

Summer Internship  
Testing QA & UX Design

SUM  
2017

ADELE FRANCOIS



A blurred background image of a person working at a desk with a computer monitor.

Software Testing & QA Internship

SUM  
2017



# AGENDA

Layout of today's speaking points.



01

## General Overview

Maintaining Quality  
&  
Purpose

02

## Macros & Methods

Testing Tab Methods

03

## Forward Thinking

Keeping a Standard  
&  
Future Testing



04

## Closing Remarks & Q&A Session

Questions?

# 01 General Overview

4

## REASONS WE NEED SOFTWARE TESTING



### VALIDATE REQUIREMENTS

We need to make sure our software is doing what it was meant to do at all times.



### WORKS ACROSS PLATFORMS

What works on one user end is not guaranteed to work on all user ends.



### UNEXPECTED USER BEHAVIOR

Never assume your users behavior when it comes to utilizing your product. No matter how silly it sounds, it may be a possibility.



### YOU WANT TO BE #1

You want to be the leading competitor in your market, keep customers satisfied, and brag about how effortless it is to use your product.

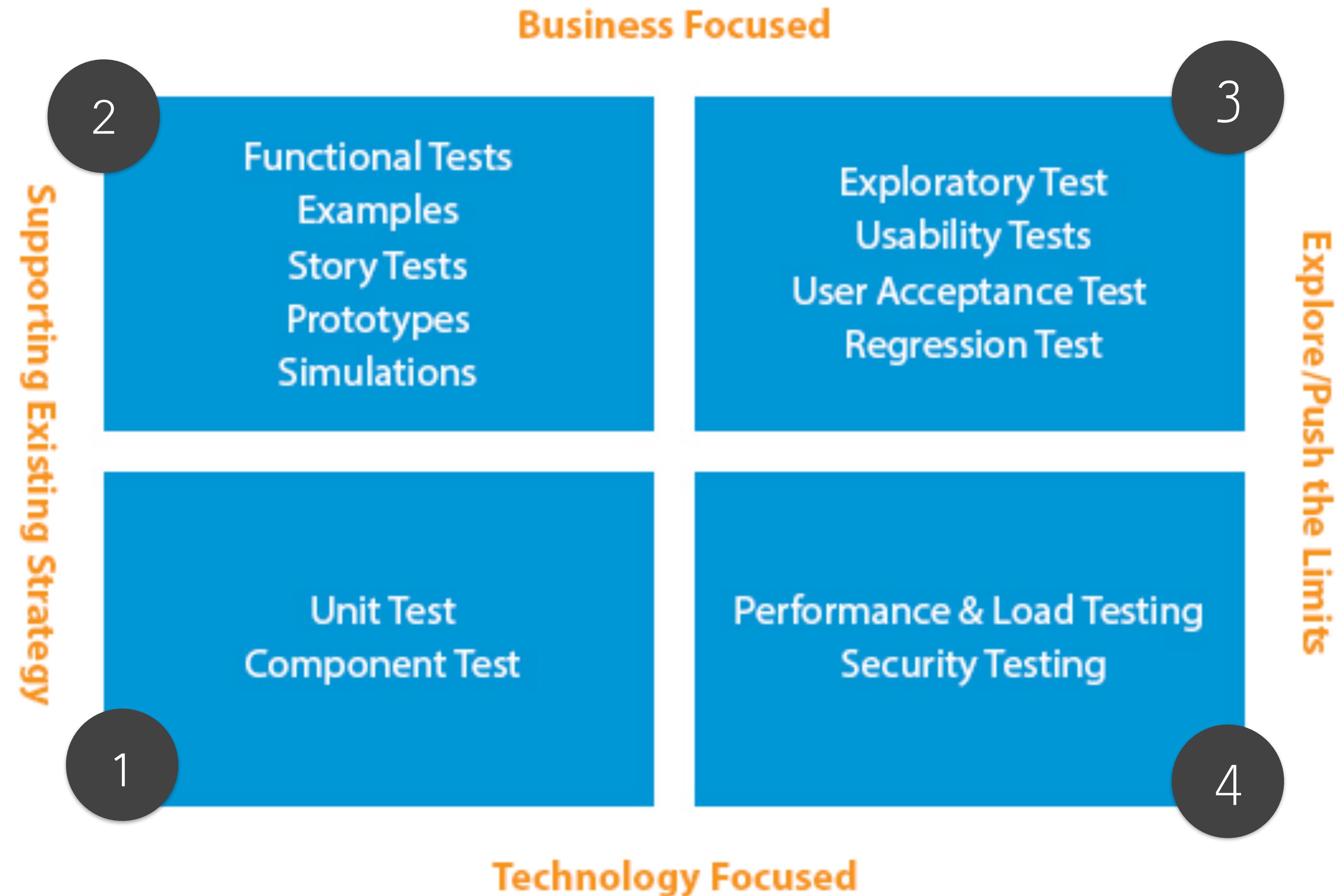


“Discovering the **unexpected** is more important than confirming

**the known.”**

- Pranav D

# FOUR QUADRANTS OF AGILE TESTING



# Agile Quadrant III



Usability Testing | Exploratory Testing



Pair Testing with Customers



Collaborative Testing



User Acceptance Testing

# 02 Macros & Methods

# Macros



## Automating test case generation using excel macros...



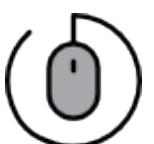
### Time Efficiency

Having a full system document, will help with knowledge retention and efficient training for long term success.



### Focused Views

Easier to break down overall functionality of system features.



### User Flow

Logical user flows are generated and help when spotting errors or defects.



### Staff Onboarding

New developers or staff will be able to understand the system better, upon initial start.

System Testing Documentation

C29 | fx | Run Billing report for previous or current month (in all exportable formats)

	A	B	C	D	E	F	G	H	K	L
1										
2	Project: CHRONICCAREIQ									
3	Person Testing	Sheet Name	Total Test Cases	# of Test Cases reviewed	Pass	Fail	Blocked	Comments		
4										
5	Adele F.	<a href="#">CCM Dashboard</a>	5	44	44	0	0	done.		
6	Adele F.	<a href="#">TCM Dashboard</a>	4	40	40	0	0	done.		
7	Adele F.	<a href="#">Patient Chart</a>	11	58	58	0	0	done.		
8	Adele F.	<a href="#">Patient Tab</a>	5	47	47	0	0	done.		
9	Adele F.	<a href="#">Protocols</a>	9	47	47	0	0	done.		
10	Adele F.	<a href="#">Users</a>	17	95	96	0	0	done.		
11	Adele F.	<a href="#">Reports</a>	6	28	28	0	0	done.		
12	Adele F.	<a href="#">User Profile</a>	6	24	24	0	0	done.		
13	Adele F.	<a href="#">Mobile Testing</a>	0	0	0	0	0	system not tested. time constraint.		
14		<a href="#">INSTRUCTIONS</a>								
15		<a href="#">Test Case Checklist</a>								
16										
17										
18		<b>Totals</b>	<b>63</b>	<b>383</b>	<b>384</b>	<b>0</b>	<b>0</b>			
19										
20										
21										
22										
23	<b>IMPORTANT NOTES</b>									
24	All testing performed on Chrome (Macbook)									
25	Redundant Testing Includes:	Adding patient Activating patient Deactivating patient								
26										
27										

DOA Summary CCM Dashboard TCM Dashboard Patient Chart Patient Tab Protocols Users Reports User Profile Mobile Testing INSTRUCTIONS Test Case Check +

Ready

Components of System

Autogenerated Test Case Results

System Testing Documentation

C13 Doctors/Nurses are granted permission to create, add(read), update, delete(deactivate) patients within the system.

	A	B	C	D	E
9	Open Defects	0			
10					
11	Subject	Test Name	<span style="background-color: #e0e0e0; border: 1px solid black; padding: 2px;">Hide Stats</span> <span style="background-color: #e0e0e0; border: 1px solid black; padding: 2px;">Show Stats</span>	Description	Step
12	Subject of the test	Specific test name		EXAMPLE ROW	Step #
13	CCM DASHBOARD	TC_01_Adding New Patients	Doctors/Nurses are granted permission to create, add(read), update, delete(deactivate) patients within the system.	Step 1	Login onto system with appropriate user name and pa
14				Step 2	Click on Dashboard Tab. Sele
15				Step 3	User clicks on +Add Patient in corner below the Chronic Care
16				Step 4	Add Patient Window appears and enter the Patient's following information: Middle Name, Last Name, Email Address, Date of Birth.
17		Specific Test Naming		Step 5	Click Continue Button.
18				Step 6	Add Patient Window expands out to enter the Patient's following information: ID, Protocol, Monitoring Physician. Window allows user to have the ability to add more and create Physician as well.
				Step 7	From the initial Name page in the Add Patient window, go the right and click on Details (located at the top of window) User will prompt

DOA Summary CCM Dashboard TCM Dashboard Patient Chart Patient Tab Protocols Users Reports User Profile Mobile Testing INSTRUCTIONS Test Case Check +

Ready 160%

System Testing Documentation

Search Sheet

Share

Home Insert Page Layout Formulas Data Review View Developer

Paste Arial 8 A A Wrap Text General Conditional Formatting Insert A Delete Z Merge & Center Format as Table Cell Styles Sort & Filter

C13 Doctors/Nurses are granted permission to create, add(read), update, delete(deactivate) patients within the system.

	C	D	E	F	
9					
10	<b>Hide Stats</b> <b>Show Stats</b>	Step	Step Description	Expected Results	PASS/FAIL Defect #
11	<b>EXAMPLE ROW</b>	Step #	Step Description	Expected Results	PASS/FAIL Defect #
12	Doctors/Nurses are granted permission to create, add(read), update, delete(deactivate) patients within the system.	Step 1	Login onto system with appropriate credentials. Enter appropriate user name and password.	Appropriate credentials are accepted and user is able to see the dashboard.	P
13		Step 2	Click on Dashboard Tab. Select Monitoring Button.	System displays Monitoring Dashboard.	P
14		Step 3	User clicks on +Add Patient in the upper right hand corner below the Chronic Care Navigation bar.	Add Patient window appears.	P
15		Step 4	Add Patient Window appears and prompts user to enter the Patient's following information: First Name, Middle Name, Last Name, Email Address, Phone, & Date of Birth.	System correctly displays the appropriate information.	P
16		Step 5	Click Continue Button.	Add Patient window expands down to show the following: Diagnosis ID, Protocol, Monitoring Physician, Case Manager.	P
17	Labeled according to component.	Step 6	Add Patient Window expands down and prompts user to enter the Patient's following information: Diagnosis ID, Protocol, Monitoring Physician, and Case Manager. Window allows user to have the option to reference more and create Physician as well.	System correctly displays the appropriate information.	P
18		Step 7	From the initial Name page in the Add Patient Window, go the right and click on Details (Nav Bar located on top of window) User will prompted to fill in the following	System correctly displays the appropriate information.	P

DOA Summary CCM Dashboard TCM Dashboard Patient Chart Patient Tab Protocols Users Reports User Profile Mobile Testing INSTRUCTIONS Test Case Check +

Ready 160%

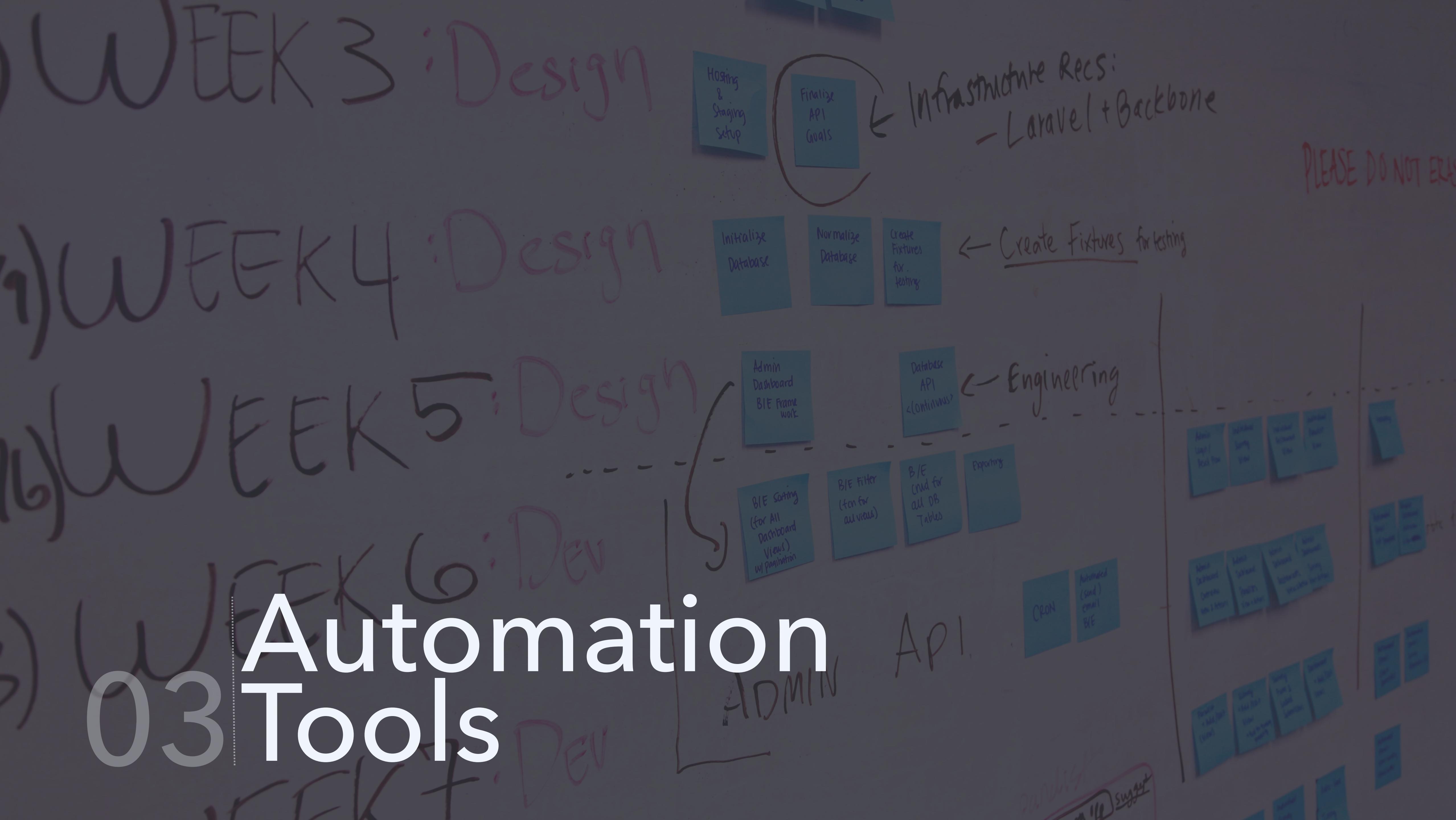
Each step for each available system action

Expected system result

Labeled according to component.

Test Case Execution Stats		Count					
Total Test Cases:		5					
Subject	Test Name		Hide Stats	Show Stats	Description	Step	Step
Total Reviewed - Y:		44					
Total Reviewed - N:		0					
Pass		44					
Fail		0					
Blocked		0					
Open Defects		0					
EXAMPLE ROW							
Subject of the test	Specific test name				Doctors/Nurses are granted permission to create, add(read), update, delete(deactivate) patients within the system.	Step #	
CCM DASHBOARD	TC_01_Adding New Patients					Step 1	Login onto system with appropriate user name
						Step 2	Click on Dashboard T

Sheet Name	Total Test Cases	# of Test Cases reviewed	Pass	Fail
<a href="#">CCM Dashboard</a>	5	44	44	0
<a href="#">TCM Dashboard</a>	4	40	40	0
<a href="#">Patient Chart</a>	11	58	58	0
<a href="#">Patient Tab</a>	5	47	47	0
<a href="#">Protocols</a>	9	47	47	0
<a href="#">Users</a>	18	96	96	0
<a href="#">Reports</a>	6	28	28	0
<a href="#">User Profile</a>	6	24	24	0
<a href="#">Mobile Testing</a>	0	0	0	0
<a href="#"><b>INSTRUCTIONS</b></a>				
<a href="#"><b>Test Case Checklist</b></a>				
<b>Totals</b>	64	384	384	0



# 03 Automation Tools

The screenshot shows a Mac OS X desktop with a Safari browser window open to the BrowserStack website. The window title is "Safari - browserstack.com". The address bar shows the URL "browserstack.com". The page content features a large image of a person's hands typing on a laptop keyboard. The laptop screen displays a news article about space debris. The BrowserStack logo is at the top left, followed by menu items: Live, Automate, App Live Beta, More, Pricing, Resources, Sign in, and a FREE TRIAL button. To the left of the main content is a vertical dock containing icons for various Mac applications like Mail, Calendar, and iTunes.

Live, Web-Based  
Browser Testing

Instant access to all real mobile and desktop browsers.  
Say goodbye to your lab of devices and virtual machines.

Sign up for free

Trusted by more than 36,000 customers globally

Microsoft   jQuery write less, do more     RBS   airbnb   MIT   BOSE   WIKIPEDIA

## Features

Real devices & browsers

Speed up your test runs

Integrate in minutes

Test dev environments

Debug with ease

### Real devices & browsers

Harness our Real Device Cloud (in Beta) to test on a range of physical Android and iOS mobile devices including iPhone, Samsung and more.

Test on 1100+ desktop browsers, including the latest versions of IE, Edge, Safari, Chrome and Firefox.

[Find out which devices and browsers we support >](#)



## Features

Real devices & browsers

[Speed up your test runs](#)

Integrate in minutes

Test dev environments

Debug with ease

### Speed up your test runs

Release faster by running tests concurrently across thousands of browsers and mobile devices.

Cut the execution time of your test suite by more than 10x using parallel tests on BrowserStack's Selenium cloud.

[Learn how parallel tests can speed up execution >](#)



## Features

Real devices & browsers

Speed up your test runs

Integrate in minutes

Test dev environments

Debug with ease

### Integrate in minutes

Use the language and framework of your choice to quickly integrate with BrowserStack. Using a CI tool?

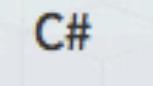
We've got you covered with plugins for [Jenkins](#), [Travis](#), [Bamboo](#) and [TeamCity](#)

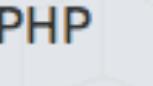
[View Documentation](#)

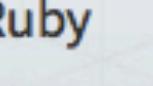
Java 

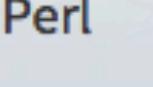
Node 

Python 

C# 

PHP 

Ruby 

Perl 

test-suite.java •

```
1 // Try running this locally.  
2 // Download Java driver bindings from http://www.seleniumhq.org/download/  
3 import org.openqa.selenium.By;  
4  
5 public class JavaSample {  
6     public static String USERNAME = "USERNAME";  
7     public static String AUTOMATE_KEY = "ACCESS_KEY";  
8     public static String URL = "https://" + USERNAME + ":" + AUTOMATE_KEY +  
9         "@hub-cloud.browserstack.com/wd/hub"  
10  
11    public static void main() {  
12        DesiredCapabilities caps = new DesiredCapabilities();  
13        caps.setCapability("device", "iPhone 6S Plus");  
14        caps.setCapability("browser", "Safari");  
15        caps.setCapability("realMobile", "true");  
16  
17        WebDriver driver = new RemoteWebDriver(new URL(URL), caps);  
18        driver.get("http://www.google.com");  
19        WebElement element = driver.findElement(By.name("q"));  
20  
21        element.sendKeys("BrowserStack");  
22        element.submit();  
23  
24        System.out.println(driver.getTitle());  
25        driver.quit();
```

[View Java Documentation](#)

## Features

Real devices & browsers

Speed up your test runs

Integrate in minutes

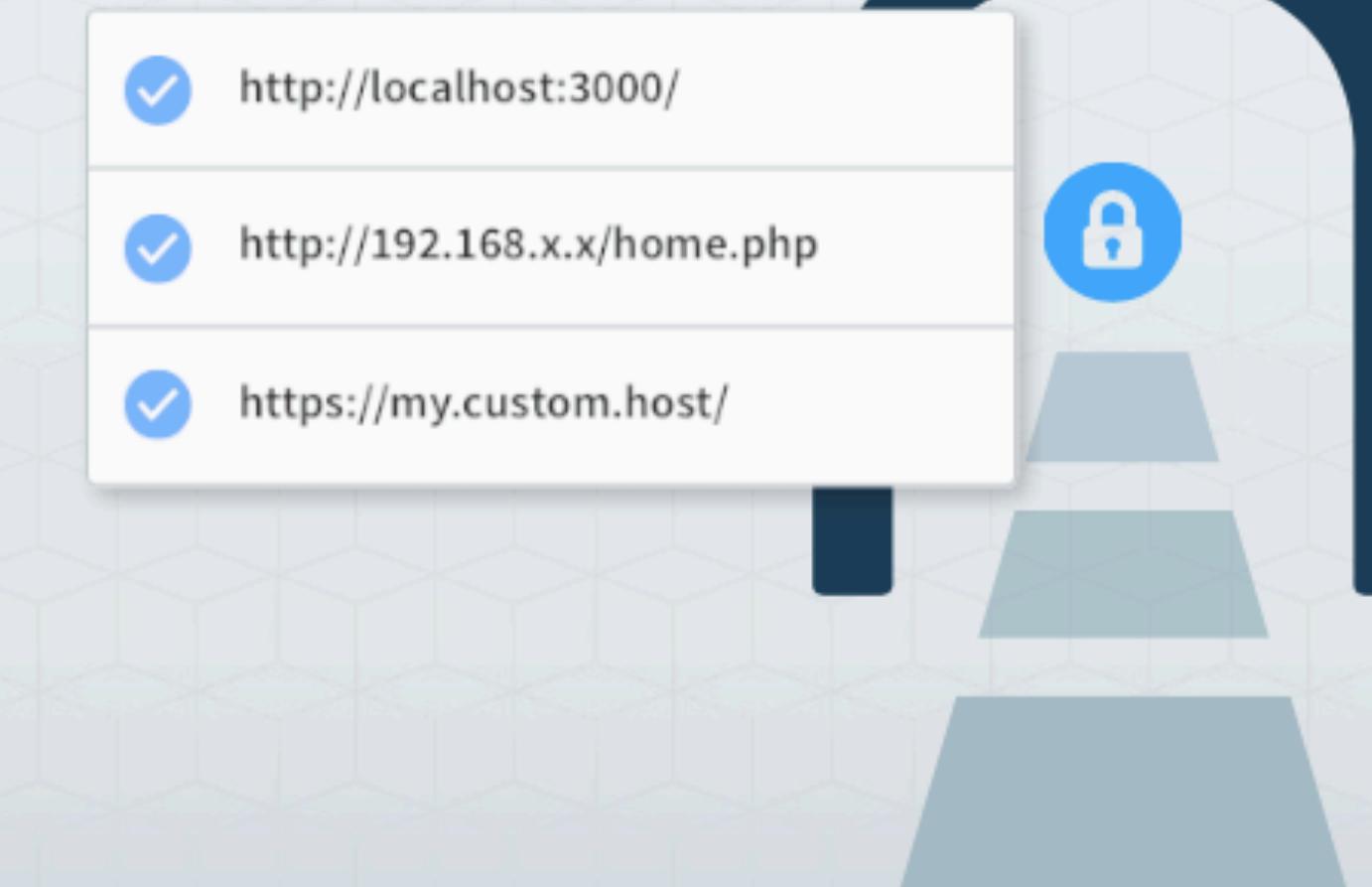
Test dev environments

Debug with ease

### Test dev environments

Test web applications located behind firewalls or on internal development environments by utilizing the secure and encrypted BrowserStack tunnel.

[Learn more about Local Testing](#)



## Features

Real devices & browsers

Speed up your test runs

Integrate in minutes

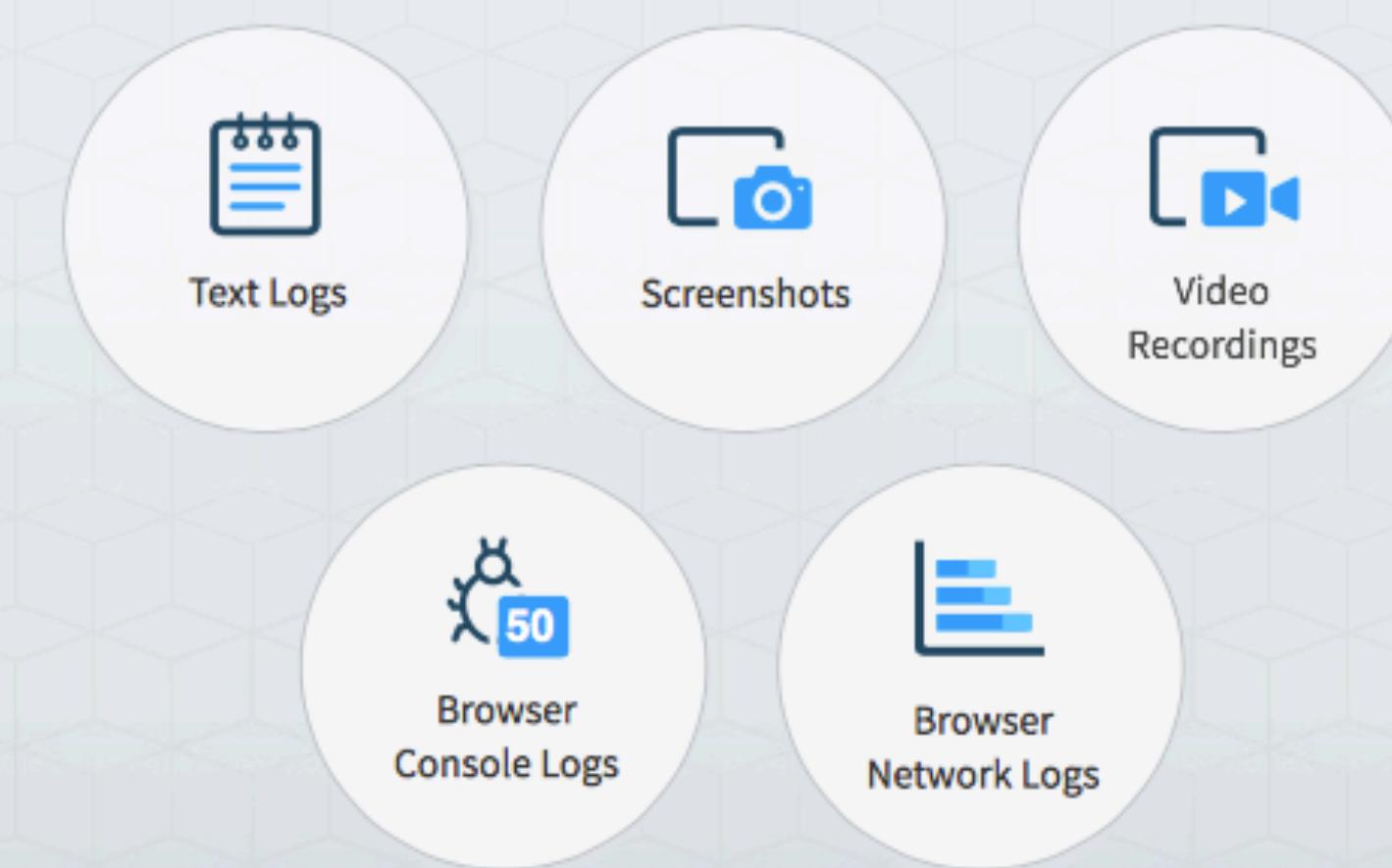
Test dev environments

Debug with ease

### Debug with ease

Harness our debugging tools, including video recordings, automated screenshots of errors, text logs of every Selenium command, browser console logs and network logs.

[View Documentation](#)





# 04 | Remarks Q&A

personal reflection





# ASK MORE QUESTIONS?



GET MORE ANSWERS  
Anthony Doan



A close-up, slightly blurred photograph of a person's hands resting on a laptop keyboard. The hands are positioned as if the person is about to type or has just finished. The background is a soft, out-of-focus blue.

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# AGENDA

Layout of today's speaking points.



01

## Current State

Current System View

02

## Wireframe

Dashboard

03

## Prototype & Next Steps

Future System View

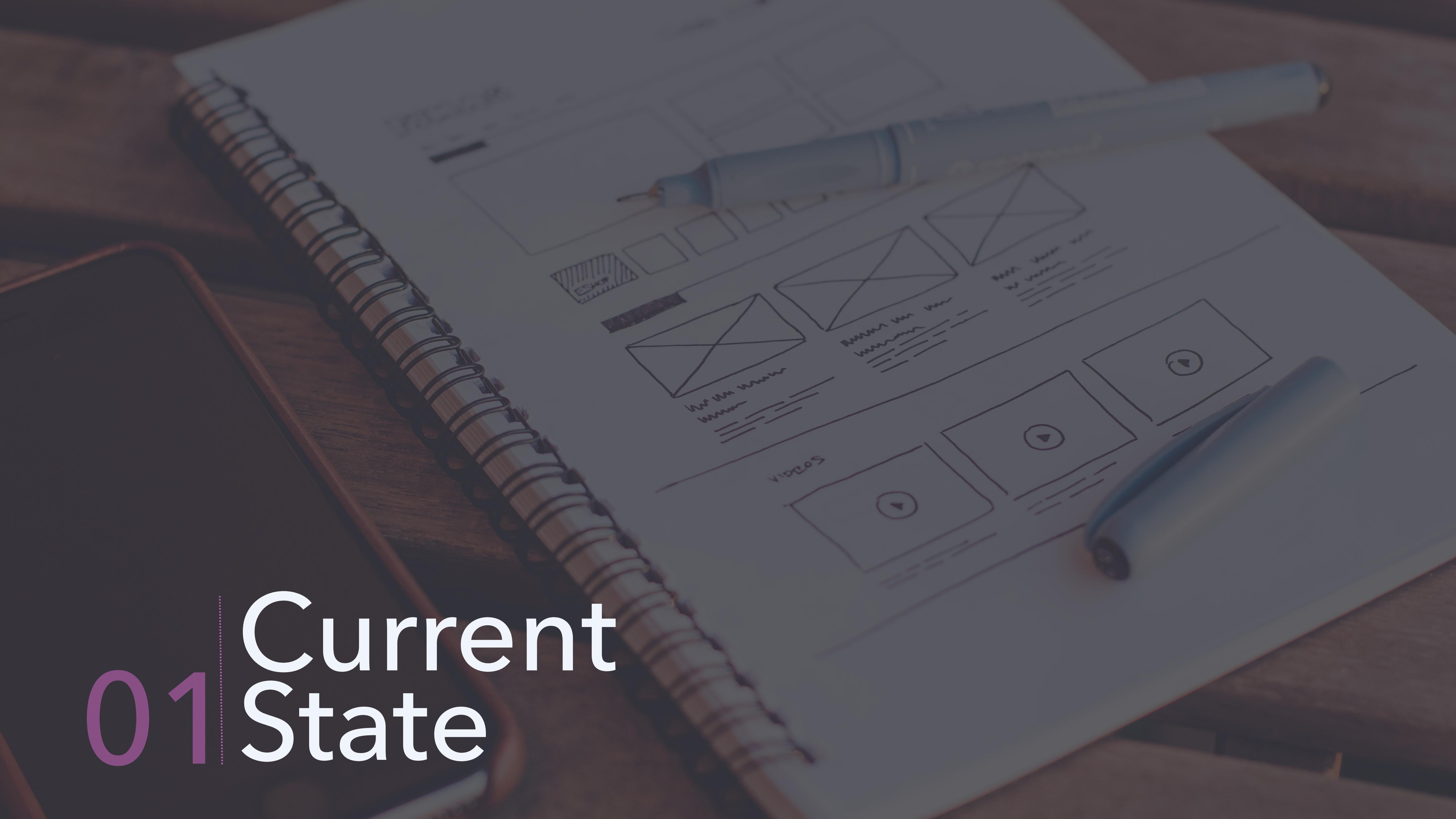


04

## Closing Remarks & Q&A Session

Questions?

# 01 | Current State



O1

Current System View

28

The screenshot shows the ChronicCareIQ dashboard with several user interface annotations:

- A pink callout bubble points to the "Status" section with the text: "Keep color theme consistent throughout system other than alert status colors."
- A green arrow points from the "Recent Billing" section to the "Patient Issues" section.
- A green callout bubble points to the "Patient Issues" section with the text: "Better labeling for these clickable buttons. I want know that I'm getting a report."
- An orange callout bubble points to the "Reports" section with the text: "Maybe have separate from dashboard."
- A red callout bubble points to the "Recent Patient Activity" section with the text: "Maybe have an option to view that patient to see answers quicker? for nurses/doctors?"

**Status**

- Alerts: 2
- Non Responsive: 3
- OK: 34

**Monitoring**

- Active: 39
- Deactivated: 2
- Unclaimed: 2190

**Recent Patient Activity**

- a few seconds ago: Bischof, Richard modify answer
- a few seconds ago: Lawson, Dana modify answer
- a few seconds ago: Lawson, Dana modify answer
- 2 minutes ago: Garcia, Juan modify answer
- 3 hours ago: Lopez, Mose modify answer
- 3 hours ago: Clifton, Lori modify answer
- 3 hours ago: Clifton, Lori modify answer

**Recent Billing**

- 7/31/2017: Bacon, Anna G0506
- 7/31/2017: Heard, Ronald 99490
- 7/31/2017: Rodriguez, Roy 99490
- 7/31/2017: Sorensen, Janice 99490
- 7/31/2017: Zhang, Evelyn 99487
- 7/31/2017: Zhang, Evelyn 99490

**Patient Issues**

- Missing Care Plan: 38
- Locked Account: 0
- Missing Diagnosis: 0
- No Login: 37

**Patients Starts per Week**

Date	Starts
06/26	0
07/03	5
07/10	14
07/17	12
07/24	4

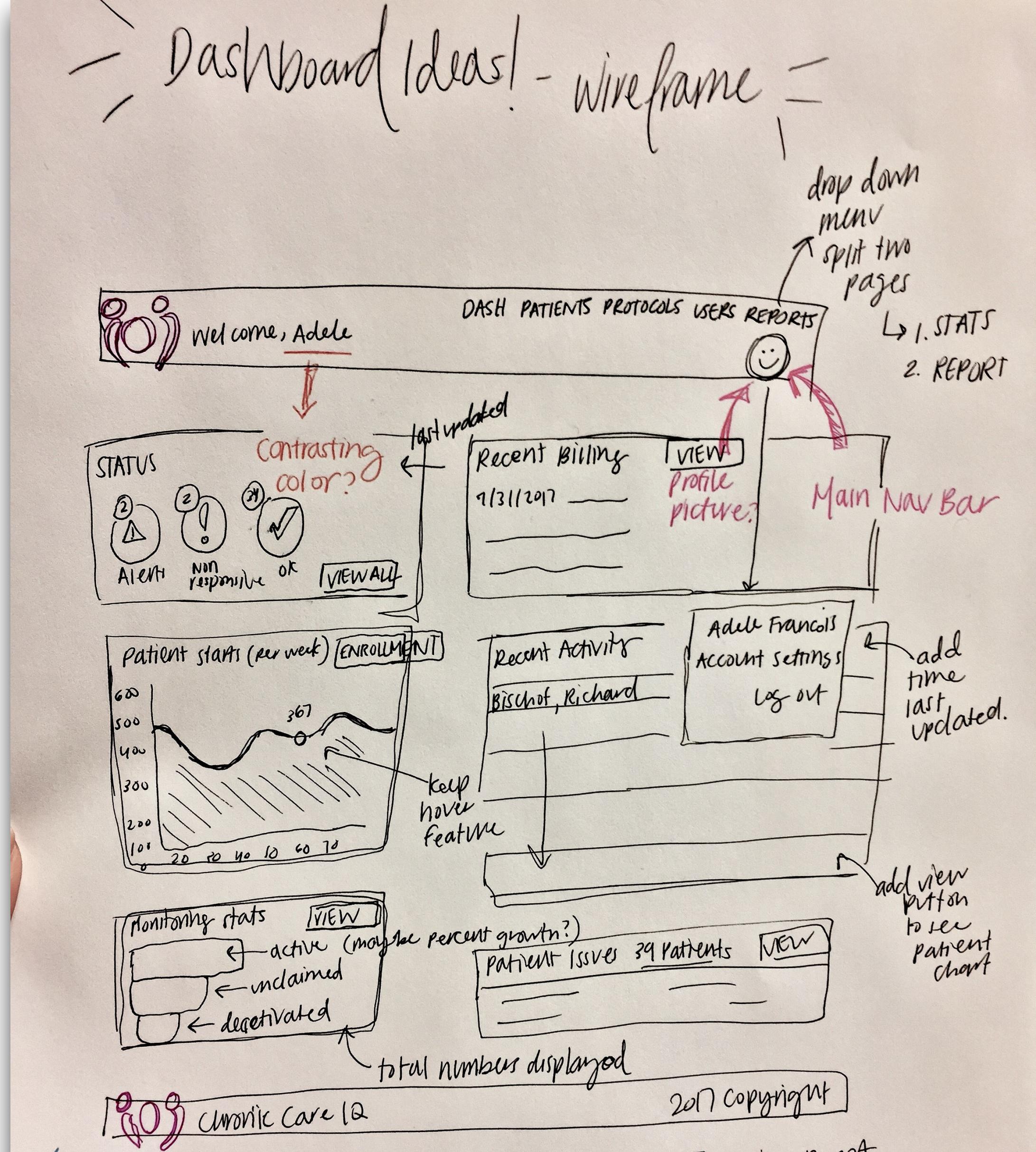
**Reports**

- Monthly Billing
- Call Record
- Patient Issue: 39 Patients
- Staff Activity

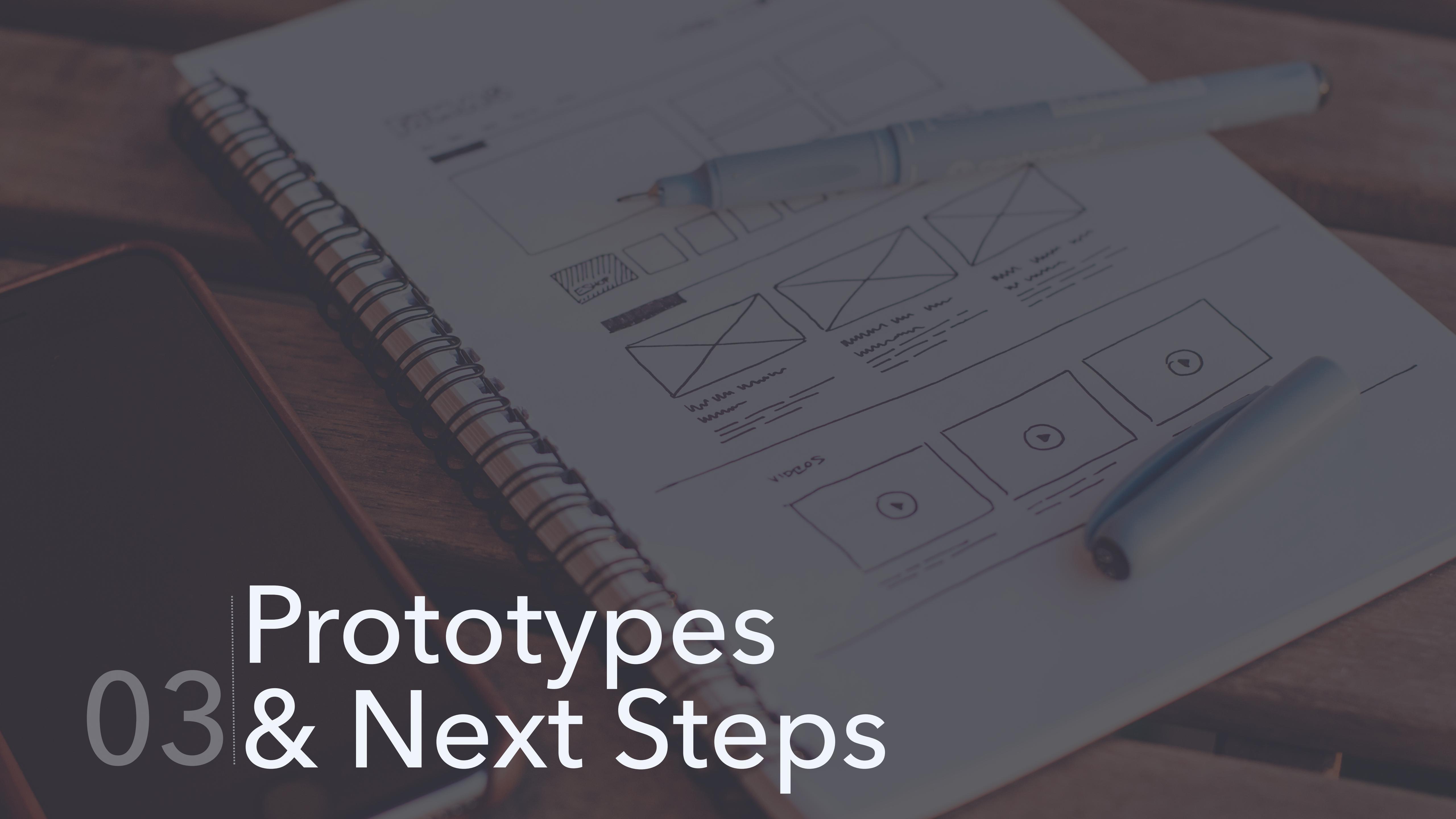
Report generated at: 7/31/2017 11:10 AM

# 02 | Wireframe





# 03 | Prototypes & Next Steps



Welcome Onboard, Adele.

Dashboard Patients Protocols Users Reports Adele Francois Account Settings Log out

Status Updated 5 hrs ago

2 Alerts 2 Nonresponsive View All

Recent Billing

Recent Activity 5 seconds ago

Bischof, Richard modify answer 5 seconds ago View

Garcia, Juan modify answer 5 seconds ago View

Torres, Jana modify answer 5 seconds ago View

Lopez, Mose modify answer 5 seconds ago View

Patients Starts (per week) Enrollment Report

600  
500  
400  
300  
200  
100  
0

367

20 30 40 50 60 70 80 90 100

Monitoring Stats View Report

Active Patients +25% 2675

Unclaimed 1327

Deactivated 573

Patient Issues (39 Patients) View

ChronicCareIQ 2017. All rights reserved.

follows same style as original dash.  
similar to recent activity.

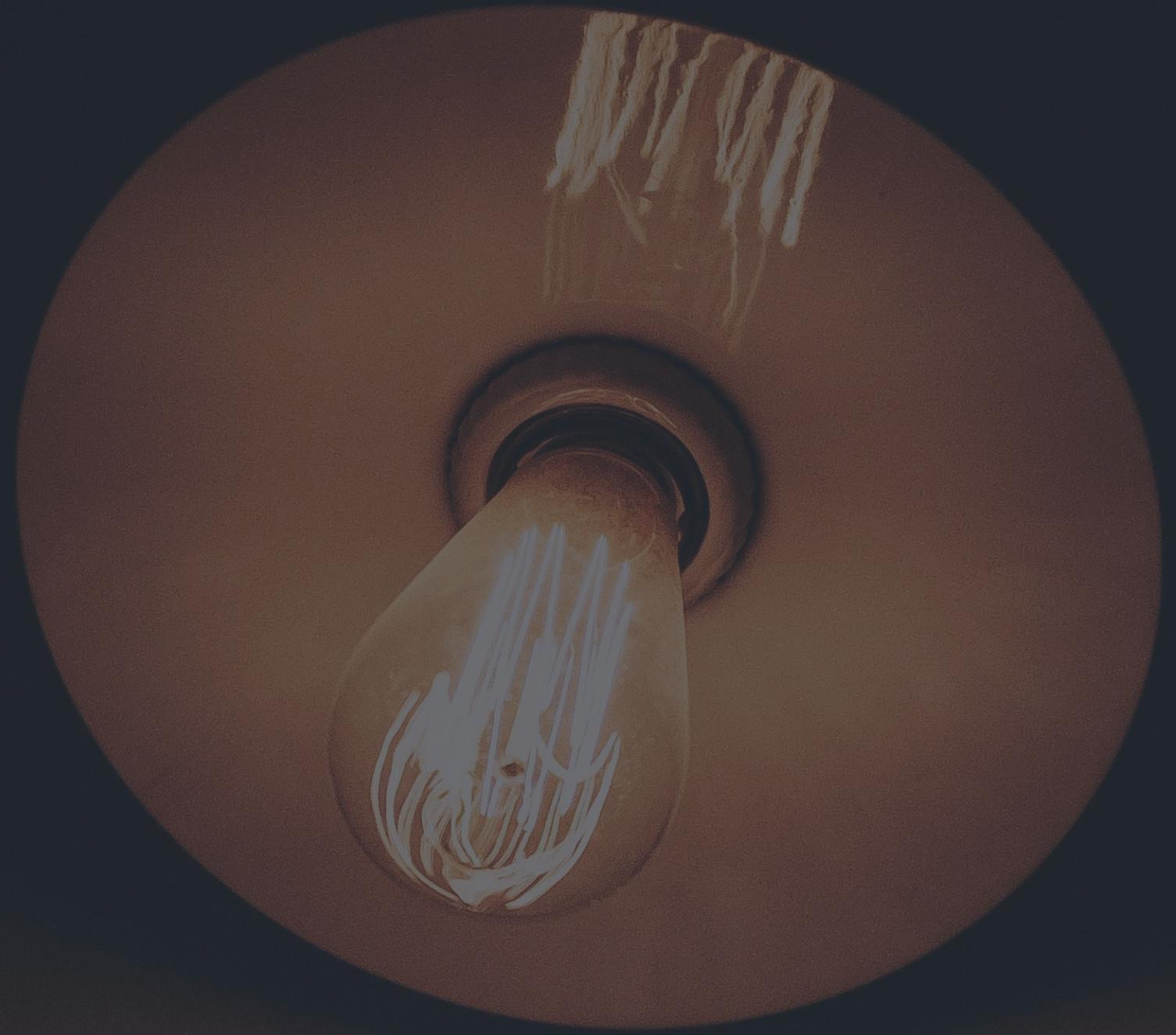
follows same style as original dash.  
similar to recent activity.



## How can we implement overtime?

Testing with groups of users.  
(pair testing and user acceptance)

# 04 | Remarks Q&A



personal reflection





# ASK MORE QUESTIONS?



GET MORE ANSWERS  
Anthony Doan





Adele Francois  
Software Engineering Student | Technology Enthusiast

About

Aspiring IT Professional focused on developing and providing extraordinary solutions.  
Experienced in mobile application development, creative content, & managing projects.



→ [github.com/skyyfaloo7](https://github.com/skyyfaloo7)



→ [linkedin.com/in/adelefrancois](https://linkedin.com/in/adelefrancois)