



Easy Health Care



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Guided By:
Prof. Vishal Chawala





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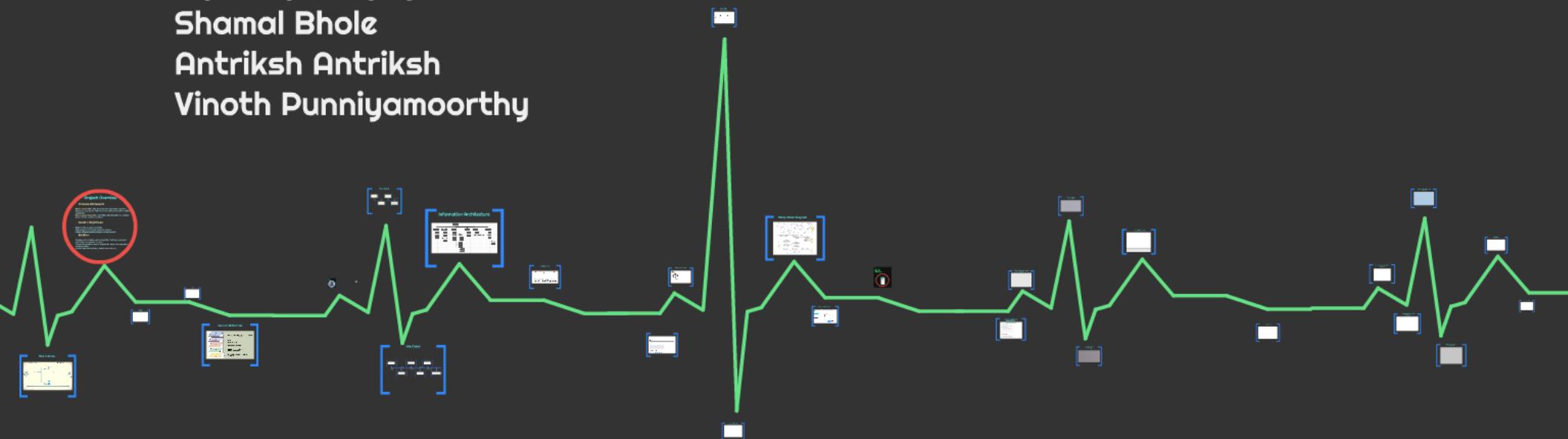
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Project Overview

Problem Statement

- **What is the problem :** With the increase in population there is a dearth of resources for health care like addressing health problems of patients
- **Who is having the problem :** bedridden, disabled patients, patients obstructed by weather conditions

Goals & Objectives

- Make healthcare more accessible
- Addressing the difficulties faced by patients
(mainly differently abled patients, old age people)

Solution

- Develop a user friendly, easily accessible, functional one-touch application and website for users
- Connect the patients, doctor, pharmacist, nurse & the emergency service provider
- Provide improved and timely health care solutions

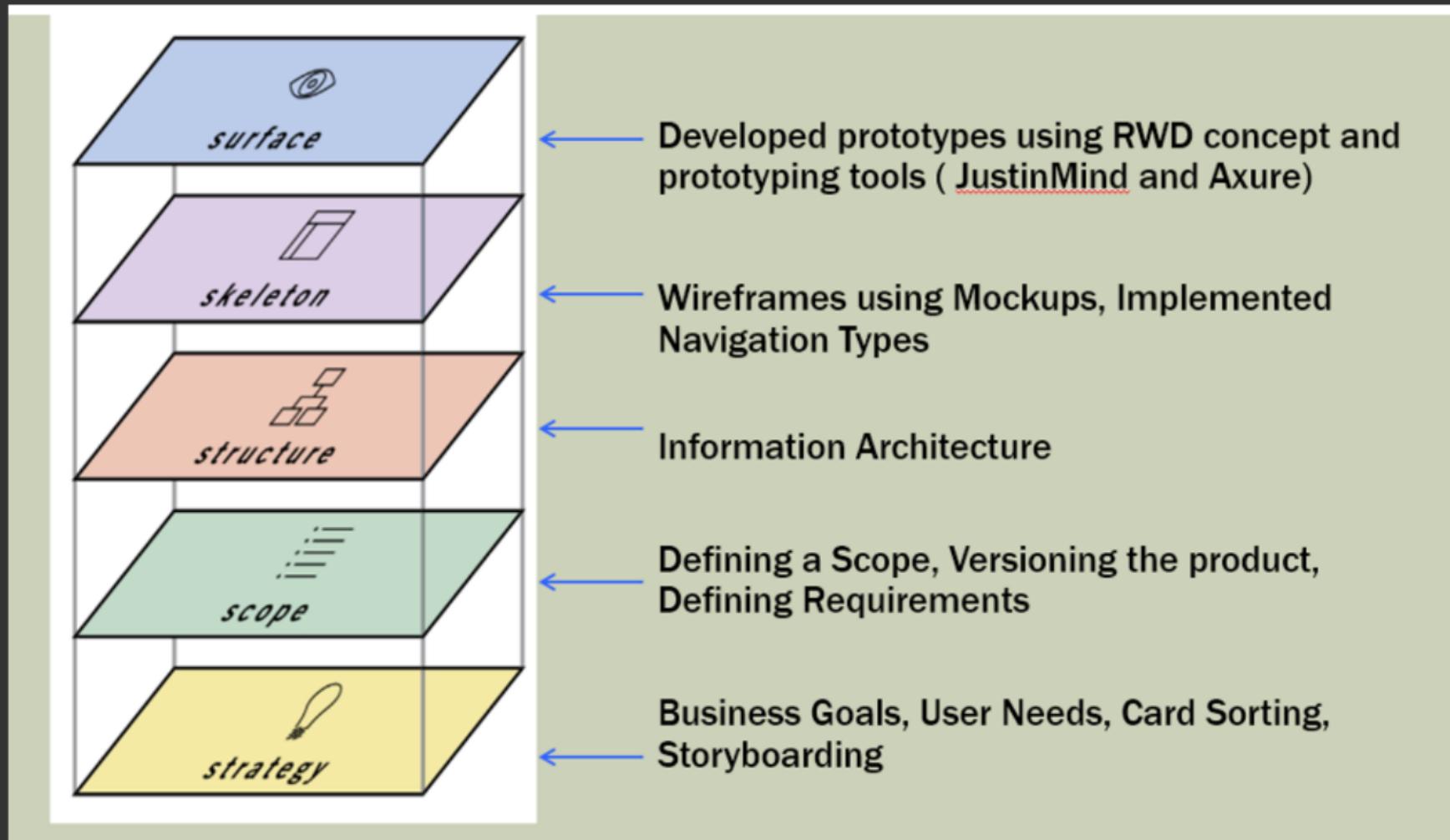
Recap from Midterm

- Strategy plane
 - Business Goals
 - Brand Identity
 - User Personas
 - User Research
- Scope plane
 - Defining scope
 - Requirements
 - Specifications

Recap from Midterm

- Structure plane
 - Conceptual Model
 - Error handling
 - Approach
 - Team Roles
 - Information Architecture
- Skeleton Plane
 - Wireframe using Moqups
 - Navigation Design

Approach (Bottom-Up)



Stakeholders



Admin



Doctor



Patient



Pharmacy



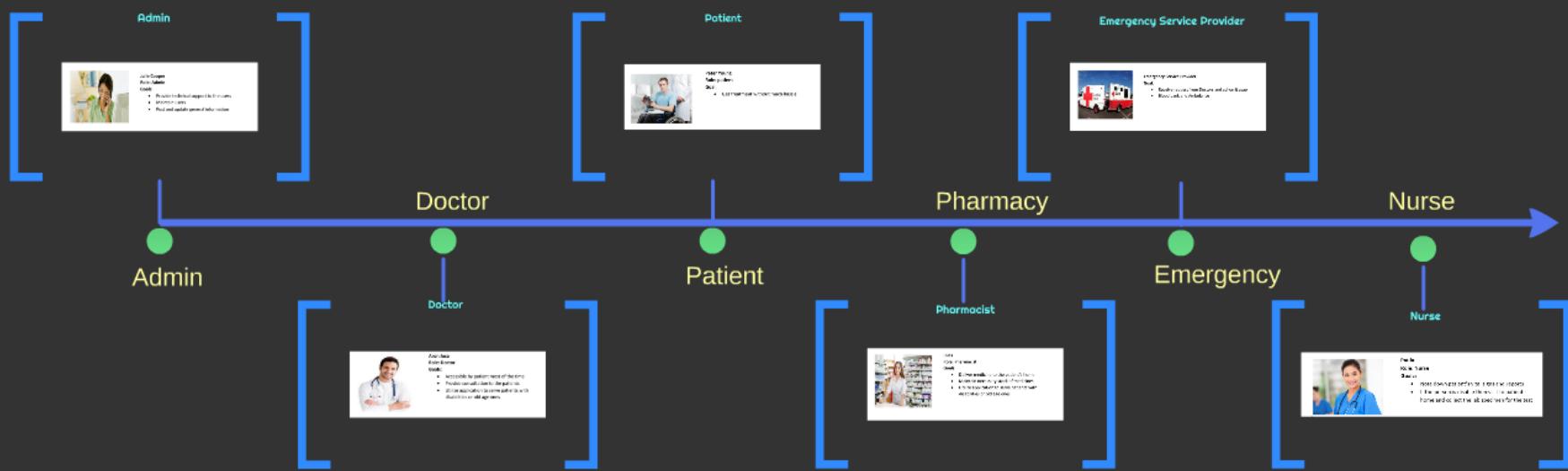
Emergency Service Provider

+



Nurse

Use Cases



Nurse



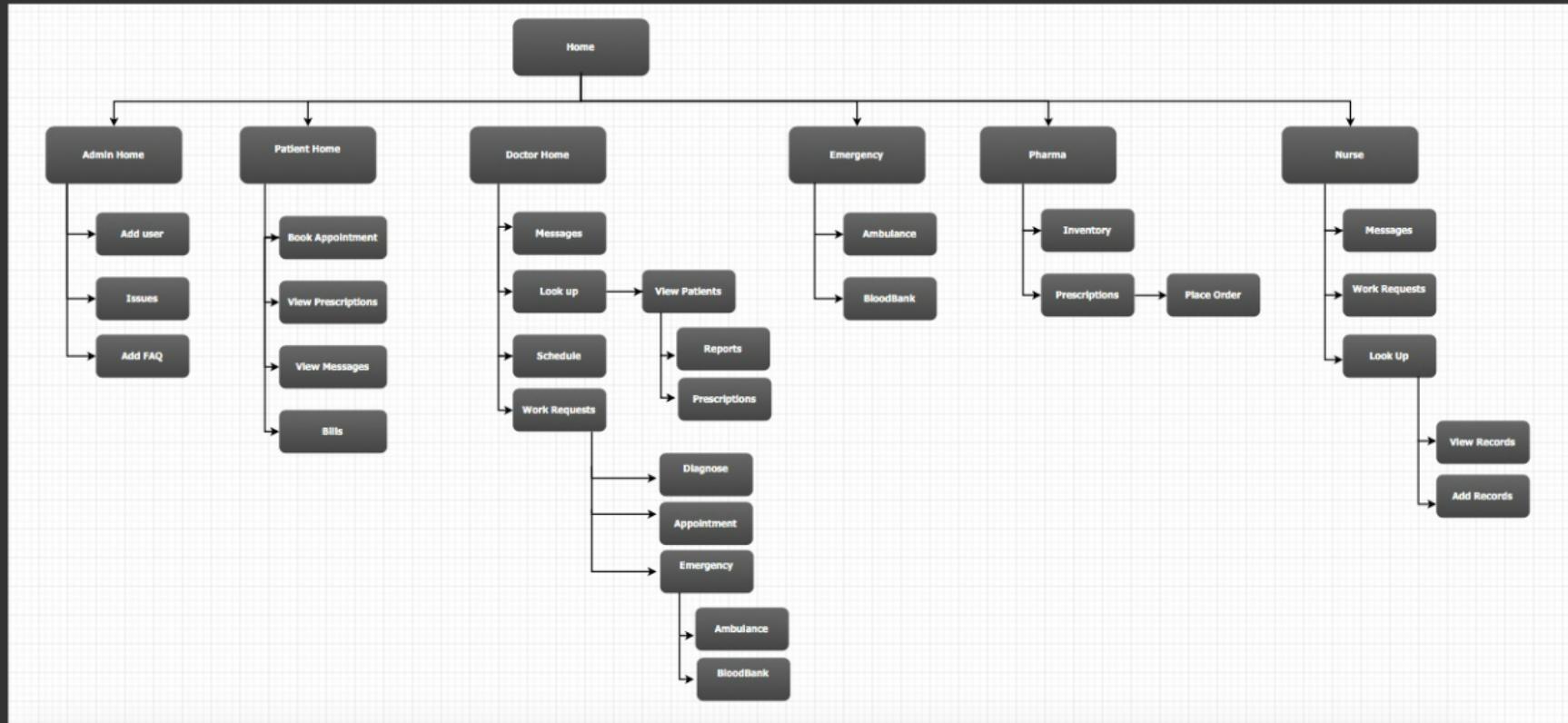
Paula

Role: Nurse

Goals:

- Note down patient's vital signs and reports
- If the person is disable then visit to patient's home and collect the lab specimen for the test

Information Architecture



Interface Design – Skeleton Plane

- View status of request/appointment, show more details on click/hover
- Appointments are sorted by the status (color coded) on the scheduler dashboard
- Auto save of changes made to the profile every 2 minutes
- Previously searched keywords presented to the returning user
- Brief search results and detailed ones on “search” functionality.

Navigation systems used:

Global



Local



Contextual/inline

Home > Look Up > Patient Look Up > Reports

Senses - Surface Plane

- Vision
 - Contrast
 - Uniformity
 - Popup Messages
 - Error Messages
- Hearing
 - Notifications for Emergency
 - Custom Notifications
- Touch
 - Vibration

Color Choices - Surface Plane

- Bootstrap color palette
- Used bright and bolder colors(#1758B9) for menu and links
- Muted color(#~~fffffff~~) and (is used as background color
- Color coding based on request type (status)
 - Emergency (Red)
 - Normal Request (Green)
 - Diagnostics (Orange)

Topography - Surface Plane

Typography – Surface Plane

Style:

- Roboto (JustinMind)
- Helvetica and Arial (Axure)

Size:

JustinMind :

- Header – 14 px Body – 10 px Links- 12 px

Axure :

- Header - 32 px Body - 14 px Links – 15 px

Overview of Tools used



Selenium Web Driver

- Selenium is a free (open source) automated testing suite for web applications across different browsers and platforms.
- Selenium is known for its powerful capability to support performance testing of Web applications.



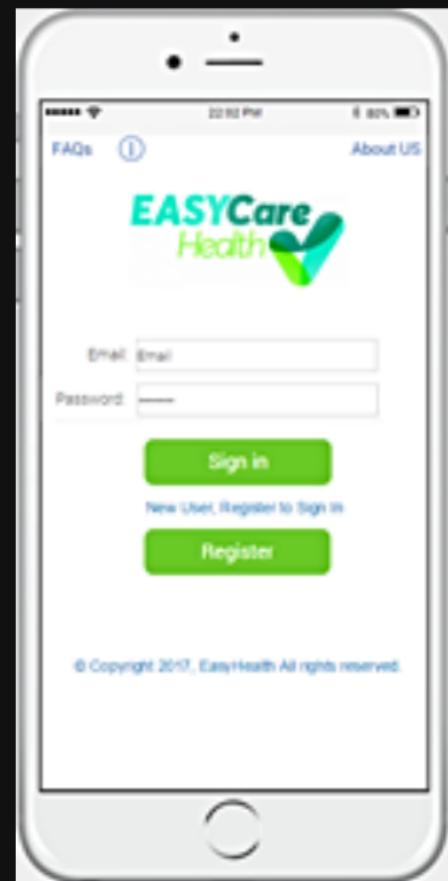
- Justinmind Prototyping tool is an authoring tool for web and mobile app prototypes and high-fidelity website wireframes.
- Justinmind has features for annotating widgets and defining interactions such as linking, animations, conditional linking, calculations, simulating tab controls, show/hide elements and data simulation with real data.
- Axure RP Pro is a wireframing, rapid prototyping, documentation and specification software tool aimed at web and desktop applications.
- Axure offers drag and drop placement, resizing, and formatting of widgets.



Other Tools Used



Mobile Prototype - JustInMind



Interview Questions for EasyHealth App

INTERVIEW QUESTIONS FOR EASYHEALTH APPLICATION:

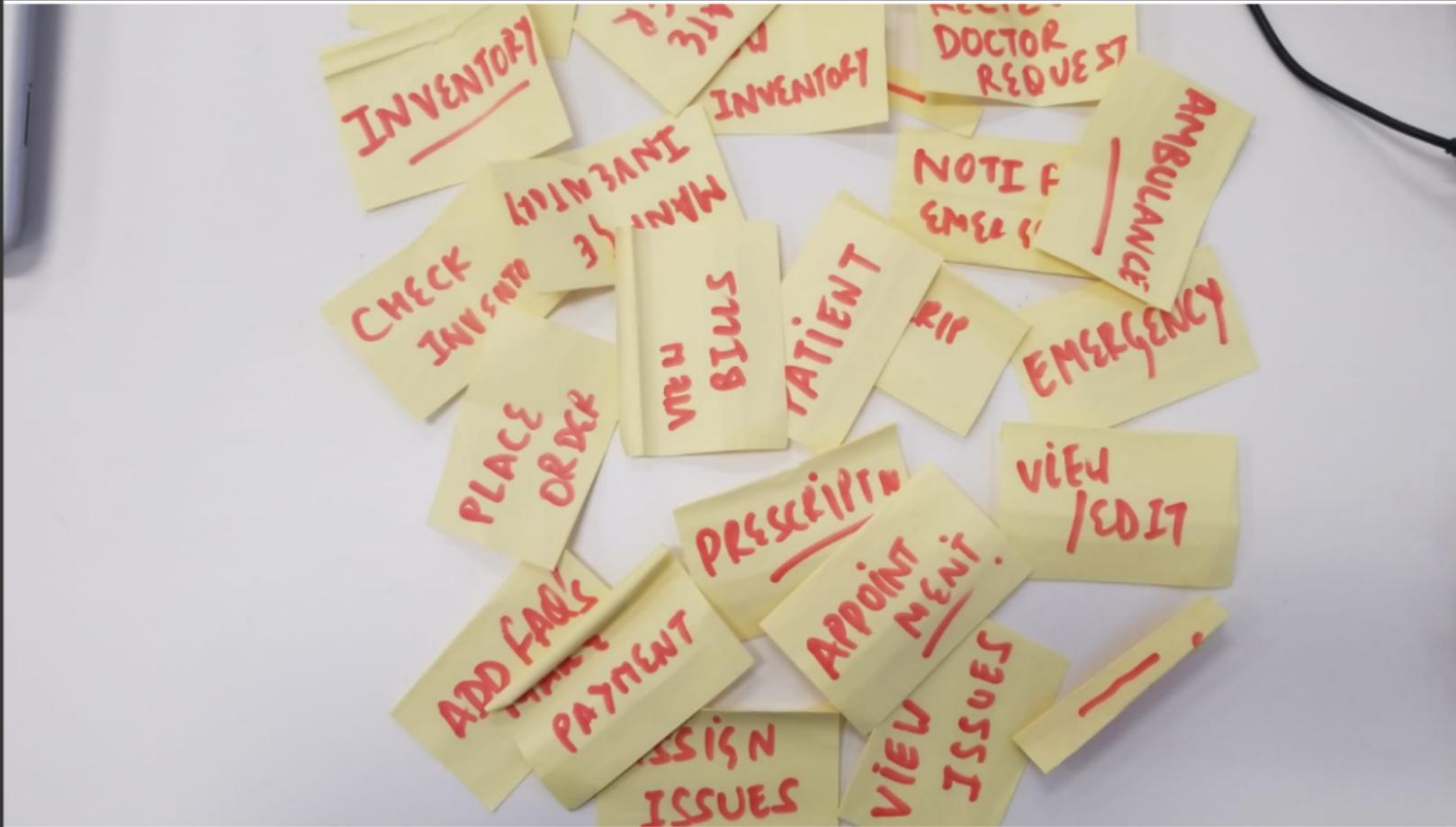
DOCTOR INTERVIEW QUESTIONS:

- 1) What features would you like to add to the application?
- 2) Who would use the features?
- 3) When do you want the schedule to be updated?
- 4) Where would you like to search for a patient and its details?
- 5) How would you like to process a new request?
- 6) How would you like to set the status/priority of requests?
- 7) What steps would you like to follow in case of an emergency?

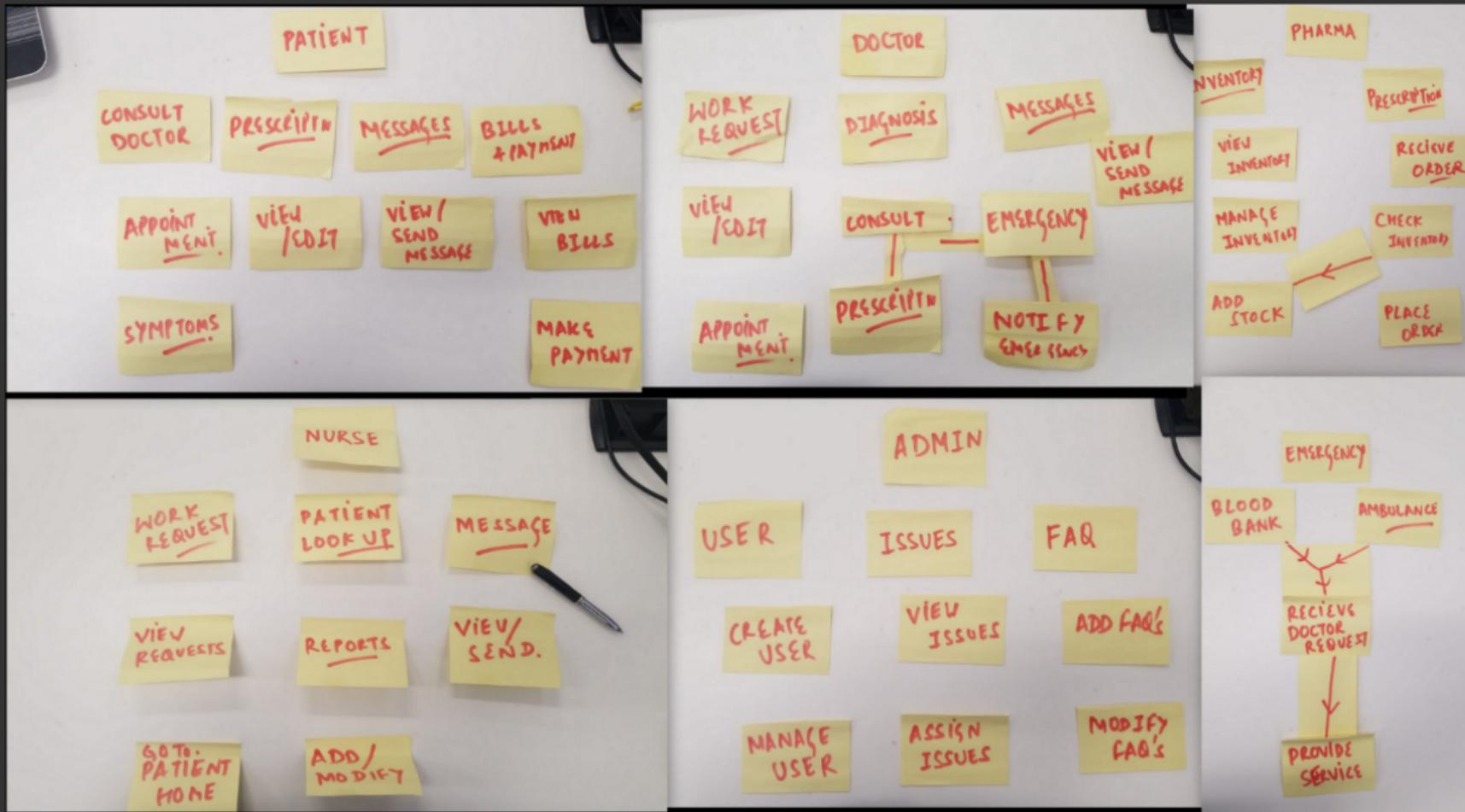
PATIENT INTERVIEW QUESTIONS:

- 1) What features would you like to add to the application?
- 2) Who would be able to see your personal and medical records?
- 3) What details would you like to be updated while booking a request?

UX Research Methods : Card Sorting I



UX Research Methods : Card Sorting II



UX Research Methods: True Intent Studies

https://web.easyhealth.com

True Intent Study

True-Intent Studies

1) WHAT IS THE REASON FOR YOUR VISIT TODAY ?

2) WHAT IS YOUR PLACE OF RESIDENCE ?

3) WERE YOU ABLE TO ACHIEVE YOUR TASK USING THE APPLICATION ?

4) WAS THIS YOUR FIRST TIME USING THIS APPLICATION ?

5) WHICH OF THE BELOW AGE GROUP DO YOU FALL IN ?

6) HOW CAN WE MAKE YOUR EXPERIENCE BETTER ?

Do you like to participate

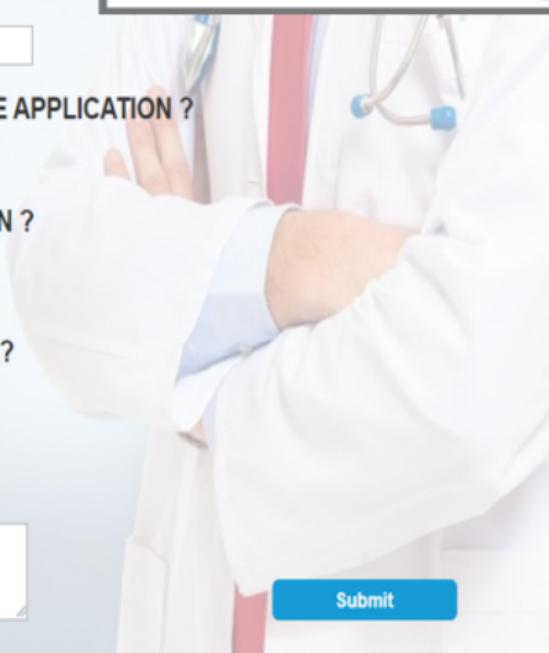
Yes No

Submit

Submit

<20

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Usability Testing

Usability Testing Document

Patient:

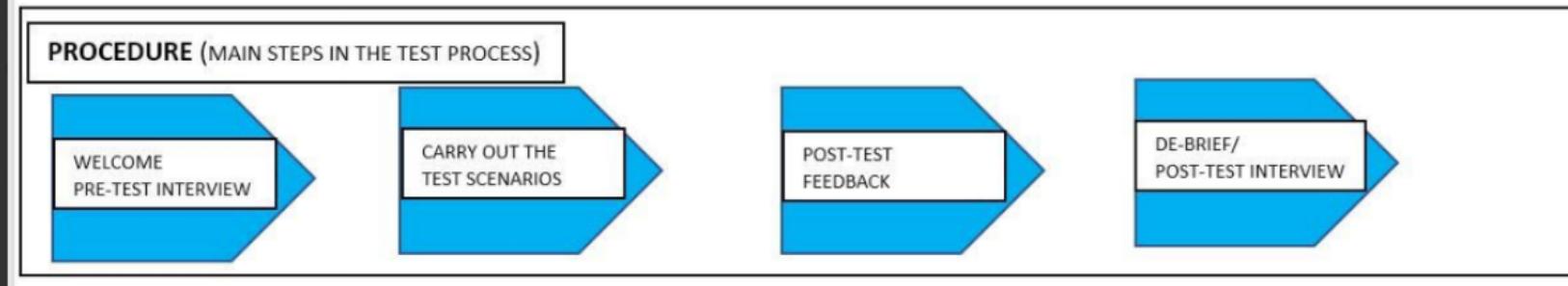
- Make an appointment for next Tuesday at 10am with your physician, Dr. Petersen.
- You are on vacation and went to California. Your primary physician is in Boston. You met with an accident and suffered some injuries. You wanted to show that to your primary physician, can you able to make a video call to your physician through EasyHealth application?
- View and save your previous prescriptions and reports through application.
- You got married and your last name changed. Go to your profile and make changes in your last name and other details.
- Due to some unforeseen reason you have to close your bank account and credit card. You have now new bank and card details. Go to your profile and update your new account/card details.
- Your very first report is missing in your report history page. Can you send a message to admin and ask about the missing information?

Doctor:

- You were on vacation and returned to work after 10 days. During that time you don't have the access to internet. After returning, can you check your appointment schedule?
- Patient is having emergency and he is trying to call you. Will you be able to receive video call from patient?
- You are on your way back to home. In the road you saw an accident and the passengers are severely injured. Can you notify ambulance provider and blood bank to reach the accident spot?
- A person is on his 2nd visit for the treatment and he is requesting for the appointment. Confirm his request and give an appoint for him for the Friday at 2 pm.

Testing Plan

OWNER: GROUP 8 (EASY HEALTH)	CONTACT DETAILS: ANTRIKSH.A@HUSKY.EDU	FINAL DATE (FEEDBACK): APRIL 21 st	
APPLICATION UNDER TEST: EASYHEALTH APPLICATION	TEST OBJECTIVE: 1) DO USERS UNDERSTAND THE PROCESS FLOW FOR EVERY USER? 2) CAN USERS NAVIGATE THROUGH THE APPLICATION WITH EASE? 3) DO USERS UNDERSTAND THE VALUE PROPOSITION – WHY, HOW OF THE APPLICATION?	PARTICIPANTS: 1) 15 USERS 2) 3 – MEDICAL PROFESSION USERS 3) A MIX OF STUDENTS AND WORKING PROFESSION	RESPONSIBILITY: ARJUN UPADHYAY ANTRIKSH SHAMAL BHOLE VINOTH PUNNIYA
BUSINESS CASE: THE TEST WILL ADDRESS SEVERAL KEY QUESTIONS THAT THE DESIGN TEAM NEED ANSWER TO, AS WE MOVE FORWARD WITH THE APPLICATION. FAILURE TO DO THIS TEST INCREASES RISK OF A WRONG PRODUCT	EQUIPMENT: 1) LAPTOP WITH WORKING APPLICATION 2) FORMS TO RECORD FEEDBACKS	LOCATION /DATES: APRIL 18 th ,19 th ,20 th LOCATION: IN PERSON/ ONLINE LINK	



UX Research Methods : Usability Lab Studies

- Results:
 - Patient User : 65%
 - Doctor User : 55%
 - Nurse User: 64%
 - Pharma User: 70%
 - Admin User : 60%

UX Research Methods: A/B Testing I

Image A/B Test

A Doctor Screen with font color : Green

Upload image

Enter the URL of an image on the web

Copy and paste the image URL here

Variable Label *Optional* 

Provide a label for internal use.

B Doctor Screen with font color : Blue

Upload image

Enter the URL of an image on the web

Copy and paste the image URL here

Variable Label *Optional* 

Provide a label for internal use.

A screenshot of the 'Doctor Screen with font color : Green' shows a doctor's dashboard with a green header and green text. The dashboard includes a welcome message 'DOCTOR ABCD, WELCOME BACK', a file upload section, and a table with four rows of patient data. The table columns are Request ID, Patient Name, Disabled, and Action. The Action column contains buttons labeled 'Diagnose', 'Appointment', 'Emergency', and 'Appointment'.

A screenshot of the 'Doctor Screen with font color : Blue' shows the same dashboard but with a blue header and blue text. The table in the Action column has different button labels: 'Diagnose', 'Appointment', 'Emergency', and 'Appointment'.

UX Research Methods: A/B Testing II

Image A/B Test

A | Home Screen with Bar code scan login functionality

Upload image

Enter the URL of an image on the web

Copy and paste the image URL here

Variable Label *Optional*  Provide a label for internal use.

B | Home Screen with regular login functionality

Upload image

Enter the URL of an image on the web

Copy and paste the image URL here

Variable Label *Optional*  Provide a label for internal use.

80.0% Home Screen with Bar code scan login functionality

EASY HEALTH

About US General Information FAQs

Please scan the barcode from your app to proceed further..!



https://web.easyhealth.com

80.0% Home Screen with regular login functionality

EASY HEALTH

About US General Information FAQs

Please Login to Continue

Username: James

Password: *****

Forgot Password



https://web.easyhealth.com

UX Research Methods: User Feedback

User Feedback Form(EasyHealth)

Please take a few minutes to provide us a feedback about our service by filling this short feedback form. We are conducting the customer feedback research in order to gauge your level of satisfaction with quality of our service.

We thank you for your participation and using our services and hope to constantly improve your experience

* Required

Email Address

Your answer

User Feedback

Do you like to participate

Yes

No

Referring to the EasyHealth , how effortless was it to use ? *

- Extremely Easy
- Easy
- Moderate
- Difficult
- Extremely Difficult

Were you able to find the info you were looking for ? *

- Yes
- No

What would you like us to improve ?

Your answer

Would you recommend our service *

- Yes

Email Survey

We want your opinion

Inbox x



to me ▾

[REDACTED] via surveymonkey.com <member@surveymonkeyuser.com> [Unsubscribe](#)

7:55 PM (5 minutes ago)

Email Survey (EasyHealth)

We're running a survey and would love your input. Please let us know what you think below. Thanks for participating!

Were you able to accomplish your task on EasyHealth application?

- A great deal
- A moderate amount
- A little
- None at all

Please do not forward this email as its survey link is unique to you.

[Unsubscribe](#) from this list

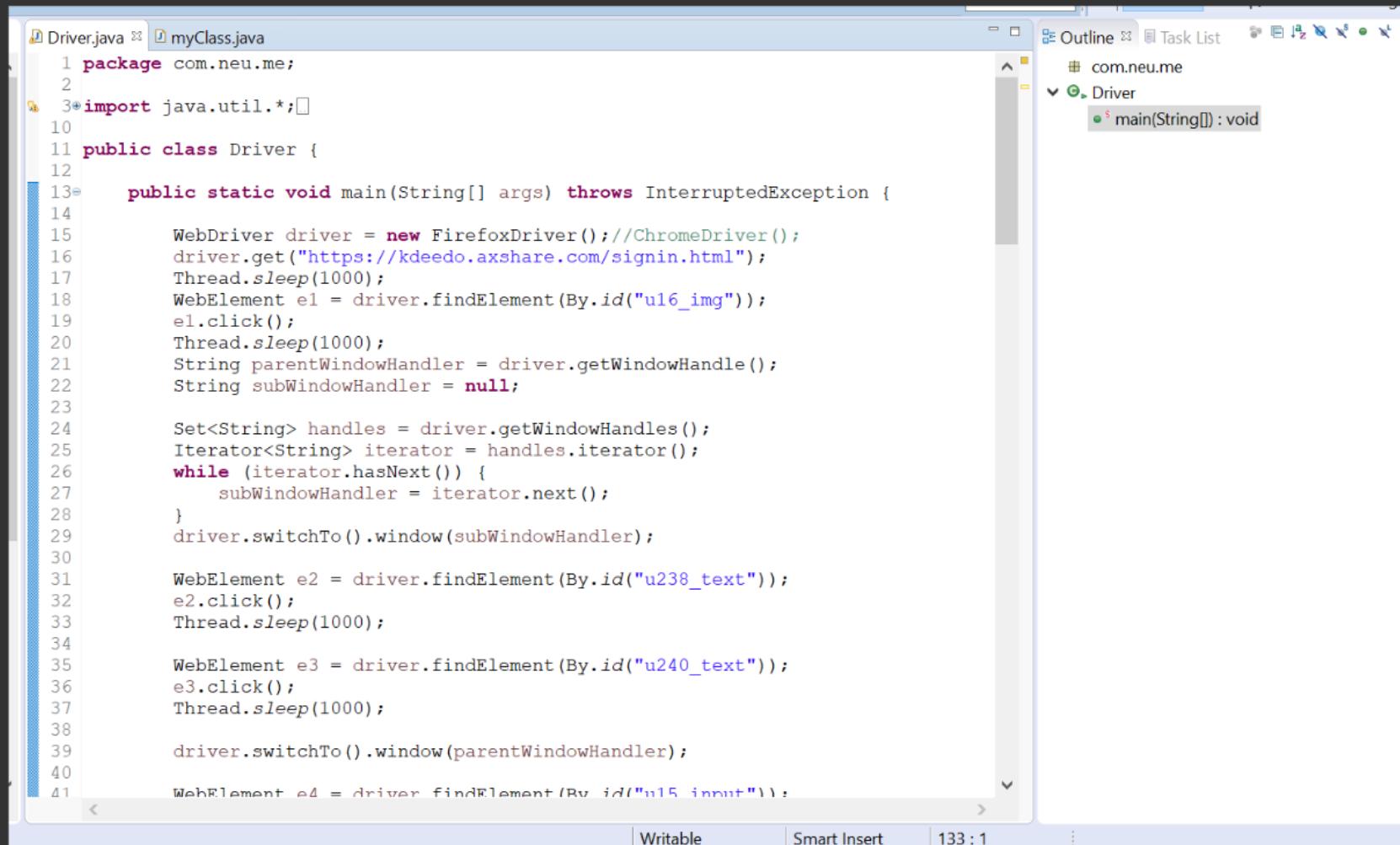
Web Prototype in Axure

Use EasyHealth on your phone to scan the code

Keep me signed in

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Workflow of EasyHealth Solution with Selenium Webdriver



The screenshot shows a Java code editor with the file `Driver.java` open. The code implements a `Driver` class that uses Selenium WebDriver to interact with a web application. The application URL is `https://kdeedo.axshare.com/signin.html`. The code performs several actions: it clicks on an element with ID `u16_img`, switches to a new window handle, and then back to the parent window handle. It also interacts with elements `u238_text` and `u240_text`.

```
1 package com.neu.me;
2
3 import java.util.*;
4
5 public class Driver {
6
7     public static void main(String[] args) throws InterruptedException {
8
9         WebDriver driver = new FirefoxDriver(); //ChromeDriver();
10        driver.get("https://kdeedo.axshare.com/signin.html");
11        Thread.sleep(1000);
12        WebElement e1 = driver.findElement(By.id("u16_img"));
13        e1.click();
14        Thread.sleep(1000);
15        String parentWindowHandler = driver.getWindowHandle();
16        String subWindowHandler = null;
17
18        Set<String> handles = driver.getWindowHandles();
19        Iterator<String> iterator = handles.iterator();
20        while (iterator.hasNext()) {
21            subWindowHandler = iterator.next();
22        }
23        driver.switchTo().window(subWindowHandler);
24
25        WebElement e2 = driver.findElement(By.id("u238_text"));
26        e2.click();
27        Thread.sleep(1000);
28
29        WebElement e3 = driver.findElement(By.id("u240_text"));
30        e3.click();
31        Thread.sleep(1000);
32
33        driver.switchTo().window(parentWindowHandler);
34
35        WebElement e4 = driver.findElement(By.id("u15_input"));
36
37    }
38
39}
```

Moonshot



Symptom 1

Symptom 2

Symptom 3

Date _____ Time _____

Gender Male Female

Sync Registered Fitbit for Vitals

Disabled



Thank You!