UNWRAPPING THE BOX OF PAIRED TESTING

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Raj Subramanian / **raj@testim.io**

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ABOUT ME

- Developer Evangelist at Testim.io
- Blogger, Speaker and Writer
  - http://www.rajsubra.com/blog/
  - https://blog.testim.io/
  - http://www.rajsubra.com/publications/
  - http://www.rajsubra.com/presentations/
- 13+ Years of Development and Testing

@epsilon11

raj@testim.io

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Exercise – 1
Duration: 5 Mins

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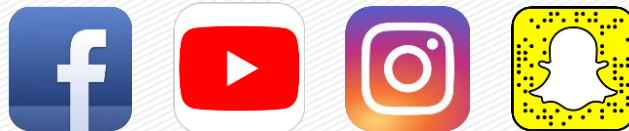
Select an ***App or Website***
Give ***3 Reasons*** why you like it

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PART – 1

- Testing Approaches
- Localization Testing
- Accessibility Testing
- Difference in Testing Approaches

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PART – 2

- Session Based Exploratory Testing (ET)

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PART 1

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TESTING APPROACHES

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I-Interrupt Testing

I-Installation Testing

K-Keypads

C-Caching Problems

B-Battery Life

W-Wi-Fi/4G

A-App Lifecycle

I/WE LACK I-PUBS

Crash Logs   L-Logs

E-End User Scenarios

Console Logs   C-Consistency

U-User Reviews

M-Memory

P-Performance

S-Storage

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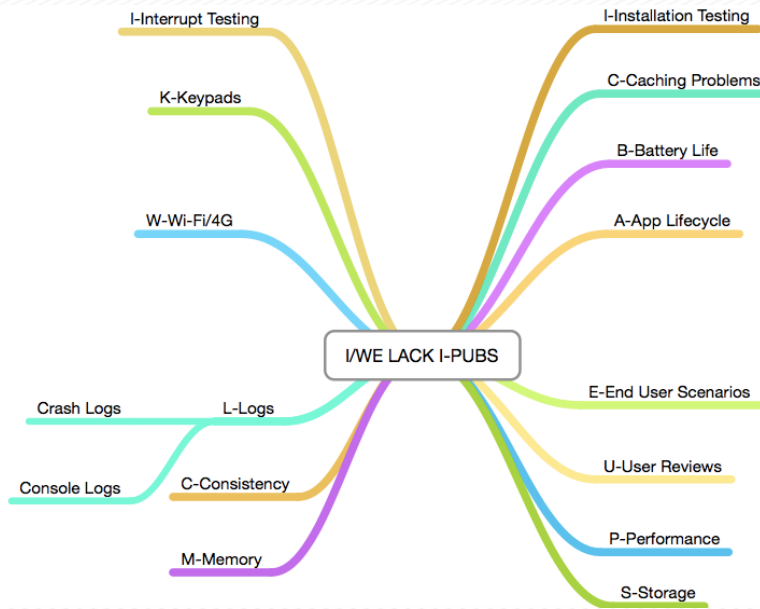
A
APPLICATION LIFECYCLE

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I

INTERRUPT TESTING

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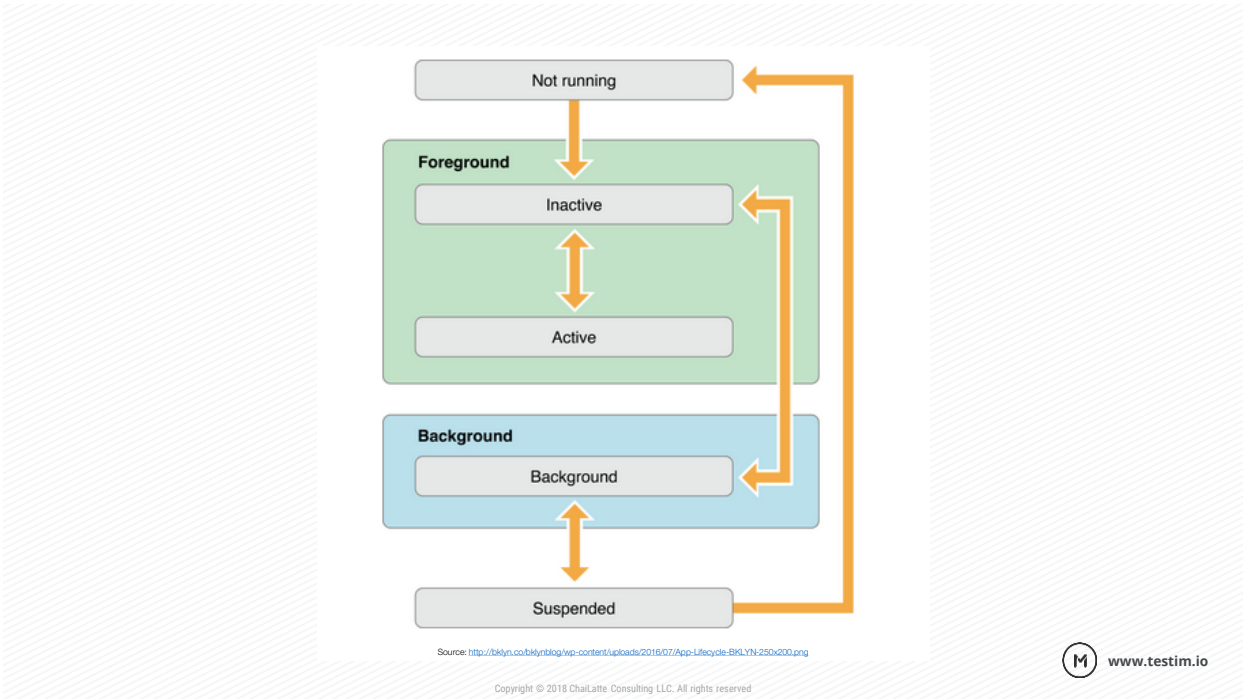
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INTERRUPT TESTING

- Incoming and Outgoing SMS/MMS
- Incoming and Outgoing calls
- Incoming Notifications
- Battery Removal
- Cable Insertion and Removal
- Network outage and recovery
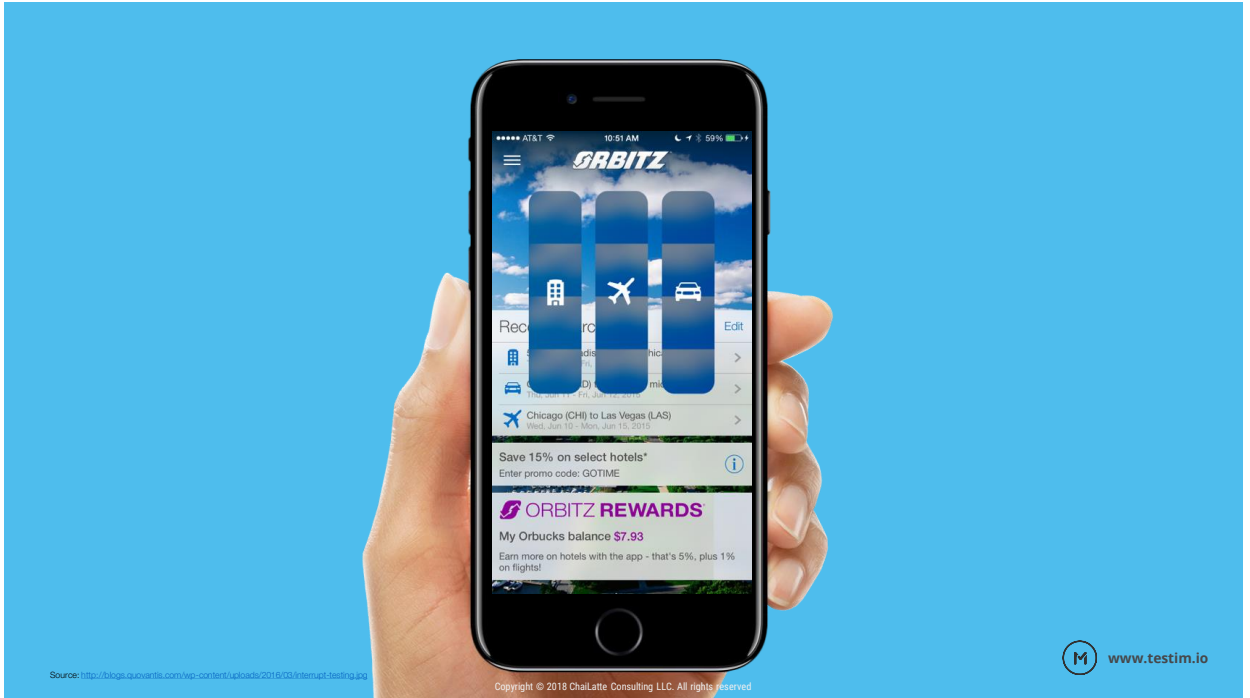- Media Power on/off
- Device Power cycle

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W

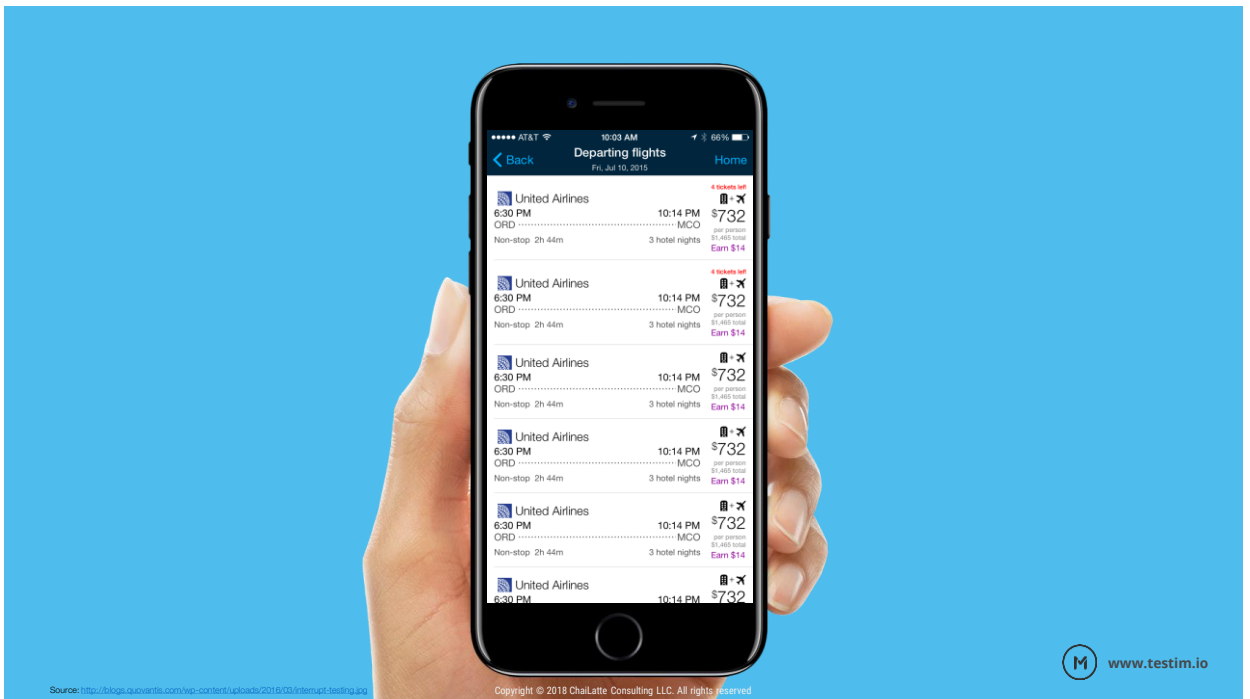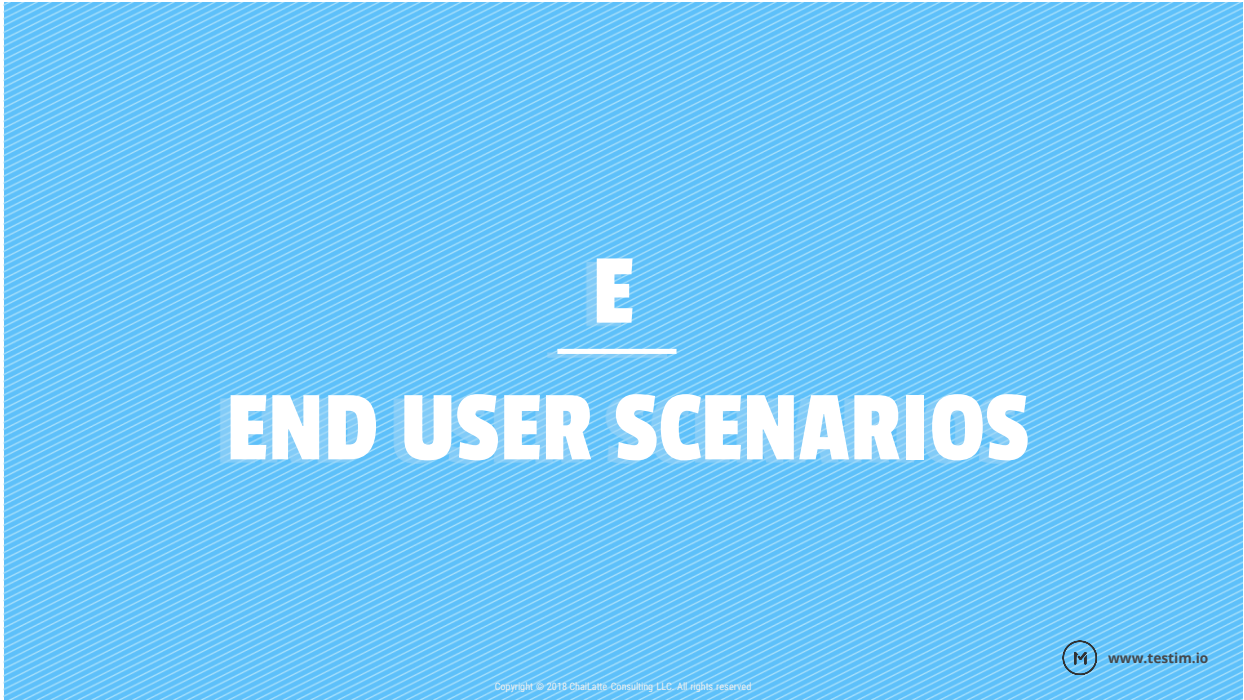## WI-FI/4G

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E
END USER SCENARIOS

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EXERCISE – 2
DURATION: 20 MINS

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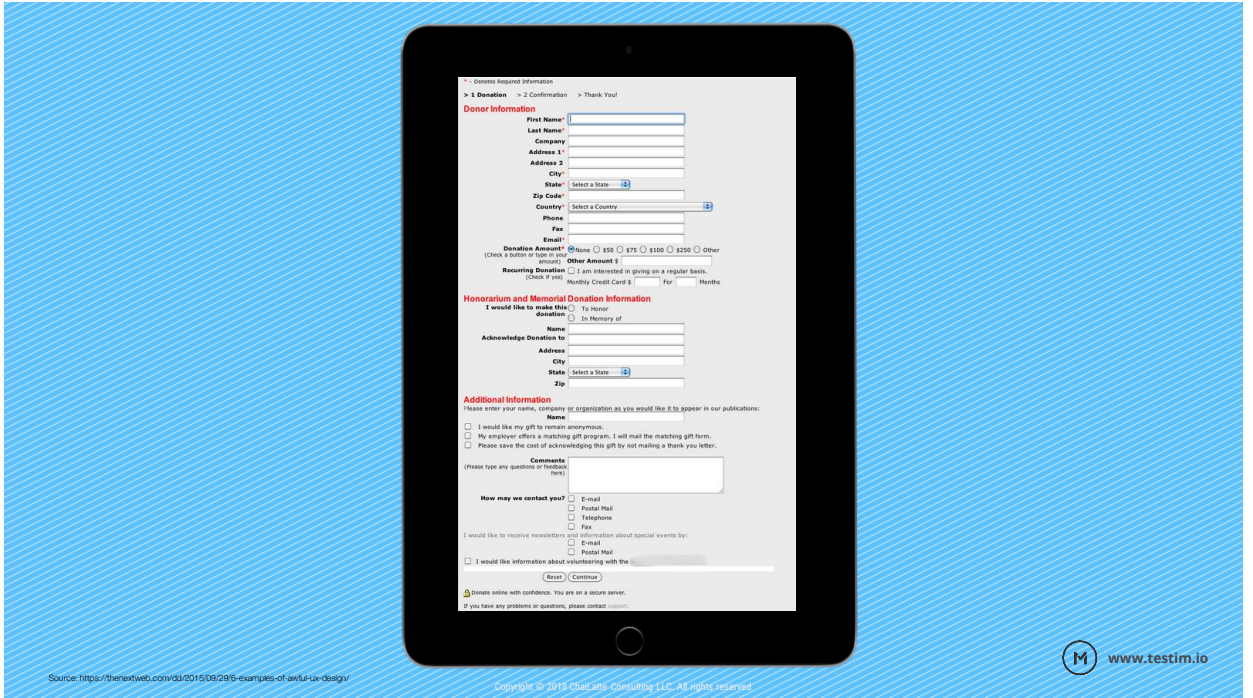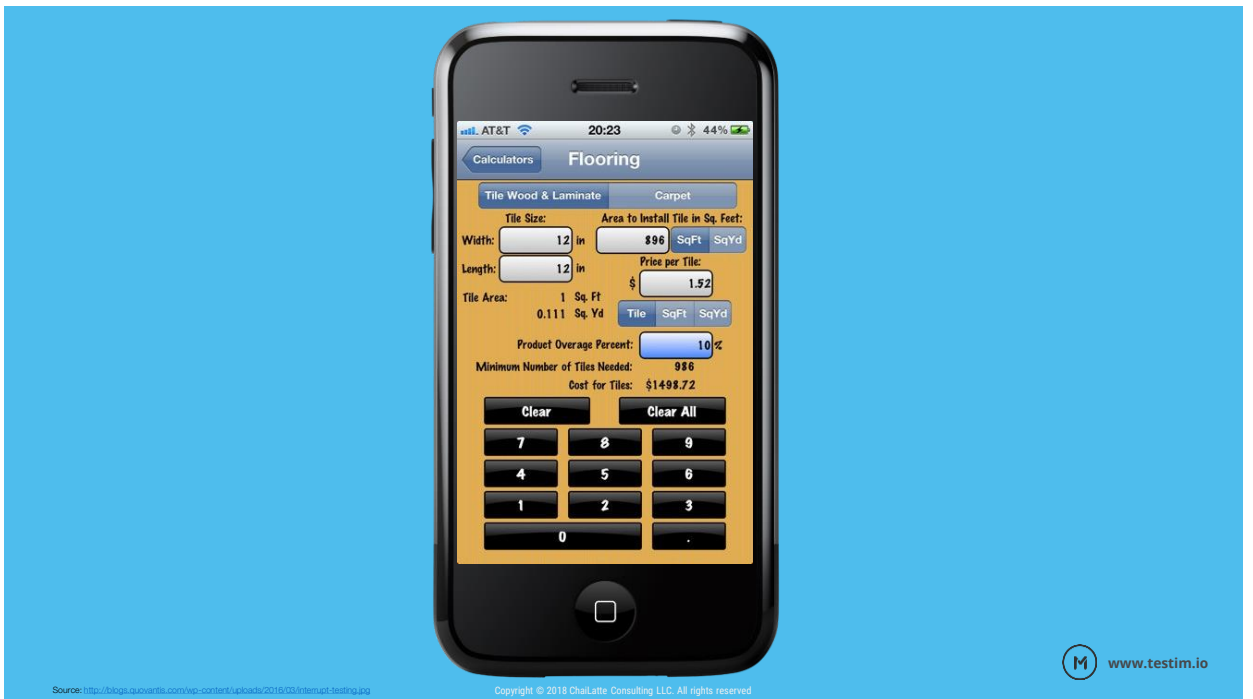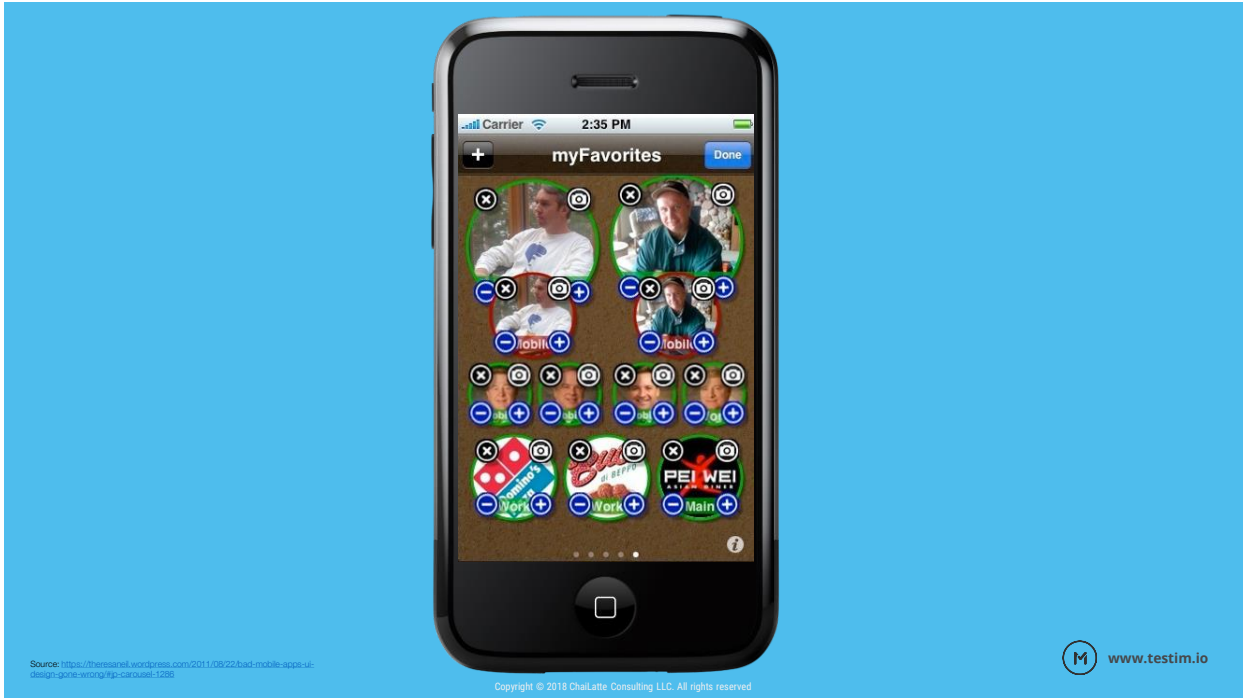
24

GO TO :
HTTP://WWW.VOLARIS.COM/
ON YOUR MOBILE BROWSER

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TEST IDEAS

- Look and Feel across Android, iOS, Windows
- Search
- Header, Footer elements
- Banners
- Sign in/out
- Links
- Share Functionality - Twitter, Facebook, E-mail

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L

LOGS

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IOS LOGS VIA XCODE

- Install Xcode
- Connect iOS Device to Mac
- Select "Trust this Computer" on device pop-up
- Open Xcode, Go to Windows->Devices
- Select <Your Device>
- Reproduce the Problem
- Select "Download Arrow button" on bottom right

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ANDROID LOGS VIA ADB LOGCAT

- Android Debug Bridge (adb)
  https://developer.android.com/studio/command-line/adb.html
- Different ways to install it
- Homebrew - **http://brew.sh/**
  via SDK manager, part of the IDE
- Download the zip manually -
  https://developer.android.com/studio/releases/platform-tools.html

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ANDROID LOGS VIA ADB LOGCAT

- After adb installation,
- Connect your phone
- Open Terminal
- Go to sdk folder, usually in
  /Users/<YourUsername>/Library/Android/sdk
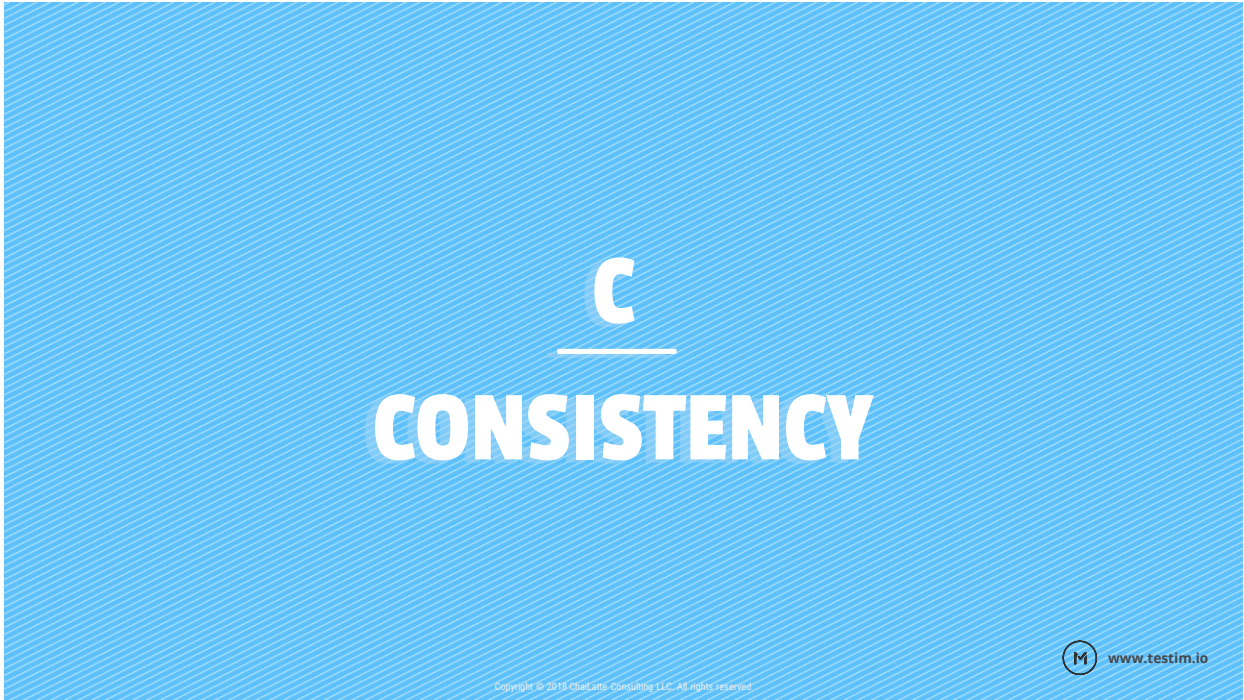- Type "cd platform-tools"
- Type "./adb logcat"

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LOGS FROM Mac

- Open **Application-> Utilities-> Console**
- Select "All Messages" tab
- Check logs in system.log and /Library folder

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LOGS FROM Windows

- In **Control Panel-> Administrative Tools, double-click Event Viewer**
- In the Event Viewer, expand "Windows Logs" (on the left pane).
- Right-click Application and click Save All Events As.
- In the Save As dialog box, make sure that the file type is set to Event Files (*.evt).
- Name the log file and click Save.
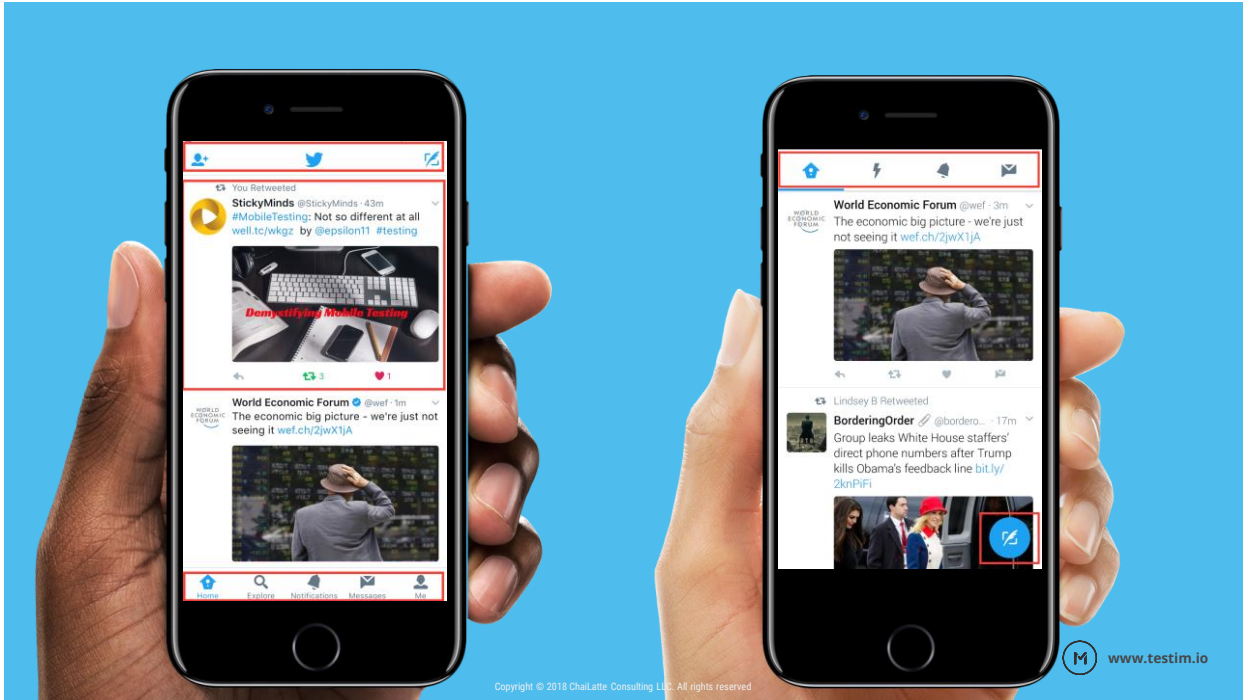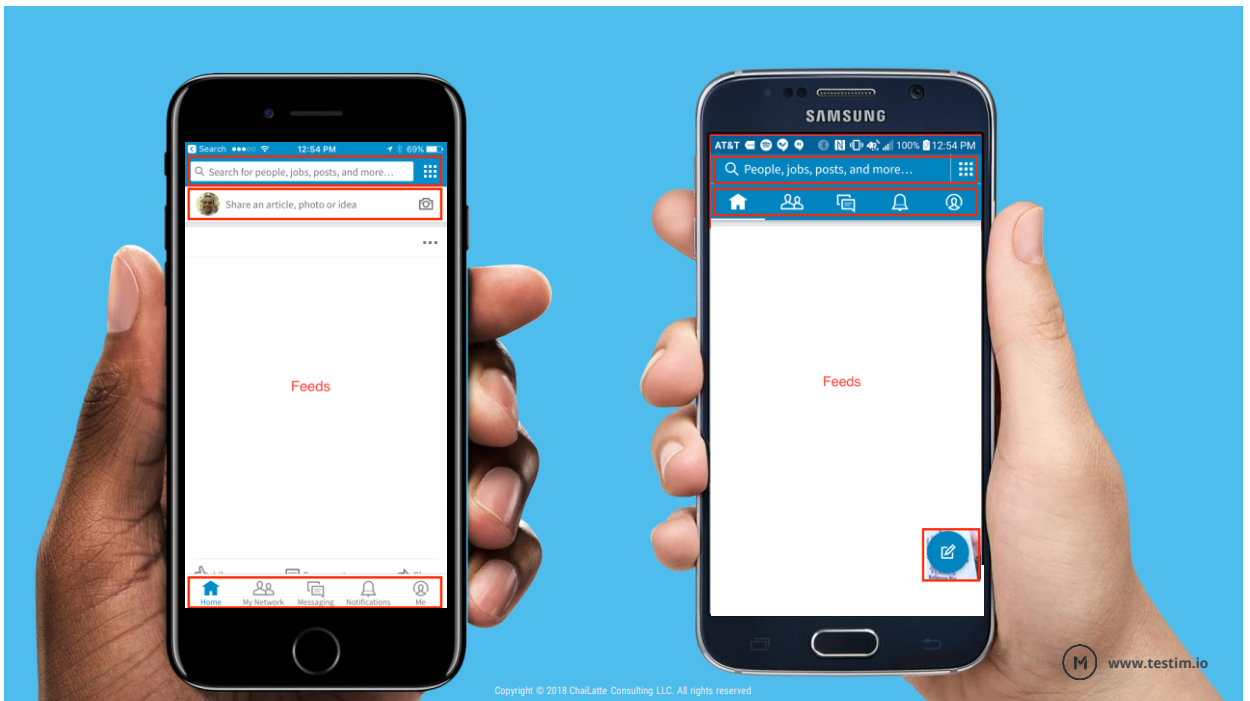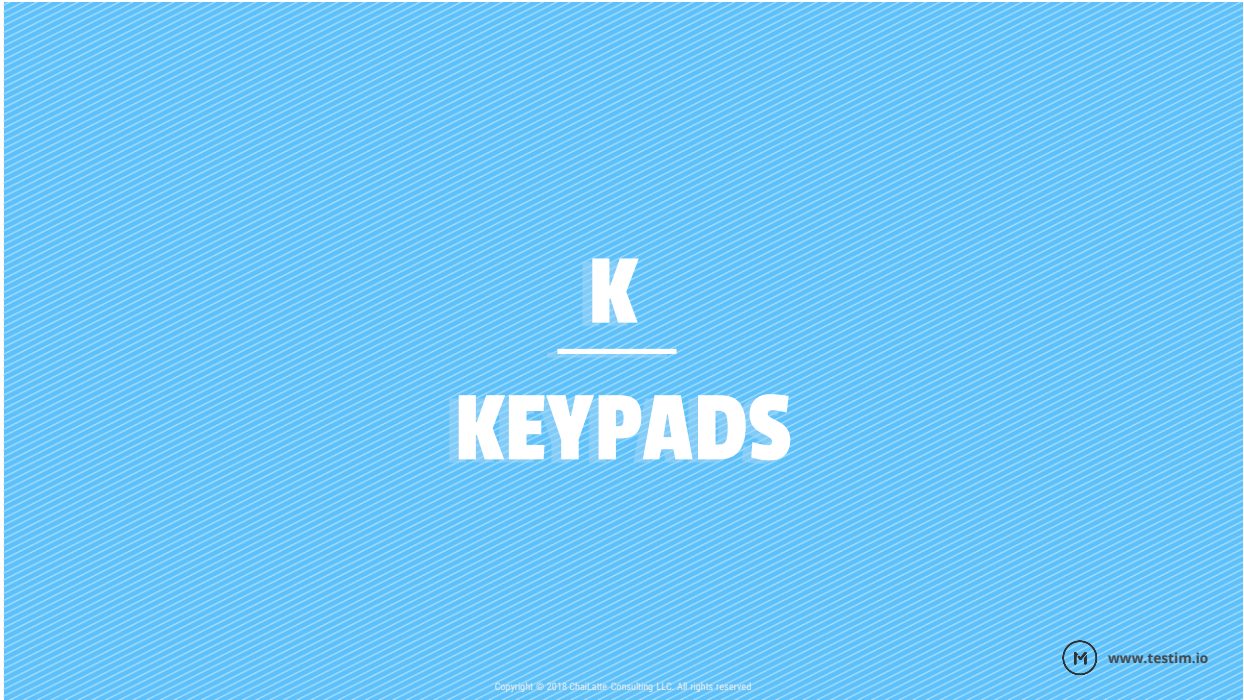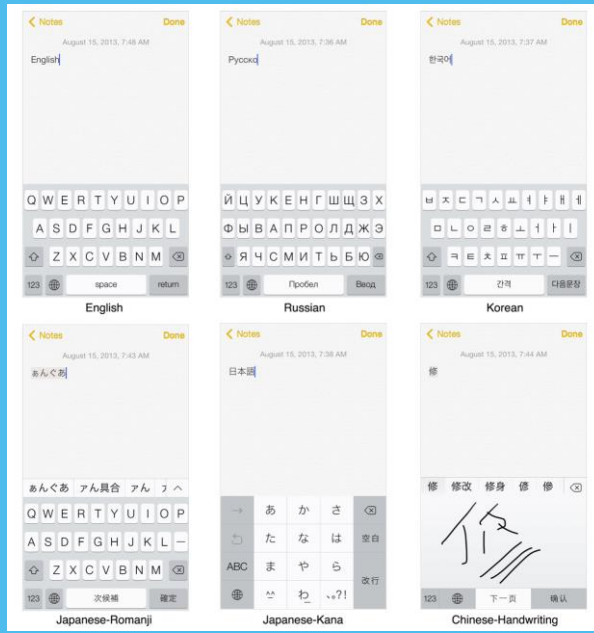- Repeat steps 5-7 to obtain the System and Security logs.

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C

CONSISTENCY

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CONSISTENCY

Is your app consistent across multiple devices?	Is your customer getting the same experience?

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K

KEYPADS

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NATIVE

EMAIL

URL

PHONE

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U
USER REVIEWS

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Slide 41

1. I payed three dollars for this

★★★☆☆ Love pink monster girl - Mar 30, 2015
As the tittle says I payed three dollars for this and it crashed every time I tried to play it. Give back my money now! I just downloaded this game and can't play because of the crashes. My three dollars was wasted on a crashy game. Waaa! Please please please give me my money back. Not fair ! I will change my review if I get my money back. Just in case it wasn't clear that money belongs to me so give it back. This isn't the dumbest thing I bought on my iPad but still! I bought this and it would be fun if it didn't crash so much. I enjoy reviewing games. Just give back my money so that I can not feel bad about buying this game . Please this isn't even my own money that I spent so I really need it back! I was going to spend that money on comics. Please!!!! Hee ha . I fixed that but I still won't change my review. Great game by the way. Hope the beginning of this review doesn't bother you guys. Just want my money back but that no longer matters. Still not a five 🌟 🌟 🌟 🌟 🌟 game/app. Needs something more but not my problem I guess.

33. Unimpressed

★☆☆☆☆ Katelyn1234566 - May 1, 2015
This mediocre RPG is unrealistic. There is no way anyone could have a laser sword. The laws of physics forbid such an atrocity. Also the pacing is all wrong. You can't pause battles in real life and decide what you're gonna do next. Its obvious the developers are lacking in the ability to understand how real life works.

12. Tofu hunter saved me

★★★★★ Soybean lover - May 25, 2015
Before tofu hunter my life was in a rut and I had no idea what to do with my life, I was stuck with my daily task of consuming tons and tons of tofu to no end. Then tofu hunter came and consumed my life, thank you tofu hunter you are my lord.

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Slide 42

I
INSTALLATION TESTING

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INSTALLATION TESTING

What happens

- Delete the app and install the new app
- Delete cache, uninstall app and install new app
- Install app over existing app
- Install app over Wi-Fi/4G/Bluetooth/USB

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PERFORMANCE TESTING

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PERFORMANCE TESTING

Key Performance Validation Areas

- Dynamic Images
- Maps
- Web Service Calls
- Client Side Validations

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PERFORMANCE TESTING

Performance Testing Tools

- Instruments (Free) part of Xcode
- adb tool (Free) part of Android
- NeoLoad - https://www.neotys.com/neoload/overview
- WebLOAD (Free - 50 virtual users)— http://www.radview.com/webload-download/
- LoadComplete - https://smartbear.com/product/loadcomplete/overview/
- Apache Jmeter (Free)- http://jmeter.apache.org/
- BlazeMeter - https://www.blazemeter.com/

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B,S

BATTERY LIFE AND STORAGE

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BATTERY LIFE & STORAGE

Leave your app on for a day and monitor battery life
(close all other apps, daemon process and have logs)
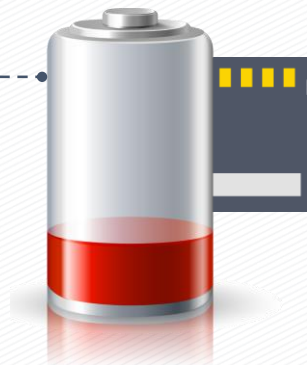
How much memory does your app consume?
(Compare with your competitor apps)

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BREAK

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EASY SEARCH FEATURES

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Google where do you

where do you **go my lovely**
where do you **get a passport**
where do you **go when you die**
where do you **get flash in fire red**

Press Enter to search.

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LOCATION AWARE APPS
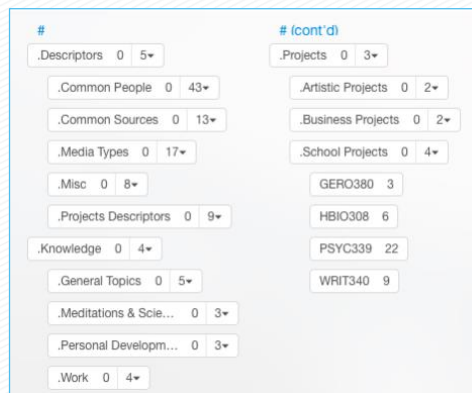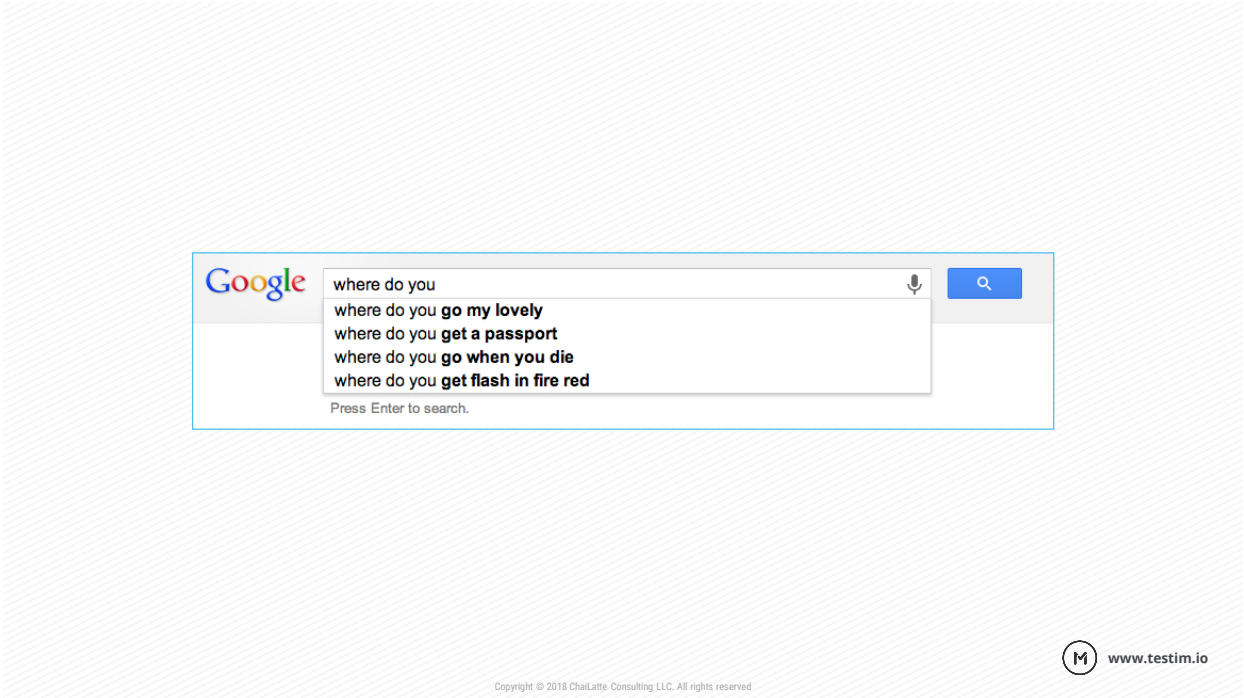
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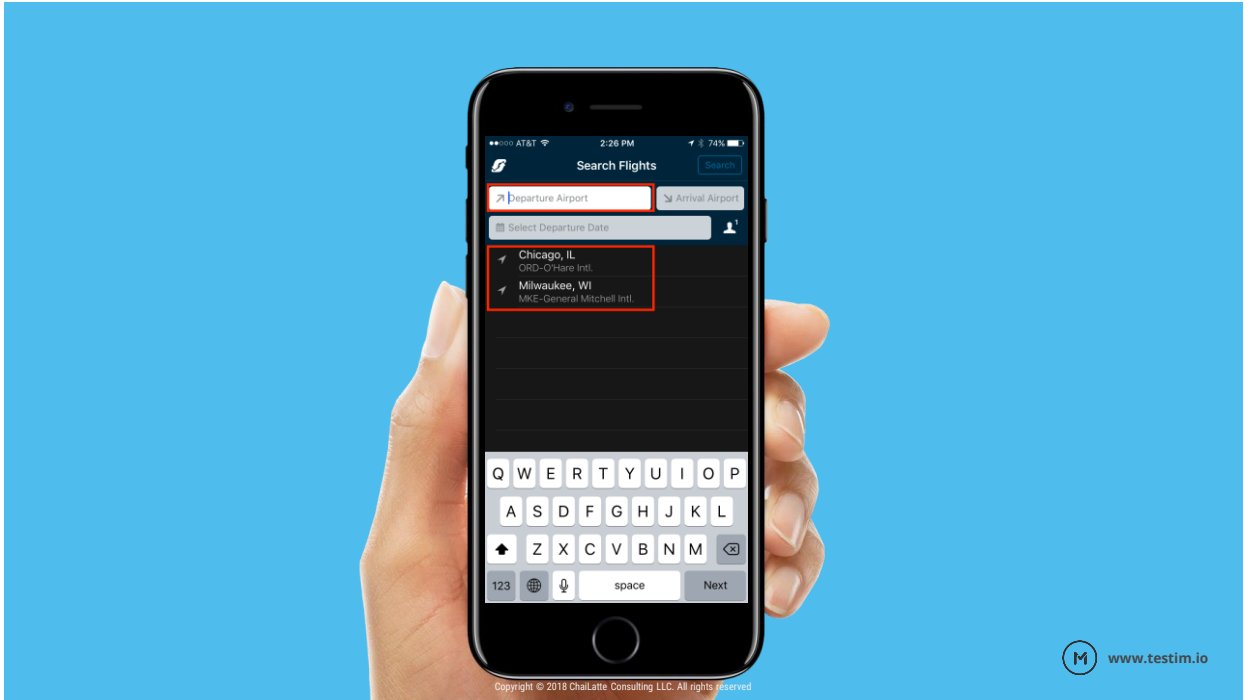
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EXERCISE – 3
DURATION: 10 MINS

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DOWNLOAD THIS APP
FROM APP STORE
OR GO TO
WWW.YELP.COM
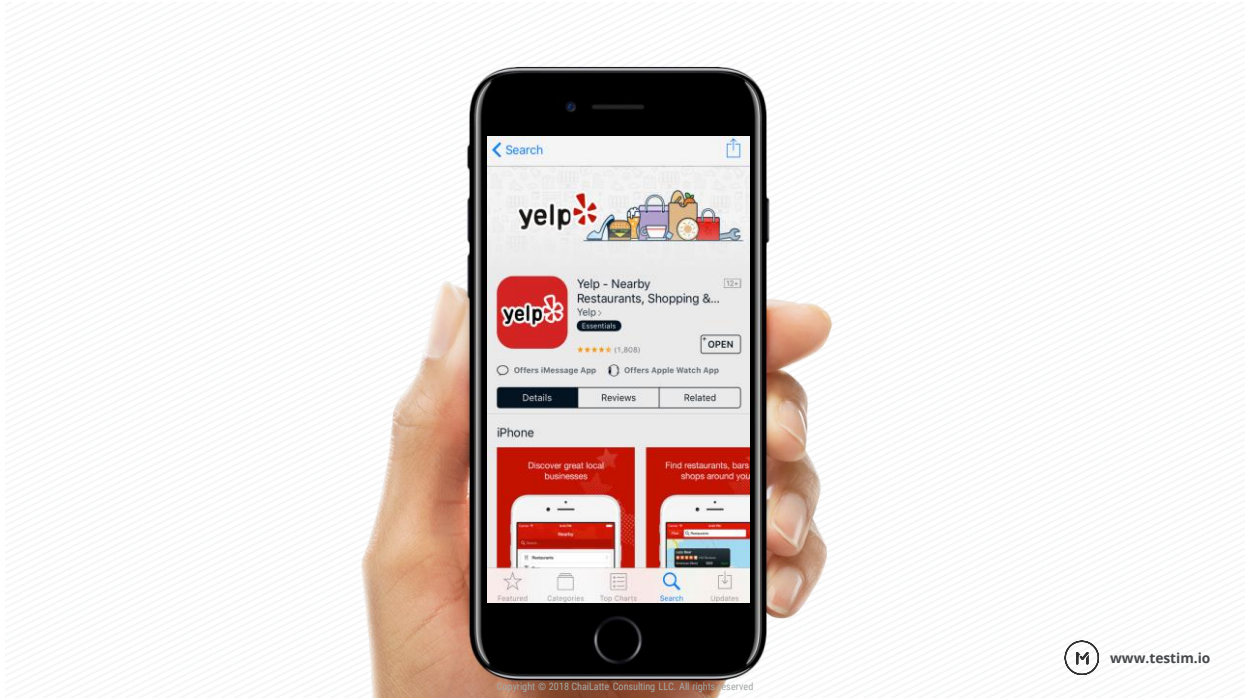
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SEAMLESS INTEGRATION – DESKTOP, MOBILE AND TABLET

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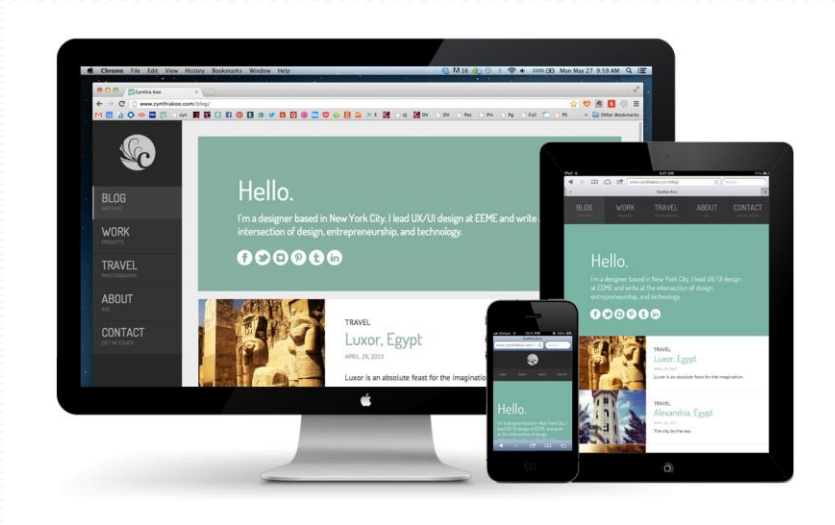
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AUTO-TABBING/AUTO-FOCUS

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LOCALIZATION TESTING

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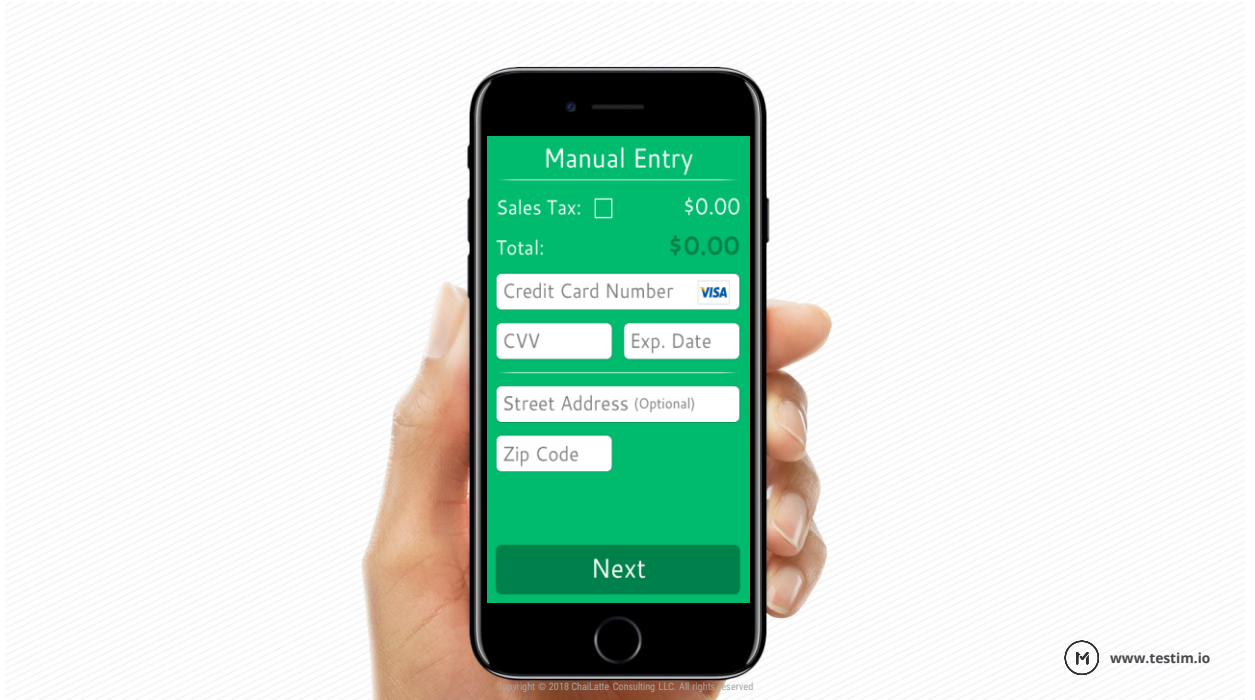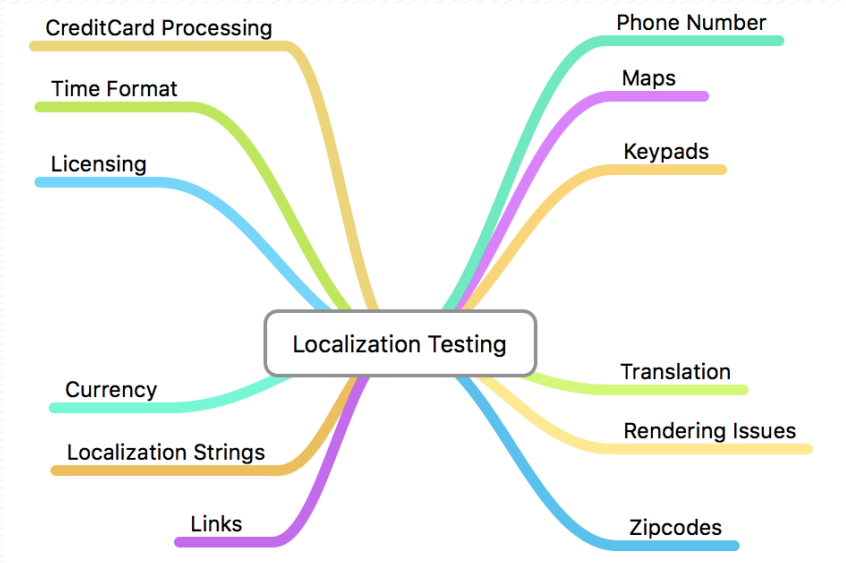
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GET MORE INFO HERE-
HTTP://WWW.RAJSUBRA.COM/2016/12/10/LOCALIZATION-TESTING/

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ACCESSIBILITY TESTING

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ACCESSIBILITY TESTING

- Vision
- Hearing
- Motor
- Cognition

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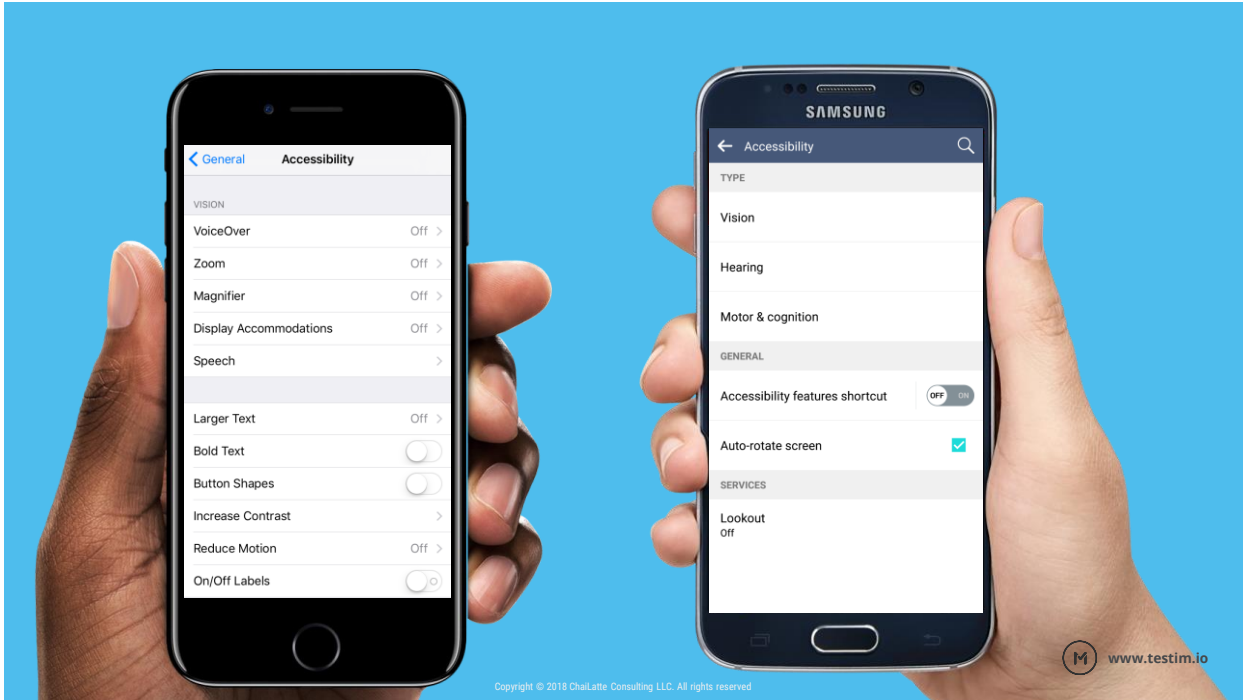
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Web Content Accessibility Guidelines (WCAG) 2.0

GO TO – HTTPS://WWW.W3.ORG/TR/WCAG20/

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ACCESSIBILITY TESTING TOOLS

- WAVE API - http://wave.webaim.org/api/
- Tenon - https://tenon.io/
- axe(Free) - http://www.deque.com/products/aXe/
- WAVE tool(Free) - http://wave.webaim.org/
- Pa11y(Free) - http://pa11y.org/
- JuicyStudio(Free) - http://juicystudio.com/services/readability.php
- Readability Test Tool(Free) - http://www.webpagefx.com/tools/read-able/

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COMMONALITIES

- Blink Test
- Installation Testing
- Interrupt Testing
- Configuration Testing
- Consistency
- User Reviews
- Rendering Issues

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DIFFERENCES

- Wi-Fi/4G
- Keypads
- Device Features
- Battery Life

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PART 2

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SESSION BASED EXPLORATORY TESTING (ET)

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SESSION BASED ET

- 45-90 min Time Boxed sessions
- Charter/Goal
- Note test ideas/scenarios
- Paraphrase/Debrief
- Discuss Observations
- Post Defects

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Charter

Slot / Environment |
Version | N/A
Strategy | Exploratory
What is being tested or Testing Mission|

Device	OS's	Browser's
iPhone	IOS 7.0.2	Safari
iPhone	iOS 6.1.4	Safari
Samsung Galaxy S4	v4.2.2	
Nexus 7	v4.1	
ipad Mini	iOS 6.1.2	

Start (Date & Time)

Tester

Task Breakdown

Total Duration |
Set up Duration |
Charter Test Duration |

Session Notes

Session 1
General [any general testing comments about how testing will be done] |

Main Testing Flows: [Any main testing flows followed could be documented here]

Test Idea's

I D	Purpose	Observation / Comments / Issue ID's	Done?

(Note: Additional sessions may be required due to high risk areas, retest issues, more items identified, etc)

Bugs

Issues [Potential or real, Tangible or intangible]

Screen Shots

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EXERCISE – 4
DURATION: 30 MINS

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DOWNLOAD ET TEMPLATE

http://www.rajsubra.com/2018/05/18/et/

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GO TO –

WWW.INTEROREALESTATE.COM/

ON YOUR MOBILE/DESKTOP BROWSER

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EXERCISE – 5
DURATION: 5 MINS

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WRITE 3 THINGS YOU LEARNT
FROM THIS WORKSHOP

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SUMMARY

- Testing Approaches
- Localization Testing
- Accessibility Testing
- Differences in Testing Approaches

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SUMMARY

- Session Based Exploratory Testing (ET)

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EXPLORATORY TESTING
http://blog.testim.io/exploratory-testing/

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CONTACT INFO

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Website: http://rajsubra.com
Twitter: @epsilon11

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THANK YOU

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