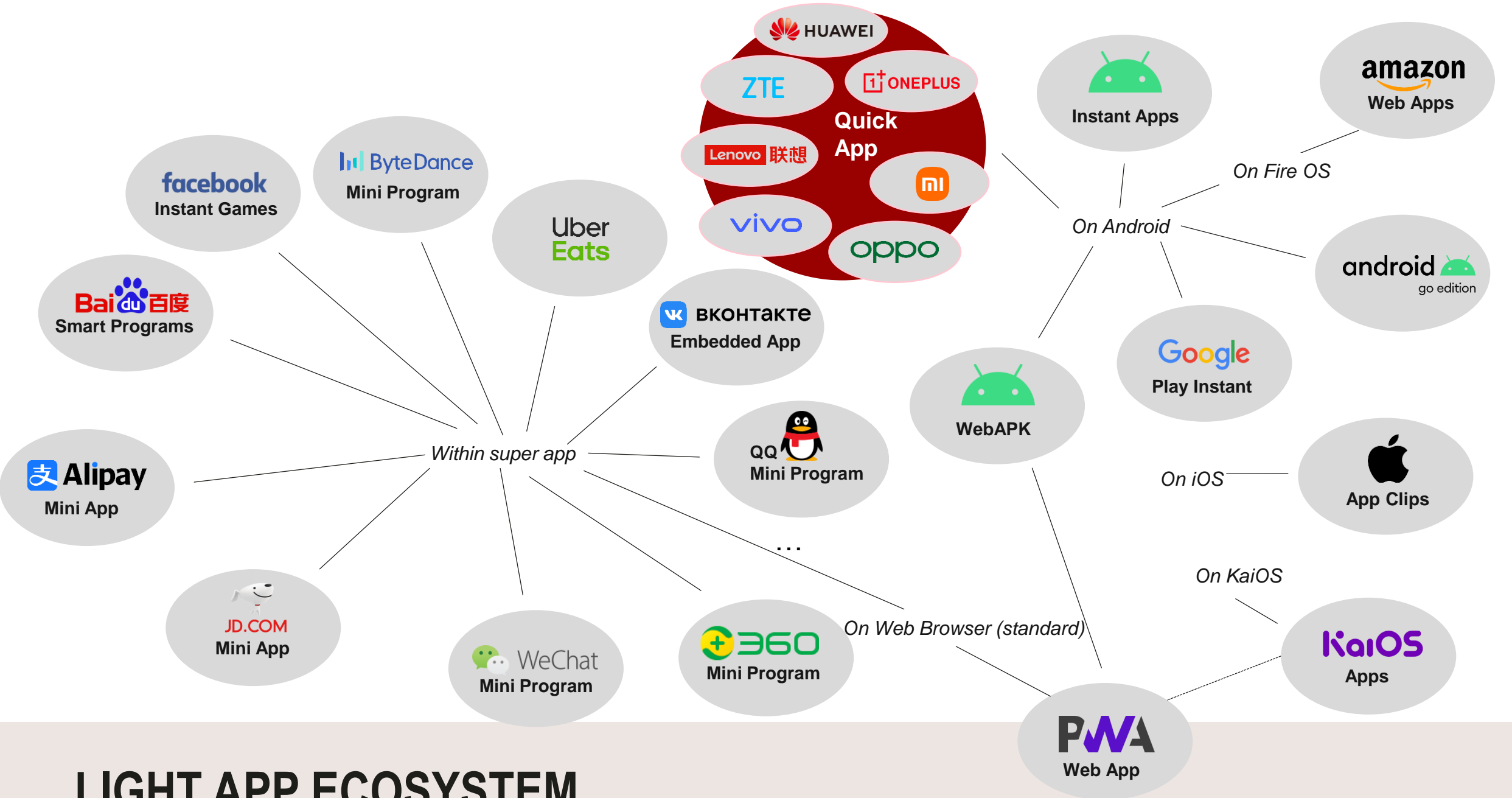
Direct user interaction

Frictionless apps

NO INSTALLATION APPS

Direct user interaction

Frictionless apps
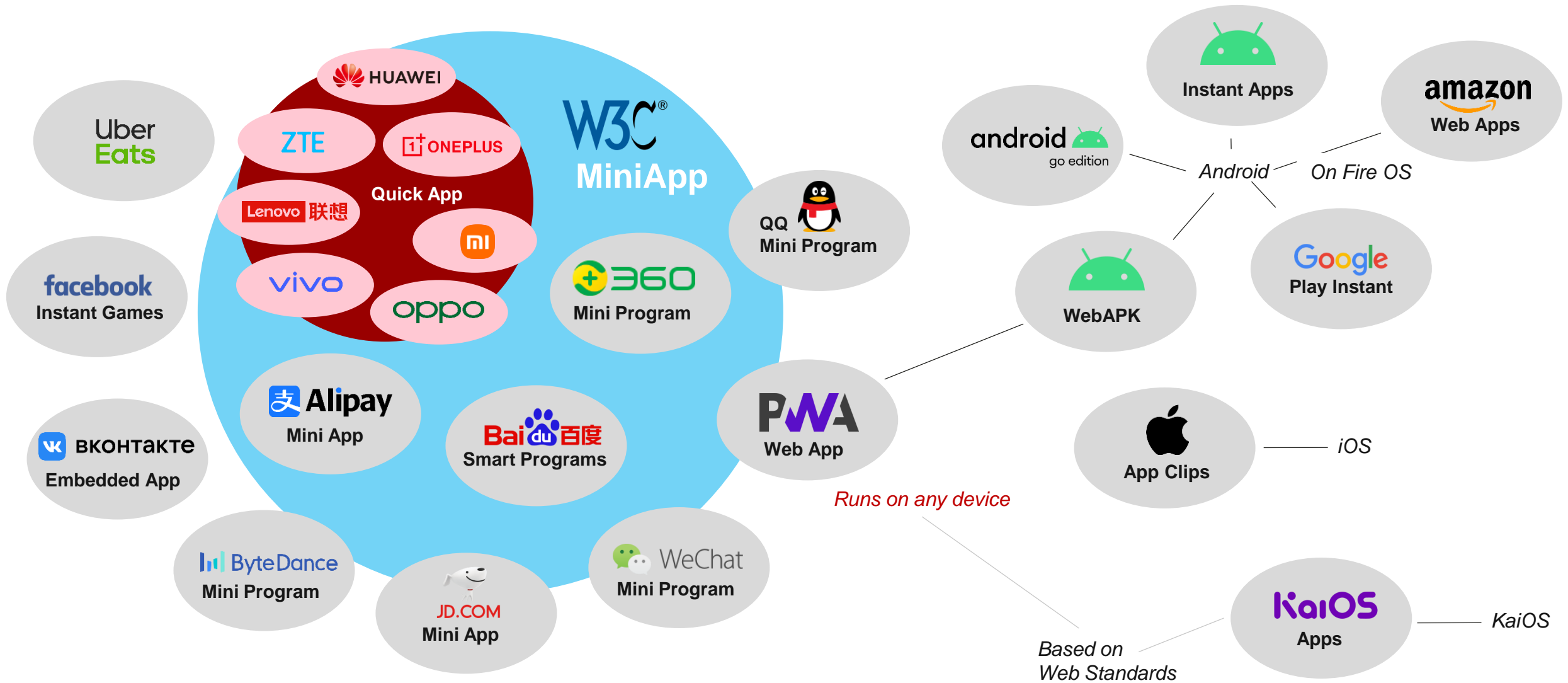
WeChat: *3.2+ million*
mini programs

LIGHT APP ECOSYSTEM

W3C
MiniApp

Quick App
HUAWEI
ZTE
ONEPLUS
Lenovo 联想
MI
vivo
OPPO

Uber Eats

facebook
Instant Games

ВКОНТАКТЕ
Embedded App

Alipay
Mini App

Baidu 百度
Smart Programs

ByteDance
Mini Program

JD.COM
Mini App

WeChat
Mini Program

QQ
Mini Program

360
Mini Program

PWA
Web App

Runs on any device

Based on
Web Standards

android go edition

Instant Apps

amazon
Web Apps

Android   On Fire OS

WebAPK

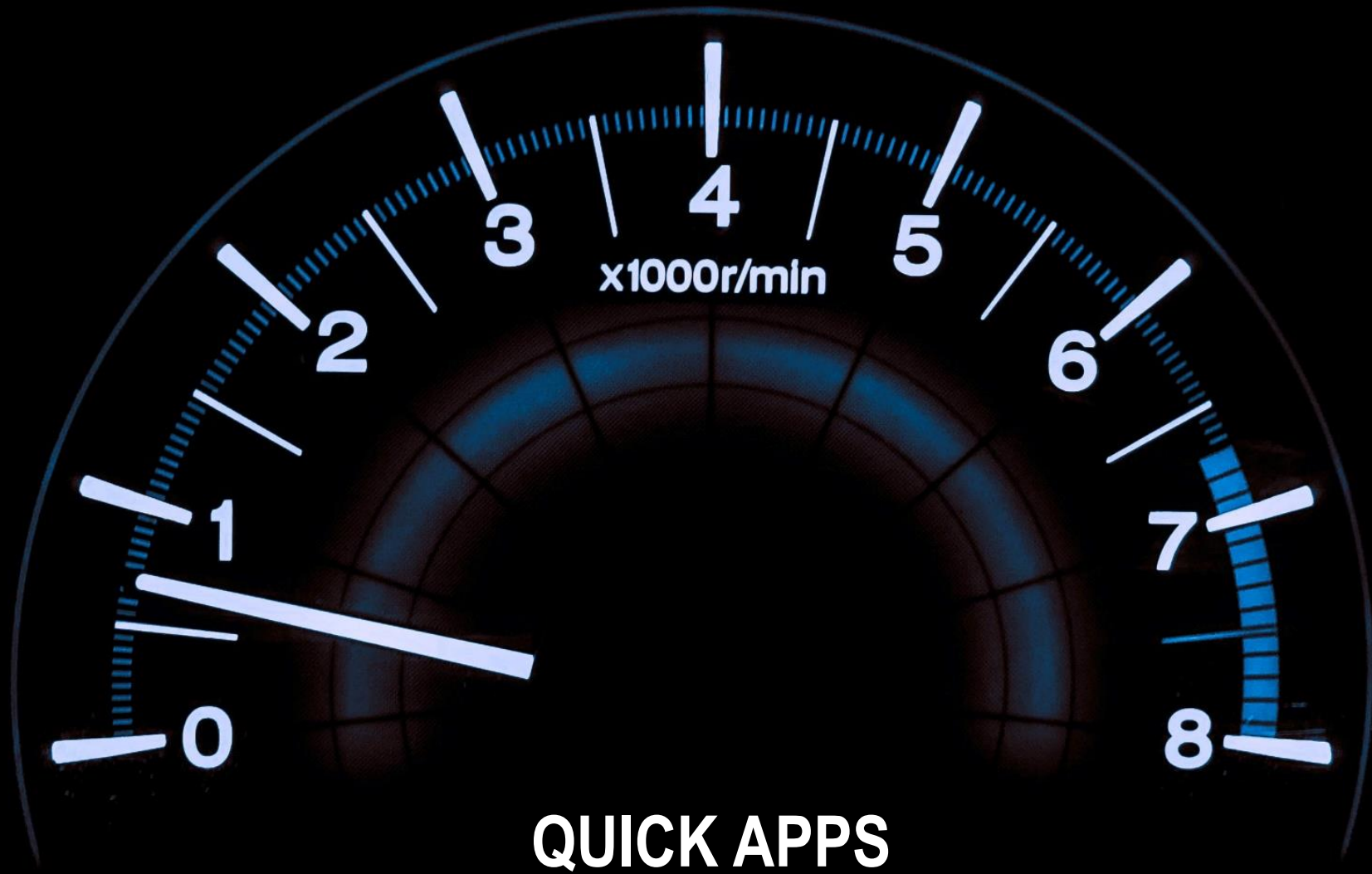Google
Play Instant

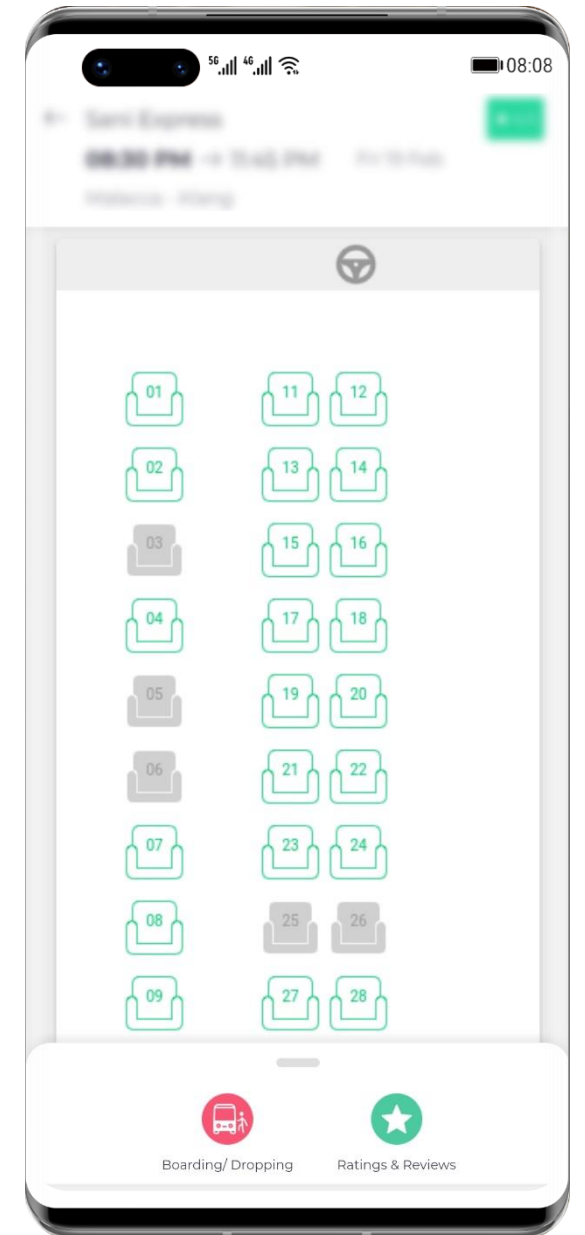App Clips   iOS

KaiOS
Apps   KaiOS

W3C MINIAPP STANDARD TO REDUCE FRAGMENTATION

W3C

QUICK APPS

QUICK APP

A MVVM framework based on Vue.js to develop native-like applications that do not require installation
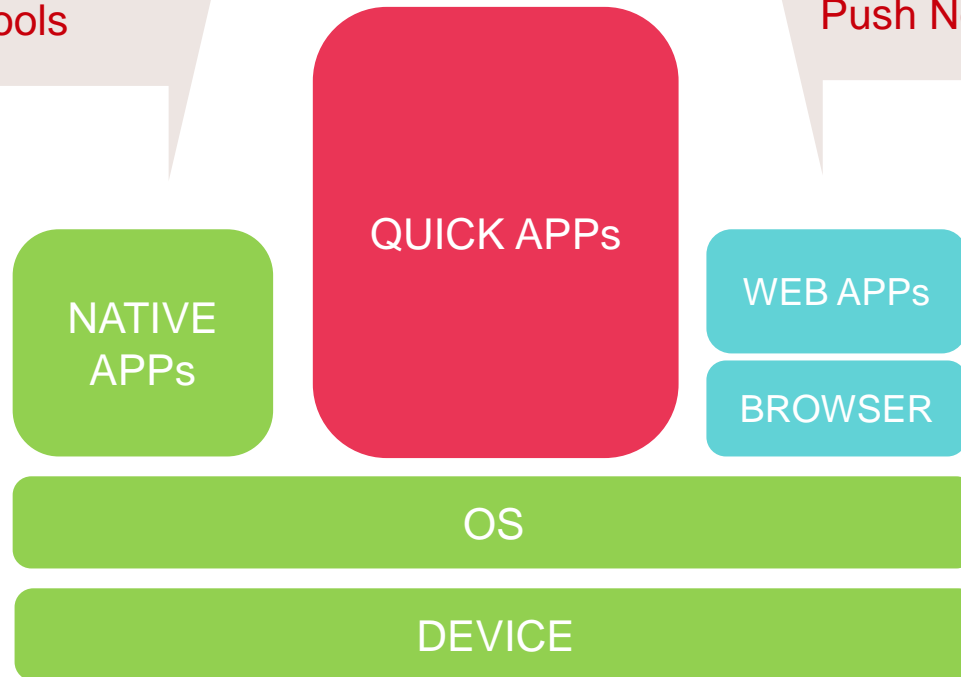
Native look & feel
Scan QR-code & run
Tap on link & run
No installation
Native performance
Quick games, tools

Access to system APIs
Marketplace flexibility
20% code lines
Low code approach
UI predefined elements
Push Notifications…

QUICK APPs

NATIVE APPs

WEB APPs

BROWSER

OS

DEVICE

developer, people by Drishya from the Noun Project

QUICK APP MAIN FEATURES

DISCOVERABILITY

USER ACQUISITION

MONETIZATION

USER RETENTION

PRODUCT'S LIFECYCLE SUPPORT

DISCOVERABILITY
USER ACQUISITION
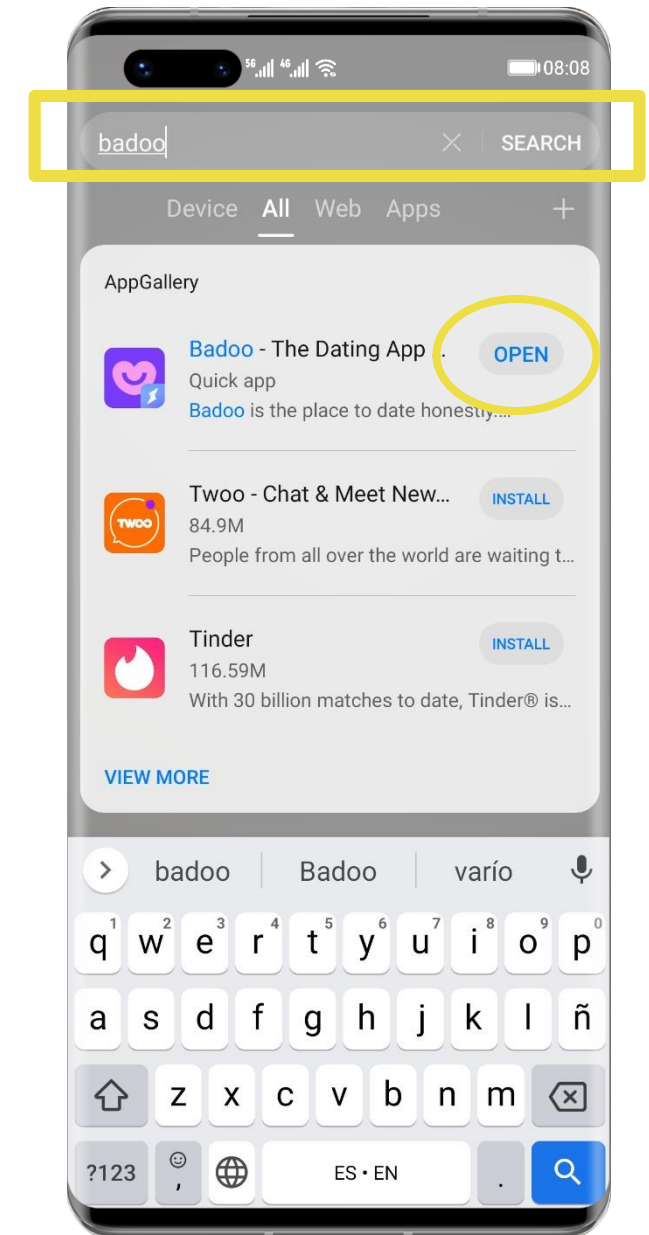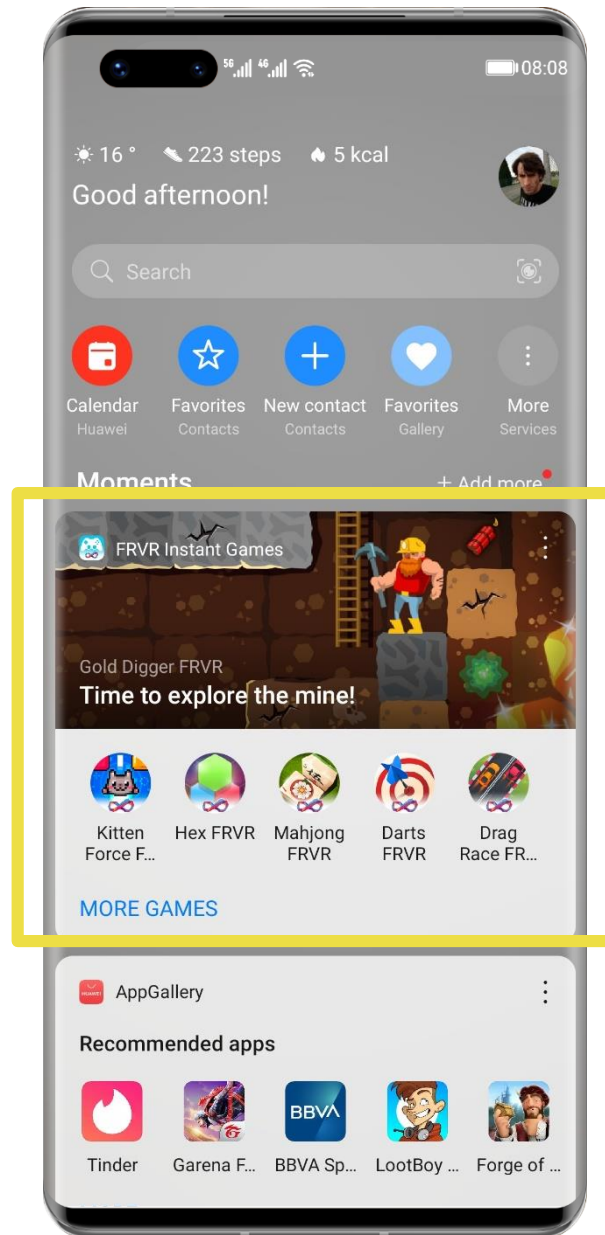## MONETIZATION
USER RETENTION

Widgets on dashboard

Global search results

Web sites (URL links)
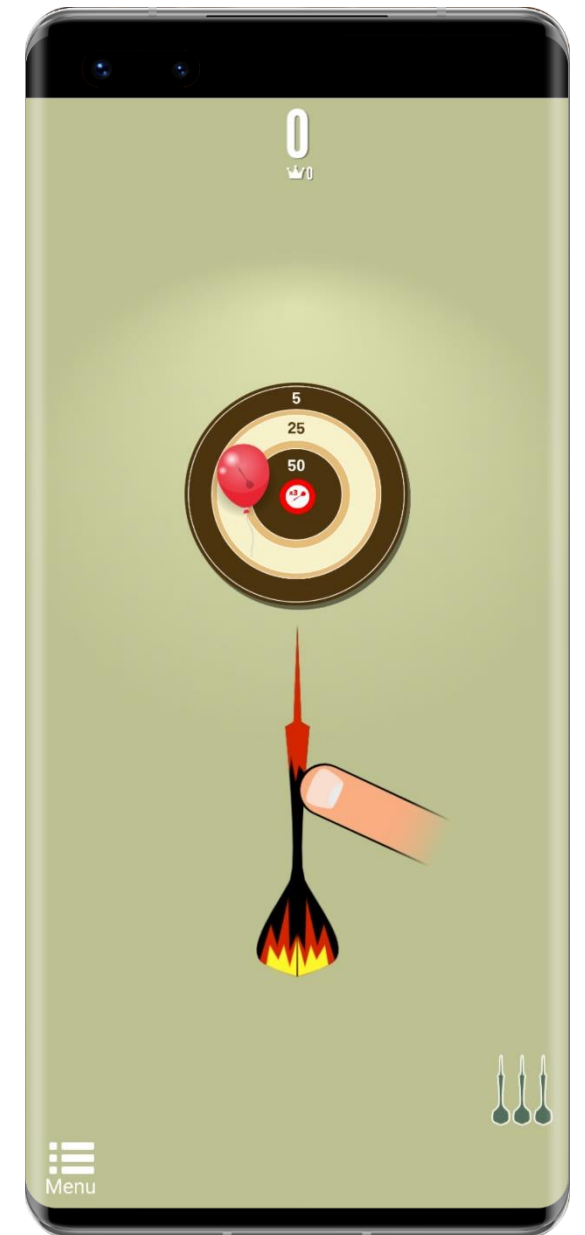
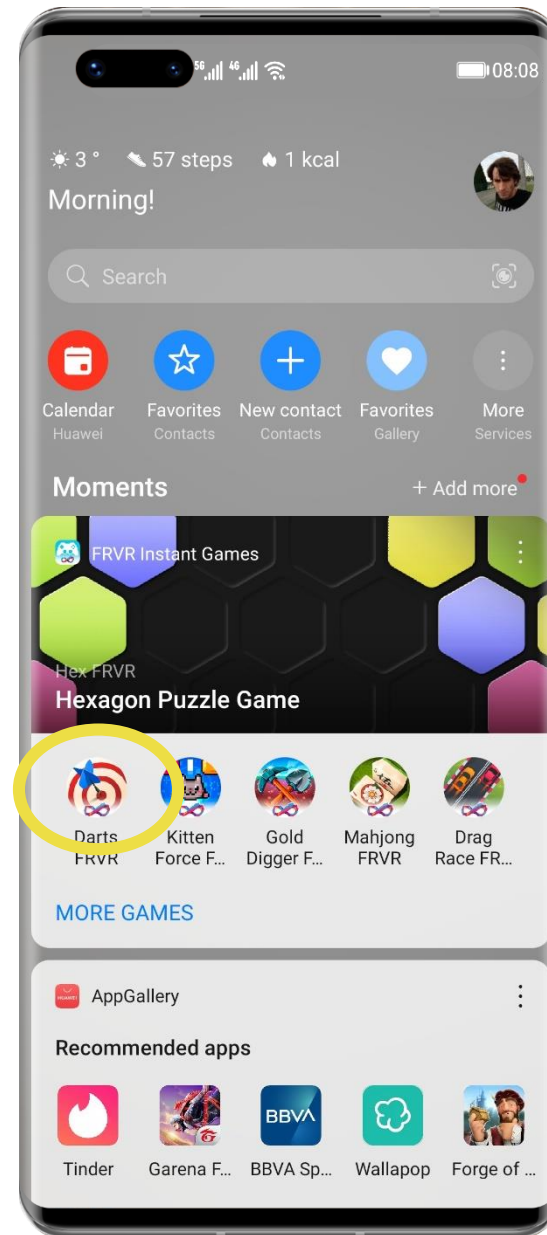*Links from other apps*

Listed in app marketplaces

DISCOVERABILITY
USER ACQUISITION
MONETIZATION
USER RETENTION

Huge discoverability

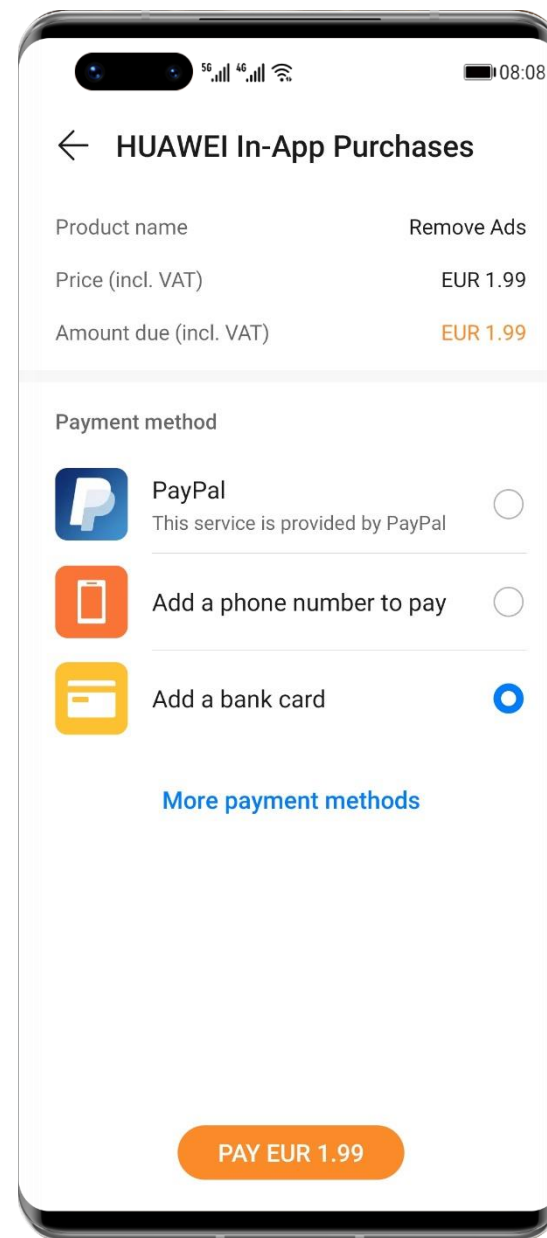*Instant access*

Minimum friction

User identification

DISCOVERABILITY
USER ACQUISITION
MONETIZATION
USER RETENTION

In-app payments
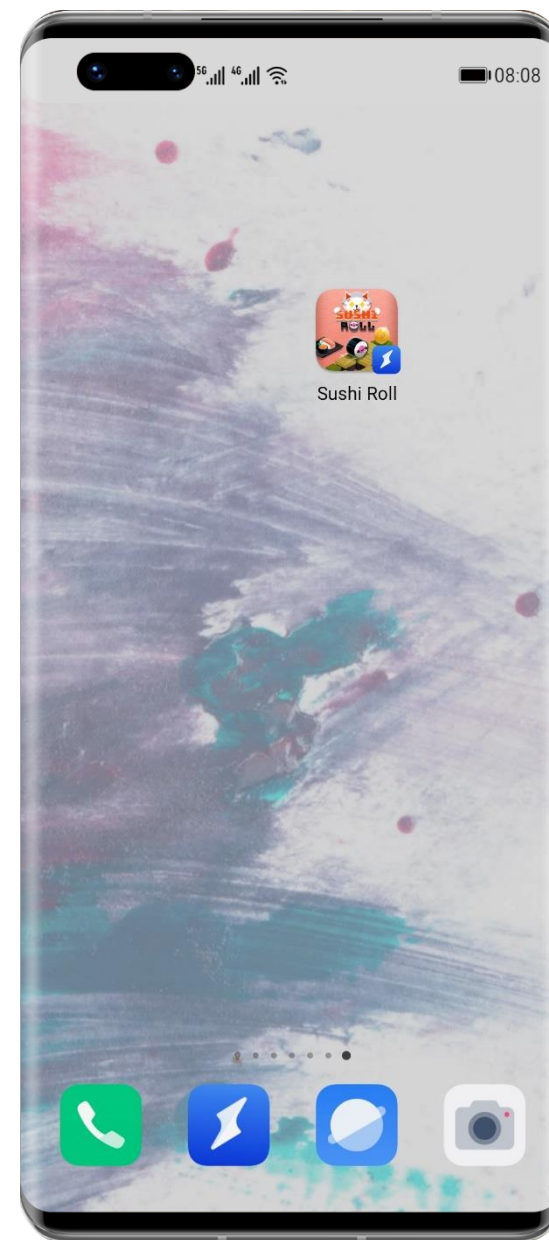
In-app ads

Rewarded ad videos

DISCOVERABILITY
USER ACQUISITION
MONETIZATION
USER RETENTION
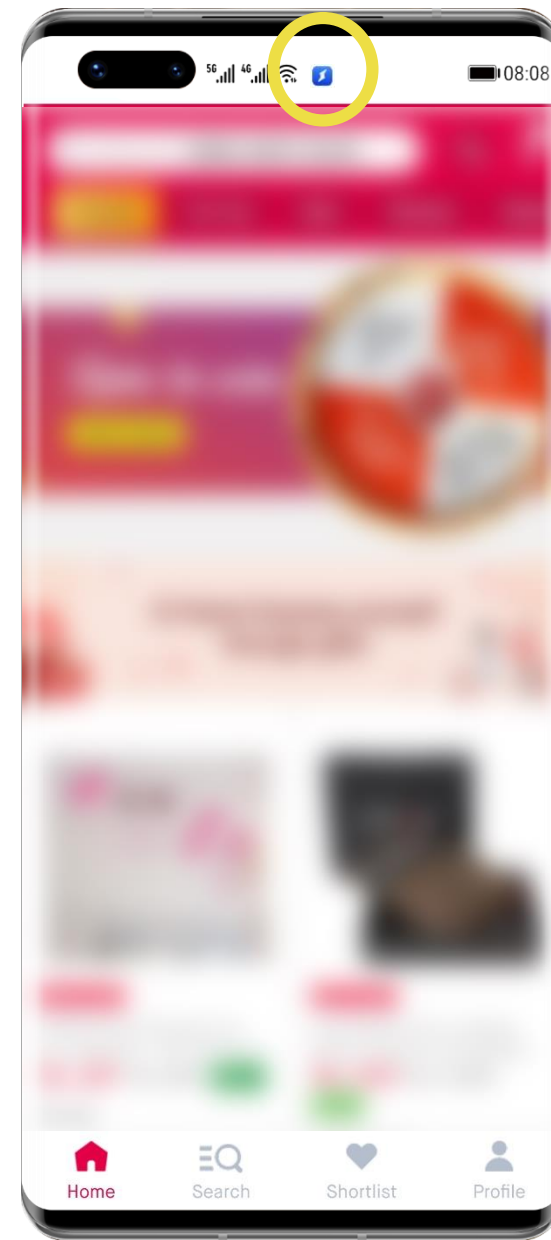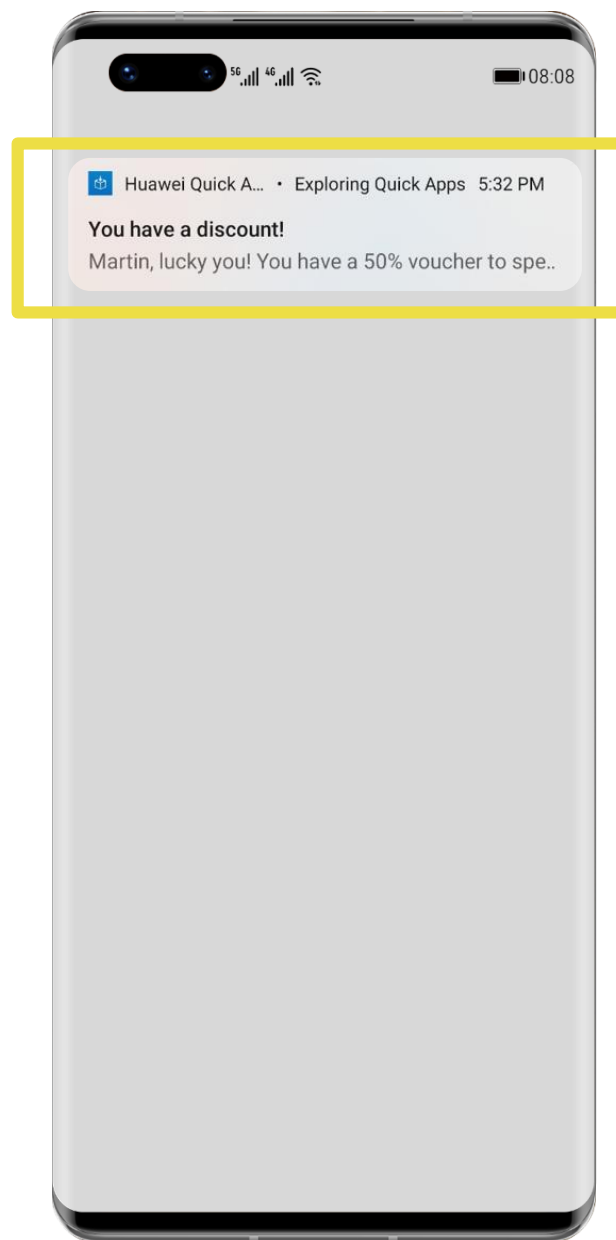
Tap to open

Save shortcut in home screen

Remember status

DISCOVERABILITY
USER ACQUISITION
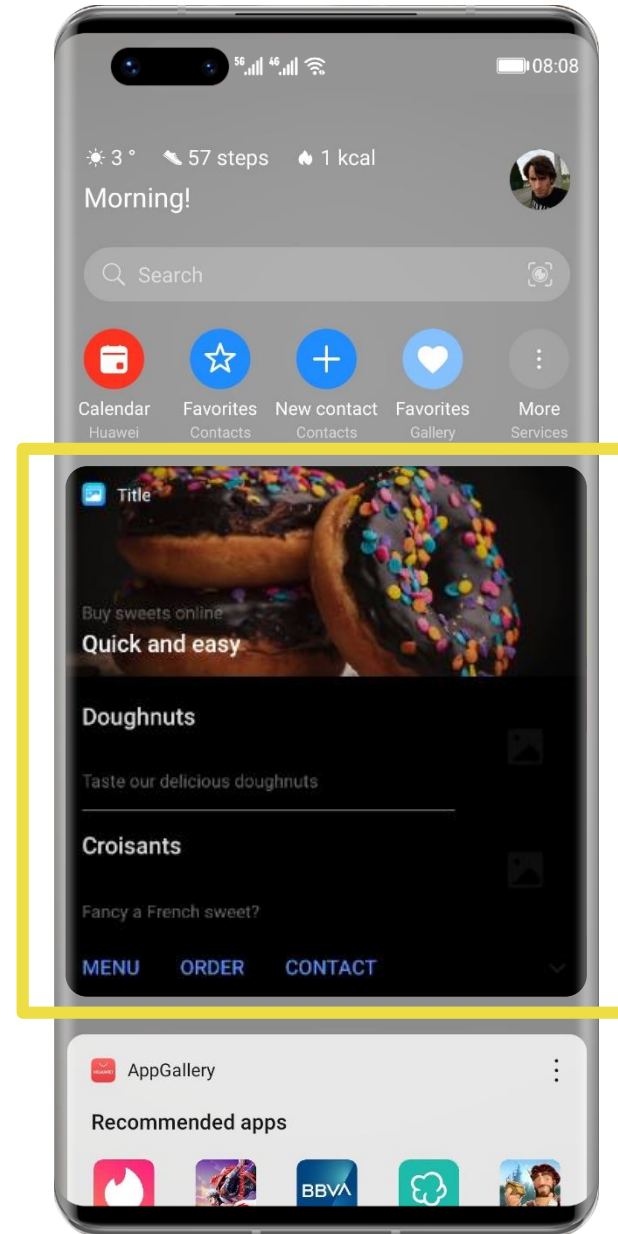# MONETIZATION
USER RETENTION

Push notifications

Banners in other apps

ALSO AS WIDGETS

Display on the home screen

Direct user interaction

THE FRAMEWORK

MVVM FRAMEWORK

Vue.js-like

Declarative rendering

Reusable UI components

Reactive HTML* templates

One-way data flow

Event binding

Virtual DOM manipulation

CSS (+LESS +Saas)

```html
<template>
  <div class="main-page">
    <text class="title">{{title}}</text>
    <input class="btn" type="button" value="Press Me" onclick="changeText" />
  </div>
</template>


<script>
export default {
  private: {
    title: 'My first Quick App'
  },
  changeText () {
    this.title = 'hello world'
  }
}
</script>

<style>
  .main-page {
    flex-direction: column;
    justify-content: center;
    align-items: center;
  }
  .btn {
    width: 550px;
    height: 86px;
    margin-top: 75px;
    border-radius: 43px;
    background-color: #4286f5;
    font-size: 30px;
    color: #000000;
  }
</style>
```
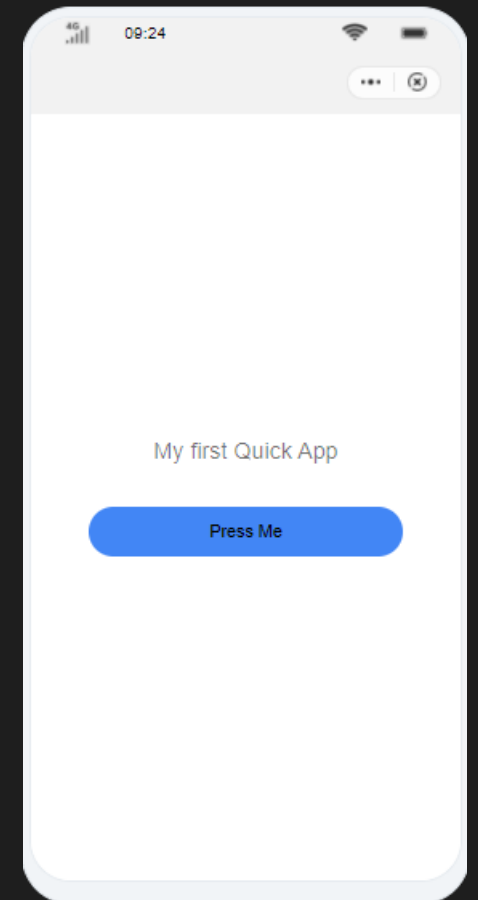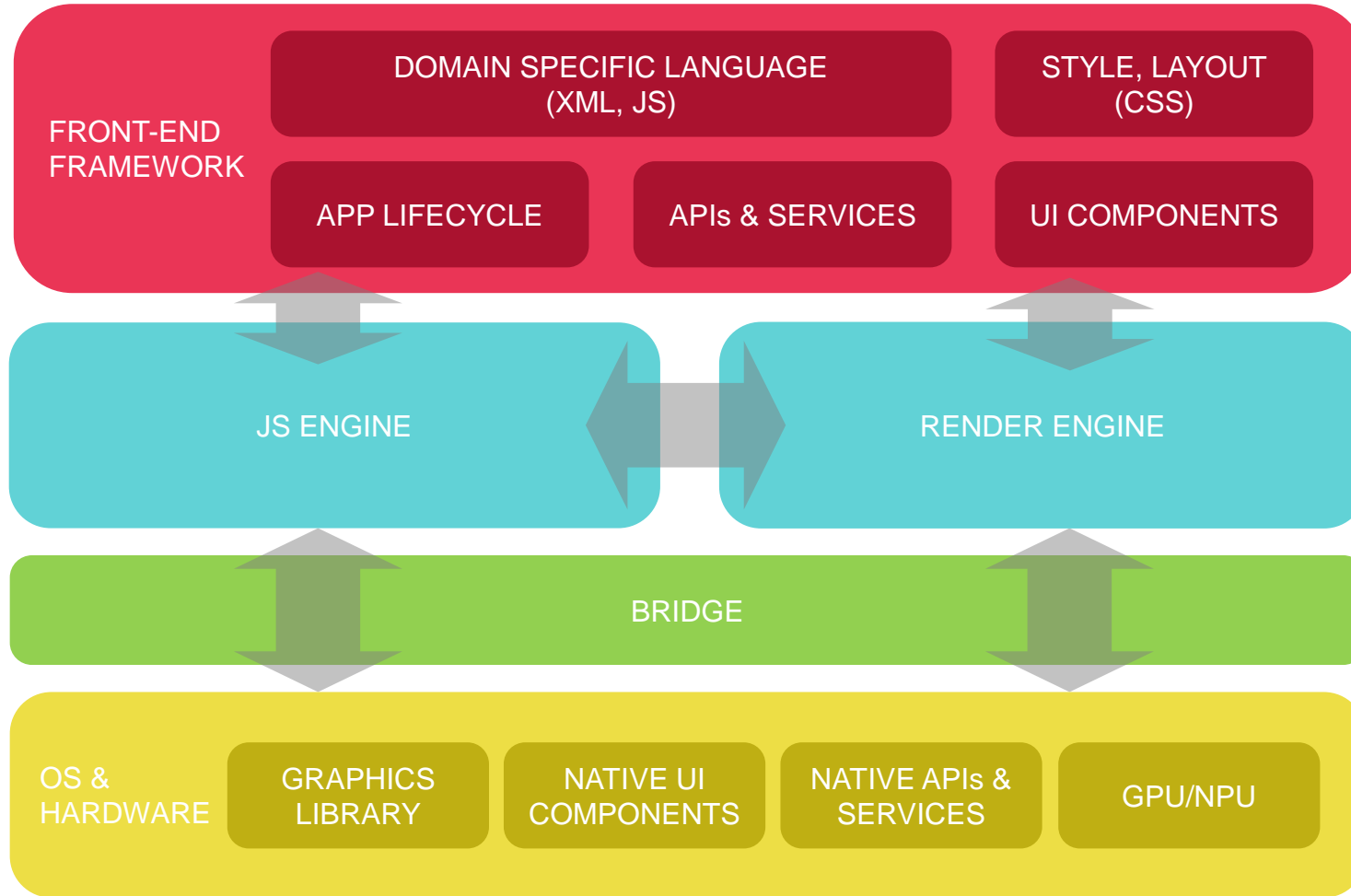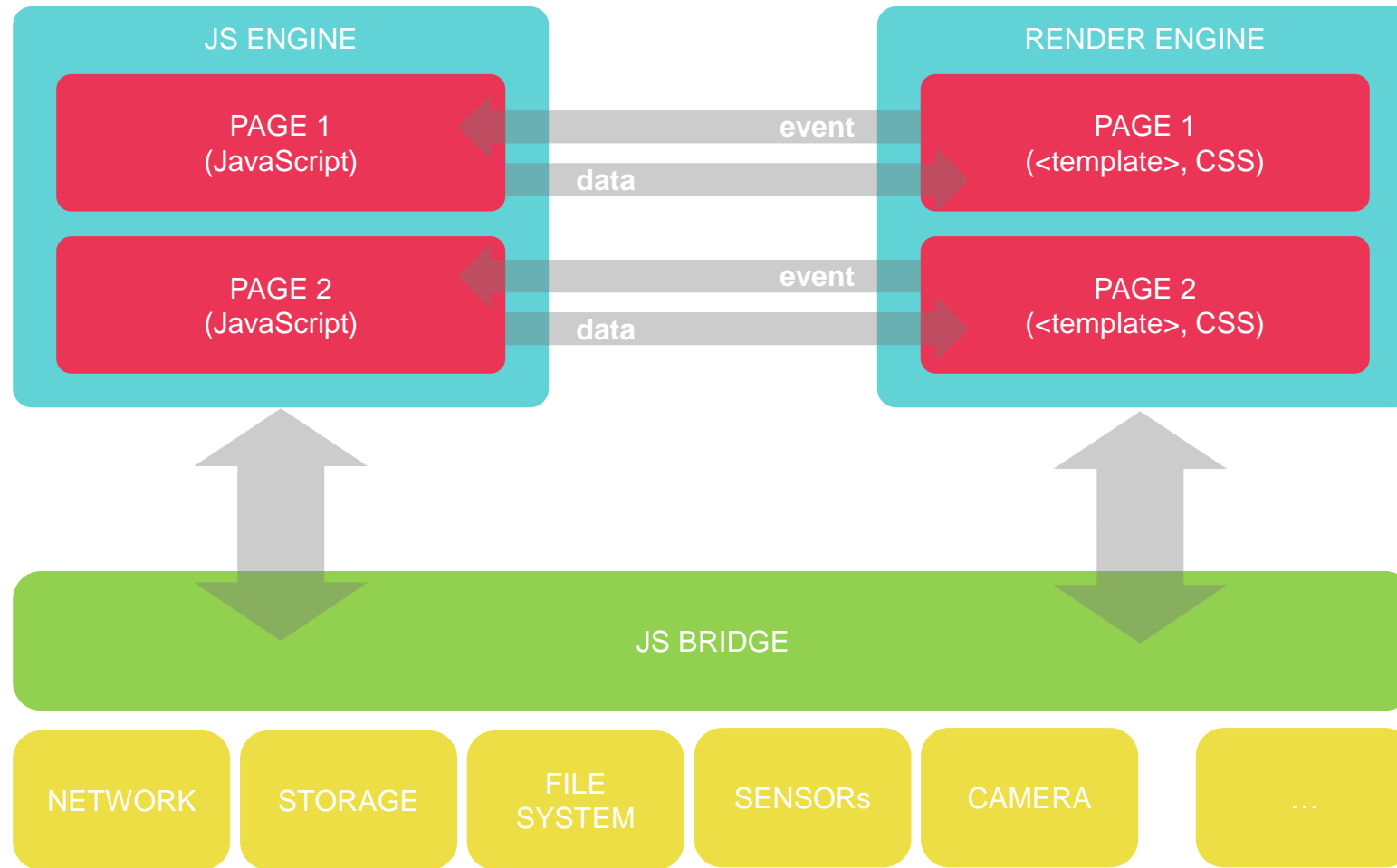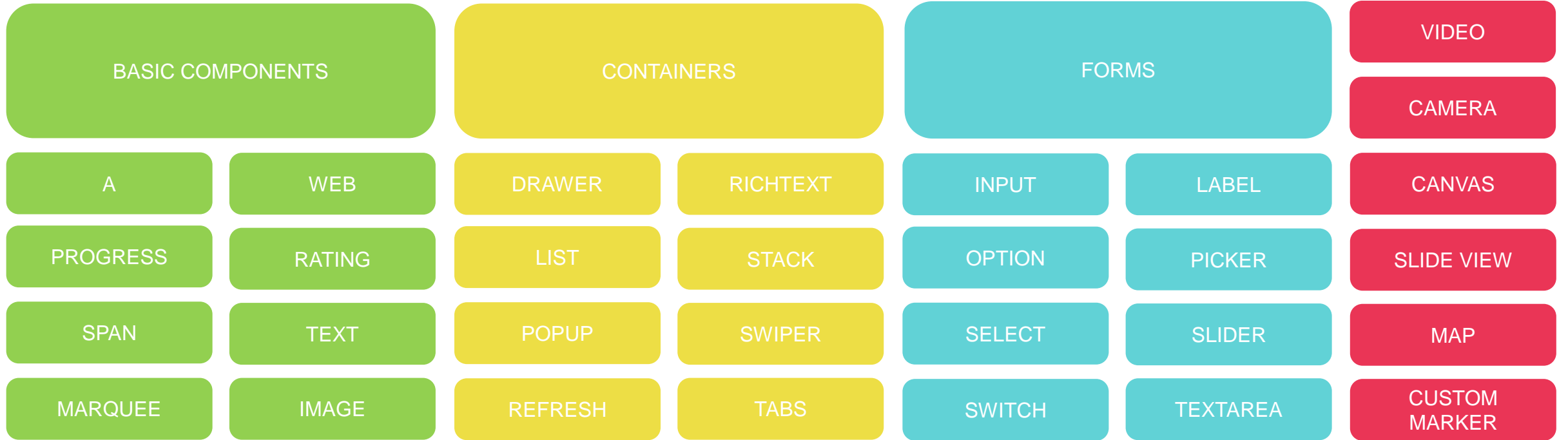
QUICK APP PLATFORM ARCHITECTURE

RUNTIME FRAMEWORK

QUICK APP BUILT-IN UI COMPONENTS

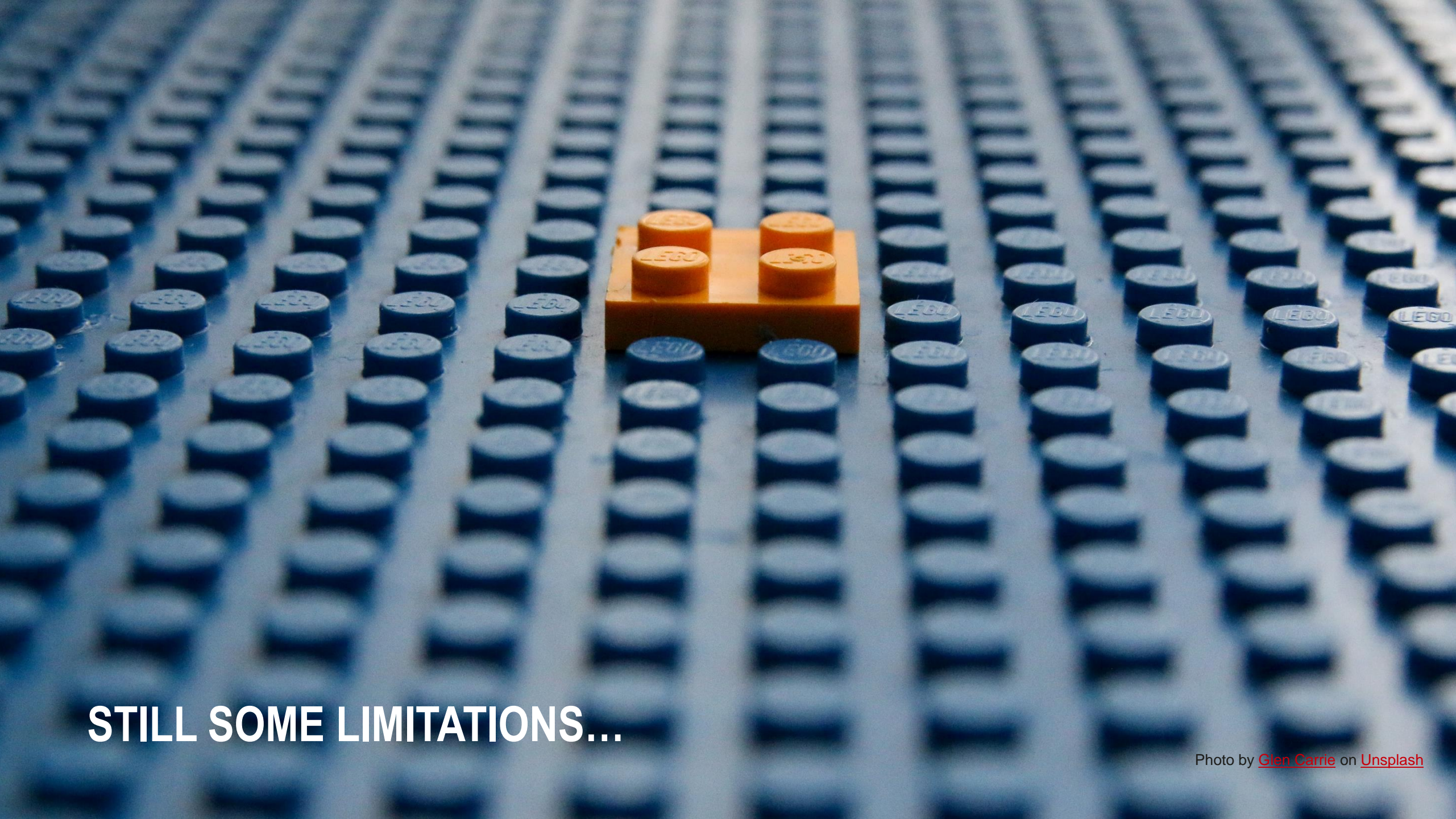| SYSTEM & NETWORK		INPUT - OUTPUT		DEVICE FEATURES		VENDOR SERVICES
RUN IN BACKGROUND	CRYPTOGRAPHY	QR CODE	QUICK APPS SHARING	NETWORK STATUS	DEVICE AUDIO VOLUME	(AI) TEXT TRANSLATION
SHORTCUT (INSTALLATION)	ZIP MANAGEMENT	AUDIO RECORDINGS	CLIPBOARD	BATTERY	DEVICE ALARMS	(AI) SPEECH RECOGNITION
SYSTEM CONFIGURATION	STORAGE	CANVAS	EXTERNAL SHARING	BRIGHTNESS	CONTACTS	PAYMENTS
PACKAGE MANAGEMENT	FILE SYSTEM	ANIMATIONS	PUSH NOTIFICATIONS	GEOLOCATION	CALENDAR	AUTH.
APP INFO	WEB SOCKETS	IMAGES	WEB VIEW	SENSORS	SMS	STATISTICS
ROUTING	FETCH	AUDIO	DIALOGS	VIBRATOR	WIFI	ADS
DEVICE INFO	UPLOAD DOWNLOAD	VIDEO	IN-APP NOTIFICATIONS	DAILY STEPS	BLUETOOTH	USER ACCOUNT

APIs & SERVICES

STILL SOME LIMITATIONS...

QUICK APP
INITIATIVE

- *Open source community hosted by OW2*
- *Vendor-neutral*
- *Collaborative task forces*

https://quick-app-initiative.ow2.io

More info:

https://quick-app-initiative.ow2.io

THANK YOU

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