

Designing on The Frontiers of Healthcare

Hacking Health

Lorraine Chapman & Scott Plewes
February 28th 2018

Introduction



Lorraine Chapman

Senior Director, Healthcare
Services



Scott Plewes

VP, User Experience

Agenda



Elements of UX (Iceberg)

Moving from Current state to future state

Framing Exercise

Ecosystems

Personas & Usage Scenarios

UX Design

Conversational UX

Surface

Defining the visual and interaction details to support the people, business and technology goals.

Visual Design
Motion Design
Testing

Style Guide, Colour, Typography, Icons
Animations
Product Reactions, A/B Testing, Beta Testing

Your Project



Skeleton

Design the details of the application to meet the people, business and technology goals.

Detailed Interaction Design
User Feedback
Development Implementation

Design Prototypes, Annotated Wireframes
Usability Testing
User Stories, Tasks

Structure

Designing the structure of the application to meet the people, business and technology goals.

Information Architecture
Design Concepts
Concept Validation
Development Planning

Workflow Diagrams, Card Sorting
Low Fidelity Wireframes, Paper Prototypes
Walkthroughs
Epics, User Stories

Scope

Defining the product in relation to people, the business and technology.

Opportunity Framing
Experience Mapping
Technical Architecture

Project Objectives, Opportunities, Pain Points
Personas, Use Scenarios, Journey Maps
System Architecture

Strategy

Understanding the product and its goals in relation to people, the business and technology.

Product Objectives
Contextual Research

People, Business, Technology
Ecosystem, SWOT

Illustration inspired by "The Elements of User Experience" by Jesse James Garrett

m-acadamian

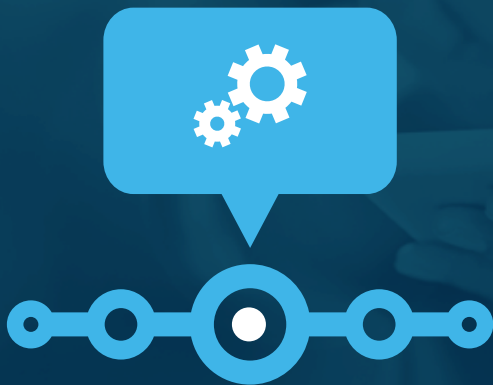
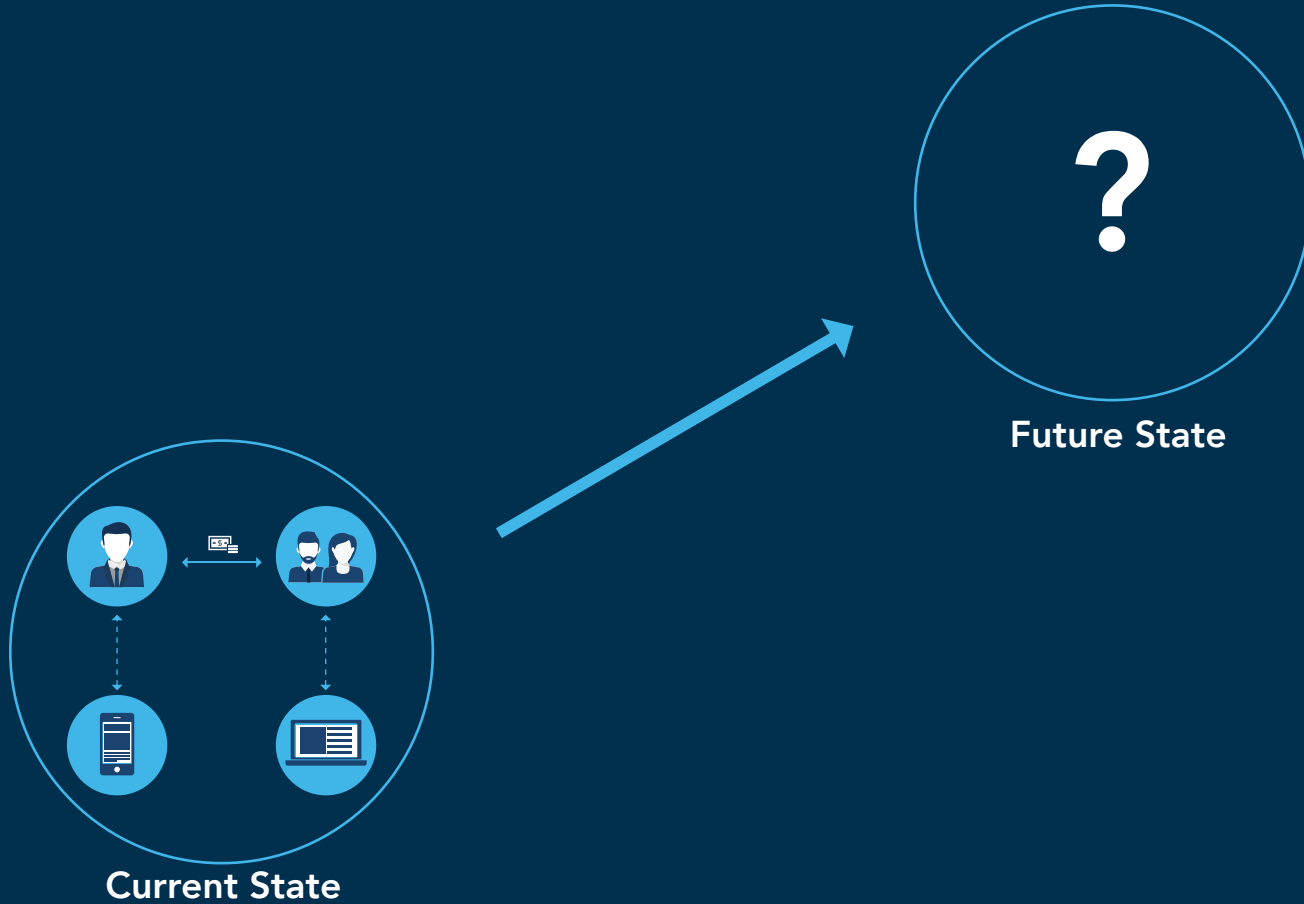


Chart The Course

Current to Future State

Business: People, Operations, Technology



EXERCISE No.1

Articulate the problem you want to solve or opportunity that you want to address.



10 MINUTES

I want to help with _____

(problem to solve or opportunity to develop)

Framing Exercise 1

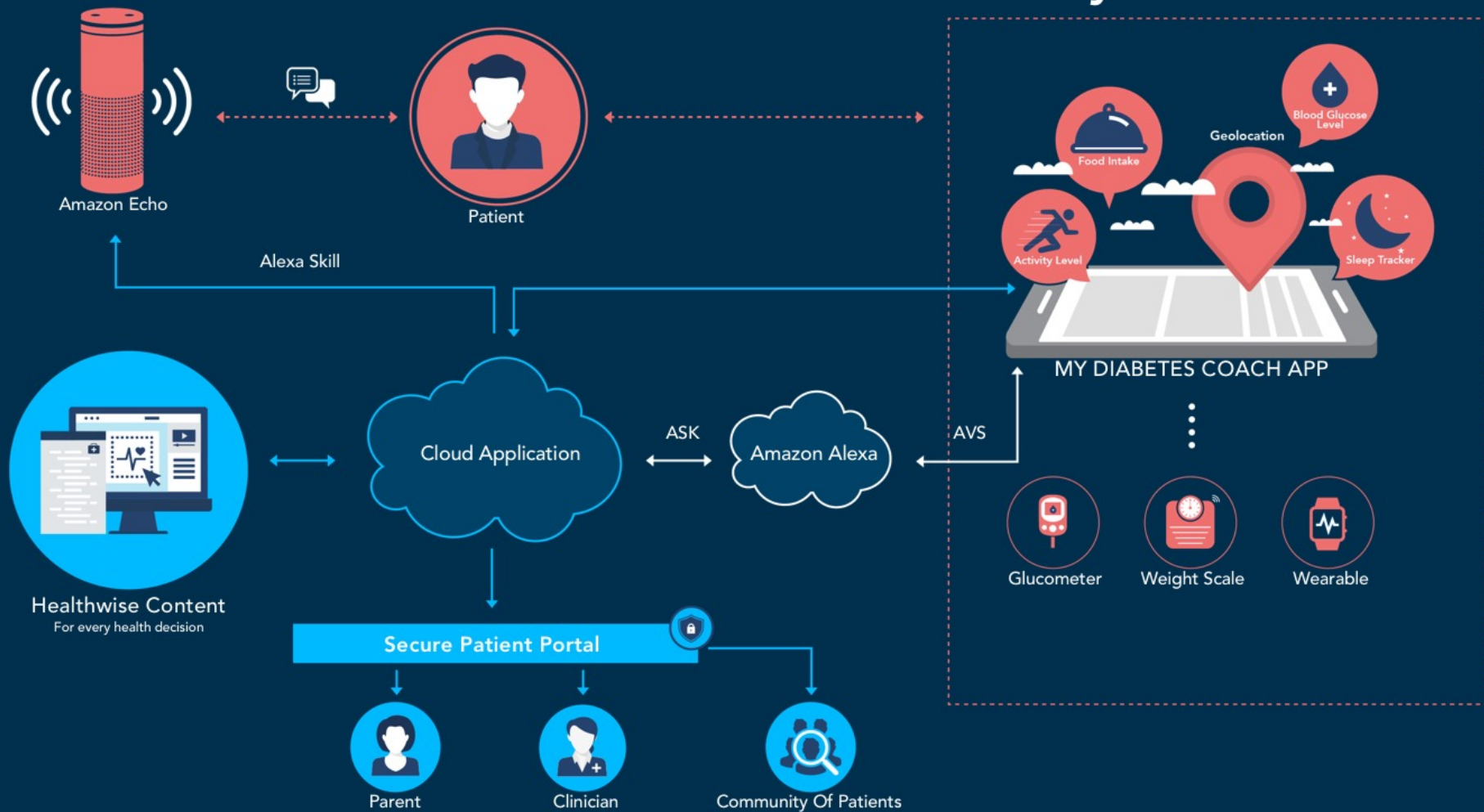
Articulate the problem you want to solve or opportunity that you want to address.

- *Nature of the problem*
- *Impact on business, revenue, efficiency*
- *People impacted/involved*
- *Devices or modalities*



10 MINUTES

My Diabetes Coach



PERSONAS and USAGE SCENARIOS





The Elderly Living At Home

Suzanne, 82 yrs

An elderly widow living at home alone. Mother of three children and Grandmother of two children.

"I want to live safely at home"

IT SAVYNESS



SOCIAL



HEALTH & FITNESS



Personal Attributes

Personality: loves sense of achievements, enjoys company, ambitious, independent, and friendly

Healthcare: has a chronic disease, learns from TV and by searching on the Internet, cares about her diet

Daily activities: walking

Motivations

Motivations and needs: Suzanne is especially worried about her health. She does not want to increase the burden of her health on her children since they have busy jobs and children of their own. She often watches healthcare program on TV and does outdoor exercise every day to keep healthy.

Expectations: Suzanne would like her in-home support for her medication management to be: easy to learn, install, update, attractive, and helpful.

Personal Attributes

Professional background: was an independent consultant before she retired 15 years ago

Technological devices and applications: Suzanne does not have a significant amount of experience with newer technologies but does use her desktop computer somewhat frequently to email her children and grandchildren and review their photos on Facebook. She has a smartphone but typically only uses it for incoming/ outgoing calls and texts

Needs, interests and goals: Suzanne is interested in finding some technological support to help her manage her complex medication regime, as she is often confused about what to take and when to take it. She is interested in finding something she can use at home to help her.



The Elderly Living At Home

Suzanne, 82 yrs

Suzanne is having afternoon tea with a friend and is highly involved in the discussion.

“Time to take your afternoon medication”

Usage Scenario

Since Suzanne has a chronic disease, her medication management can be quite overwhelming and she sometimes loses track of when to take her next medications. She was hoping to have some support or assistance with this so that it does not impede others. Recently, Suzanne installed a LifePod in her home to help with this management.

Context Of Use

Suzanne spends quite a bit of time at home. It is while she is at home that she forgets her medication schedule, as she tends to get carried away in the activities she does around the house.

Frequency & Length

Occurs at the same time every day; different lengths of time depending if Suzanne has remembered to take her medications or not

Tasks

Task 1

LifePod alerts her that it is time to take her afternoon medication, “It is time to take your medication, did you take them?”.

Task 2

Suzanne continues the conversation and is re-prompted by LifePod a few seconds later.

Task 3

She responds to the prompt with ‘no’ while she gets up to retrieve her medications from the medicine cabinet.

Task 4

LifePod prompts Suzanne again two minutes later.

Task 5

This time, Suzanne responds to the prompt with ‘yes’, as she just took all her medications.

Usage Scenario 1

"Time to take your afternoon medication"

01



LifePod alerts her that it is time to take her afternoon medication, "It is time to take your medication, did you take them?"

02



Suzanne continues the conversation and is re-prompted by LifePod a few seconds later

03



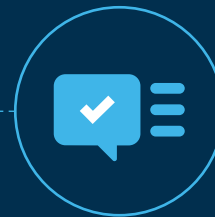
She responds to the prompt with 'no' while she gets up to retrieve her medications from the medicine cabinet.

04



LifePod prompts Suzanne again two minutes later.

05



This time, Suzanne responds to the prompt with 'yes', as she just took all her medications.

Exercise 2



10 MINUTES

03 worksheet

Part 1

Persona Worksheet



5 MINUTES

Persona	Behaviors
Demographics	Pain Points, Needs & Goals

Macadamian

03

03 worksheet

Part 2

Create Scenarios



5 MINUTES

Scenario 1

.....

.....

.....

.....

.....

.....

Scenario 2

.....

.....

.....

.....

.....

.....

Macadamian

04

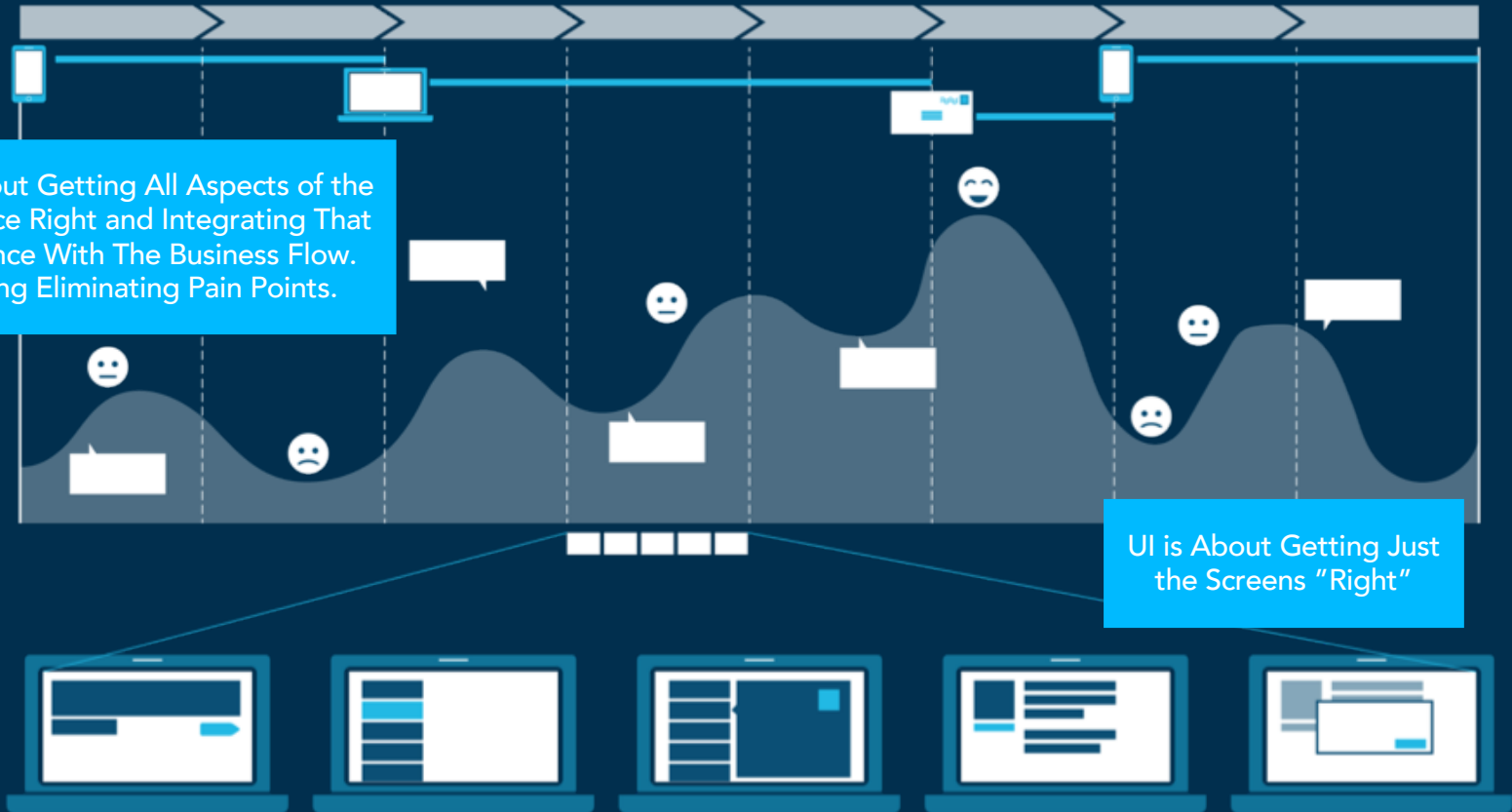


Design

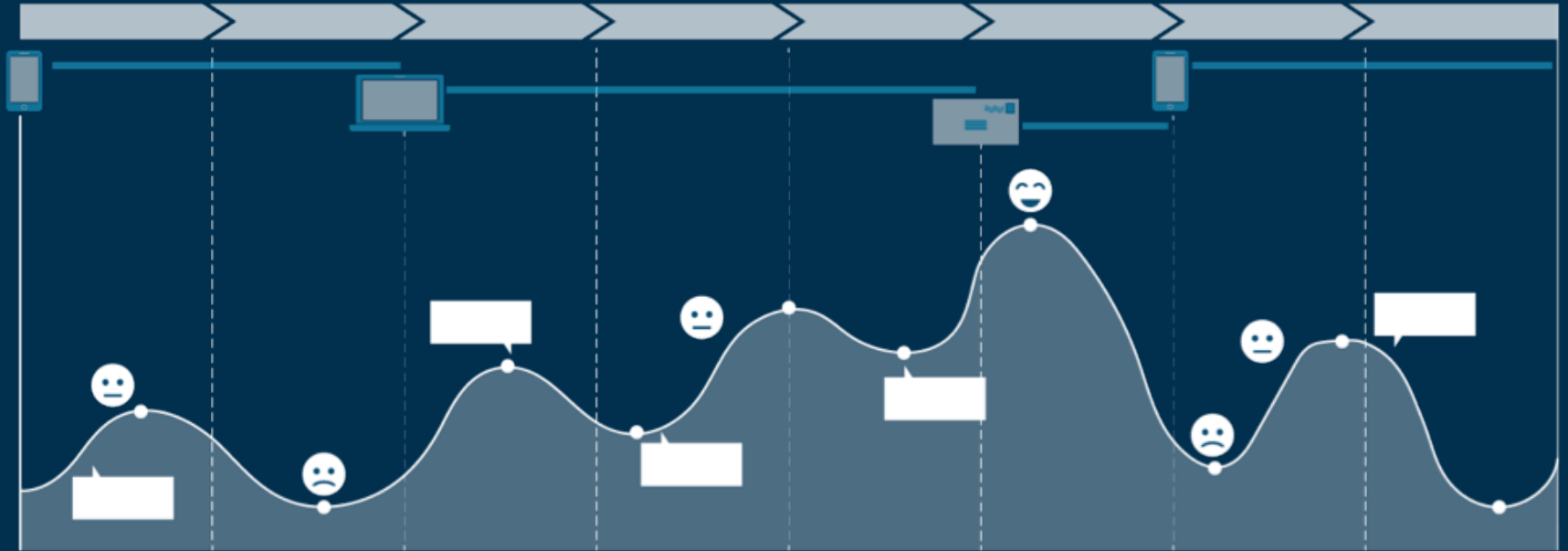
UI Is a Small Part of UX

UX is About Getting All Aspects of the Experience Right and Integrating That Experience With The Business Flow. Including Eliminating Pain Points.

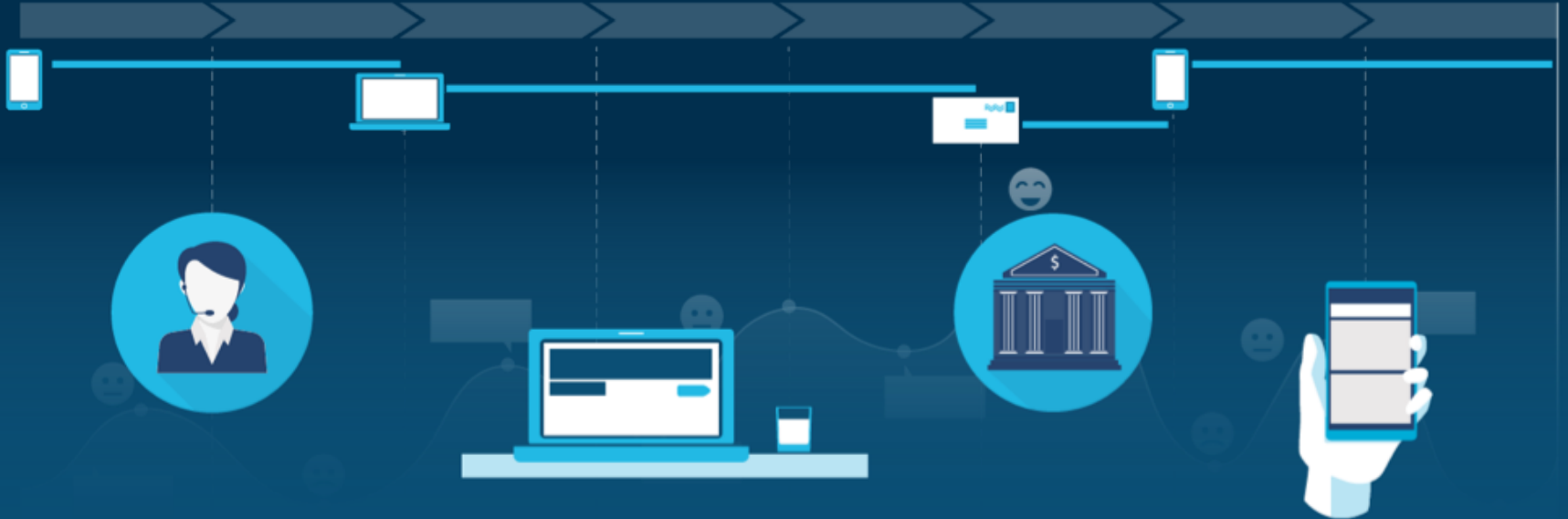
UI is About Getting Just the Screens "Right"



Journey



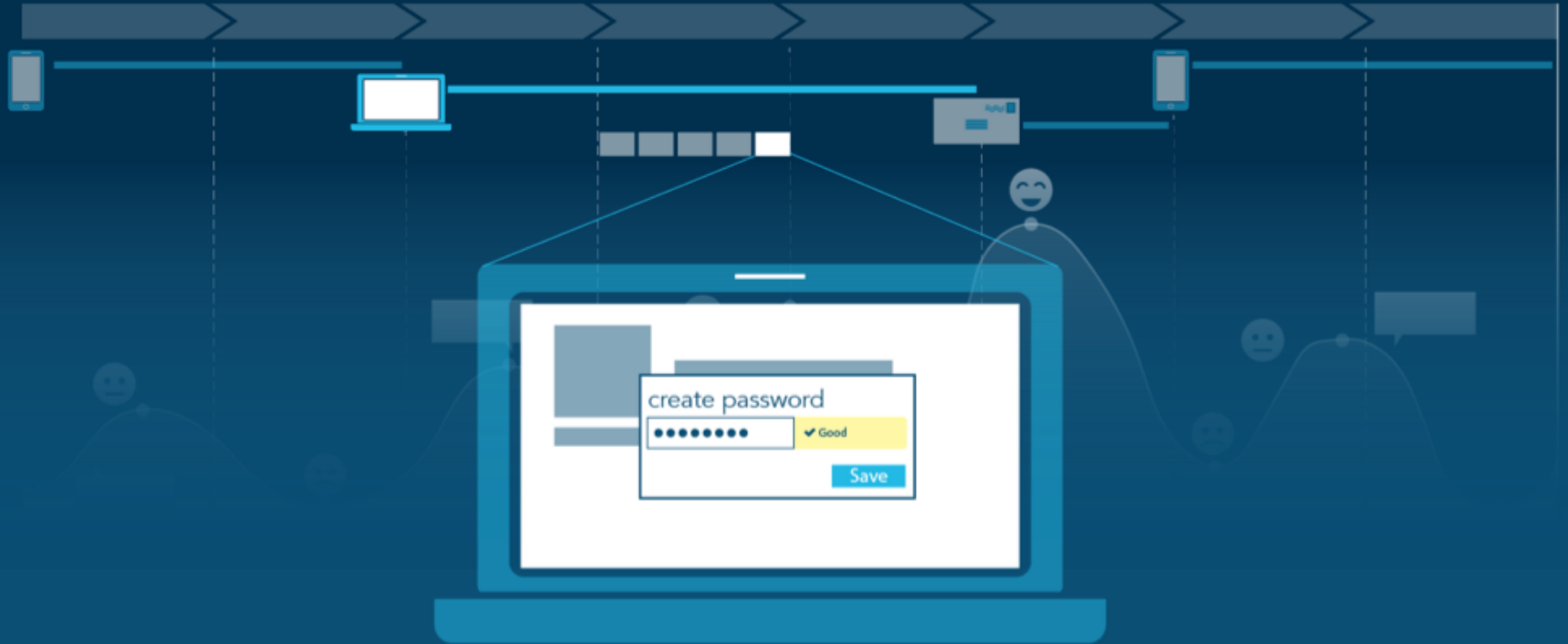
Touch-points



Interactions



Micro-interactions



Exercise 3



10 MINUTES

Ideate/Design: Sketch or describe at least 3 different ways to meet your user's needs.



Best practices in Conversational UX

Best Practices in Conversational UX



When To Use A Voice Interface

Typically,

When a person's hands are busy

When people can answer quickly and easily

When you don't want to use a phone or
piece of paper



I'm a PC



I'm a Mac

Best Practices in Conversational UX



Defining A Persona(lity) For The Application

Helps you focus the language of the conversation and choose the right words or syntax

Allows you to choose the feel and sound of the conversation, making it more or less formal

This will create a personality and frame the experience for the user in the way you intend

(Be able to fail gracefully as possible and handle interruptions)

Best Practices in Conversational UX



Prepare and Practice (and Details)

Write sample conversations or dialogues based on expected use cases (and know your data and decision tree)

Explore sample exchanges between the user and your application

Read what you have written out loud to hear how it flows

Ensure your dialogue sounds natural and not like reading a textbook

Thank you.

