

DESIGN ODYSSEY

Concept Selection & Prototyping

24 Oct 2017

OVERVIEW

- Setting Up Team Website + Landing Page
- Concept Selection
- Prototyping Strategies
- Software Prototypes
 - Web App
 - Mobile App
 - Hardware
- Feedback and planning

FREE PLATFORMS

weebly

strikingly

WIX.com



RUN-THROUGH OF *strikingly*

THINGS TO INCLUDE



Problem Statement



Idea



**Design
Documentation**



**Team
Members**









Contact

PUGH CHART







concept selection

PUGH CHART - 30 MINS

1. List your criteria based on your customer needs and functions
2. Assign weights to each need based
3. Set a concept as a reference (usually the most common solution in the market)
4. For every concept, compare each criteria with the reference design. If the performance is better/same/worse, give it a score +/0/- accordingly

Description		Standard Ratcheting Screwdriver	Back Trigger	Hand/Electric Power	Bit Magazine	Front Trigger	T-Handle
Sketch							
Criteria	Weight	Datum	Design 1	Design 2	Design 3	Design 4	Design 5
Durable	2	0	-	-	-	-	-
Portable	1	0	0	0	+	0	0
Affordable	2	0	-	--	0	-	-
Aesthetics	1	0	+	+	+	+	+
Easy to Use	3	0	+	++	+	++	++
+		0	4	7	5	7	7
0		9	1	1	2	1	1
-		0	4	6	2	4	4
Net Score		0	0	1	3	3	3

PUGH CHART - 30 MINS

Description		Standard Ratcheting Screwdriver	Back Trigger	Hand/Electric Power	Bit Magazine	Front Trigger	T-Handle
Sketch							
Criteria	Weight	Datum	Design 1	Design 2	Design 3	Design 4	Design 5
Durable	2	0	-	-	-	-	-
Portable	1	0	0	0	+	0	0
Affordable	2	0	-	--	0	-	-
Aesthetics	1	0	+	+	+	+	+
Easy to Use	3	0	+	++	+	++	++
+		0	4	7	5	7	7
0		9	1	1	2	1	1
-		0	4	6	2	4	4
Net Score		0	0	1	3	3	3

Once you are done, tabulate the scores. Remember to multiply the weights for the each criteria.

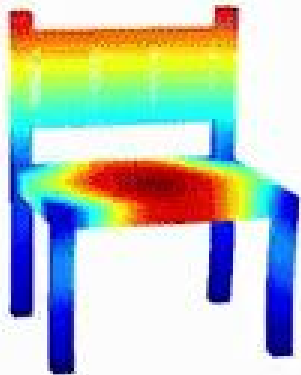
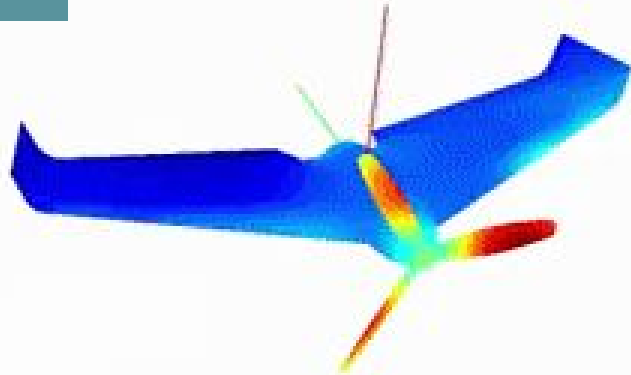
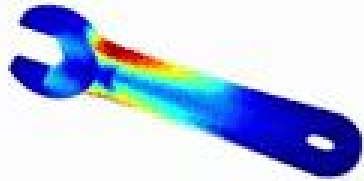
Start!

PROTOTYPING STRATEGIES

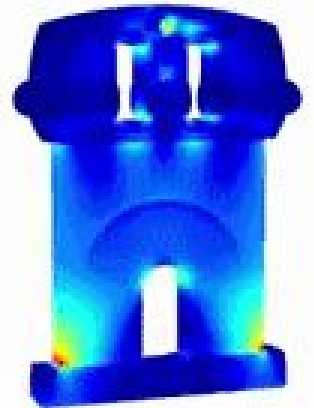


**Maximise the rate of learning by
minimising the time to try ideas**

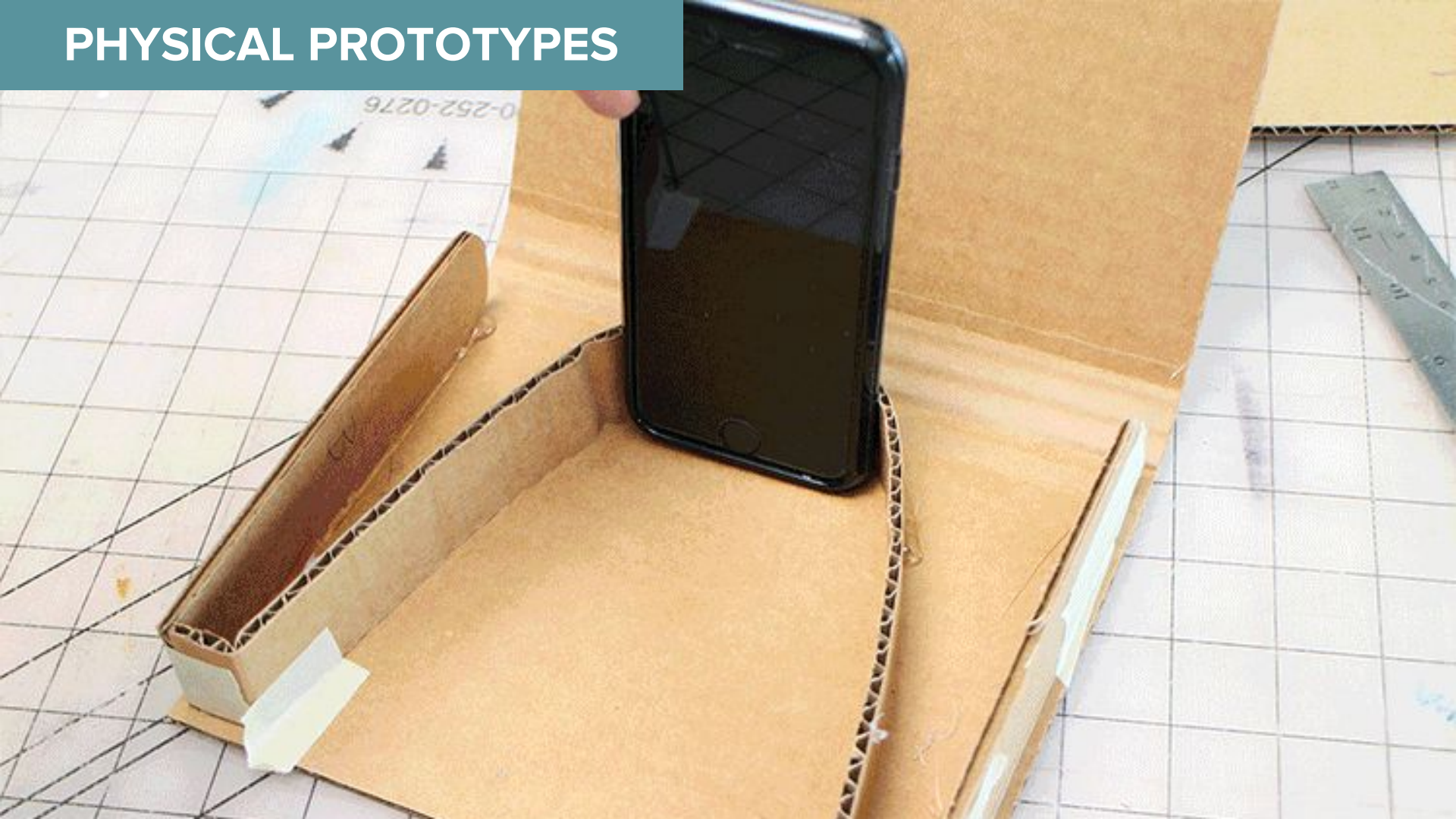
CAD + SIMULATIONS



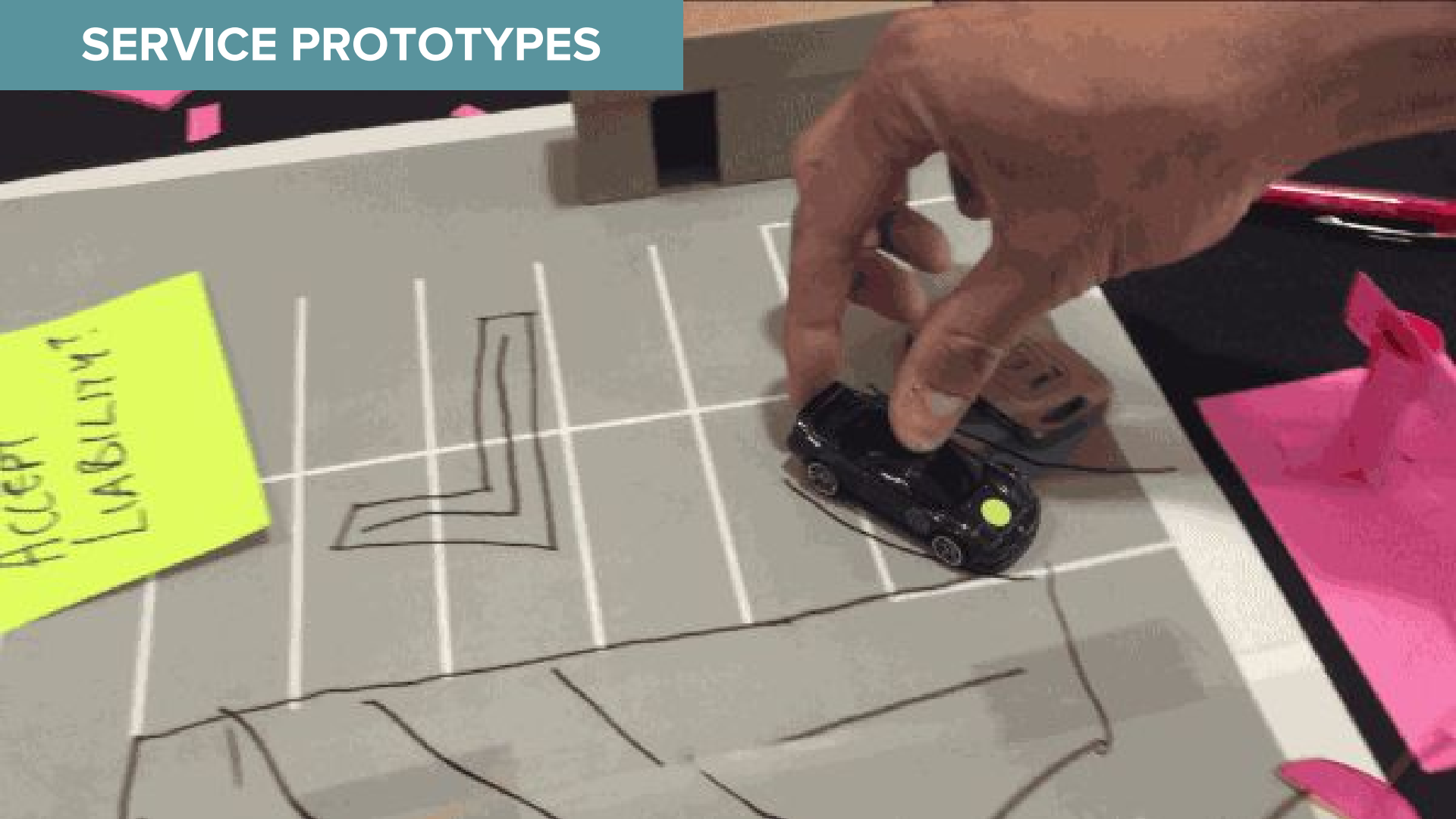
The goal is to help
designers create better
products in less time



PHYSICAL PROTOTYPES



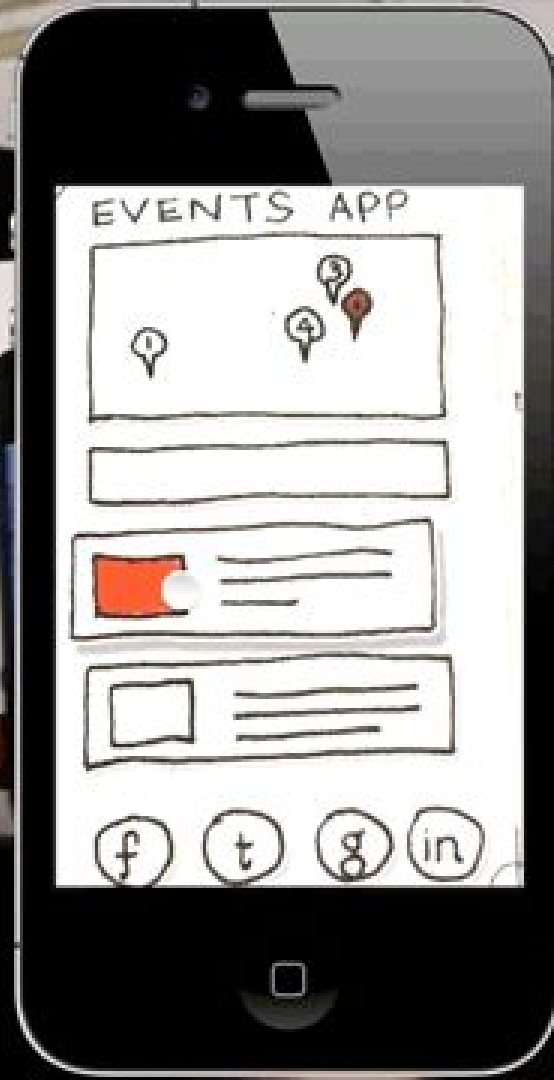
SERVICE PROTOTYPES



EXPERIENCE PROTOTYPES



UI/UX PROTOTYPES



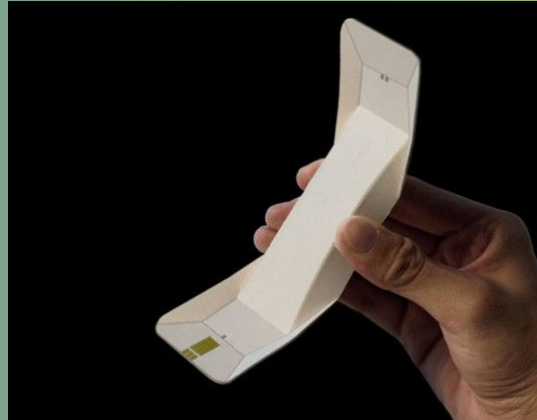
WHAT TO PROTOTYPE - 25 MINS

1. Dissect your final concept into **subsystems/features**
2. What is the **most crucial feature** you want to test?
3. How can you **replicate that experience** in a day? (come up with multiple ideas)
4. What are the **primary concerns** you want to know when testing?
5. Does your **prototype designs** help you get answers for these concerns?

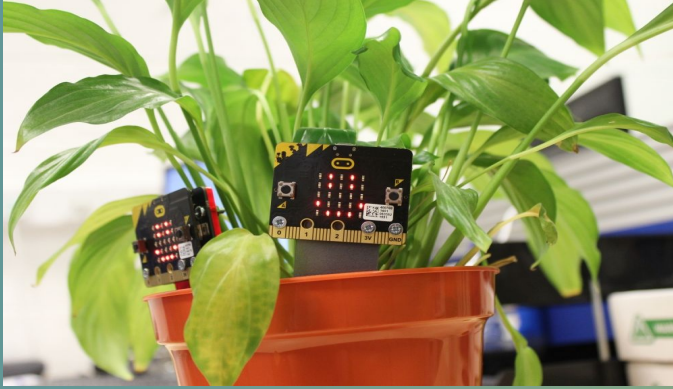
EXAMPLE

Concerns/Systems	What kind of prototype to develop to test this concern?

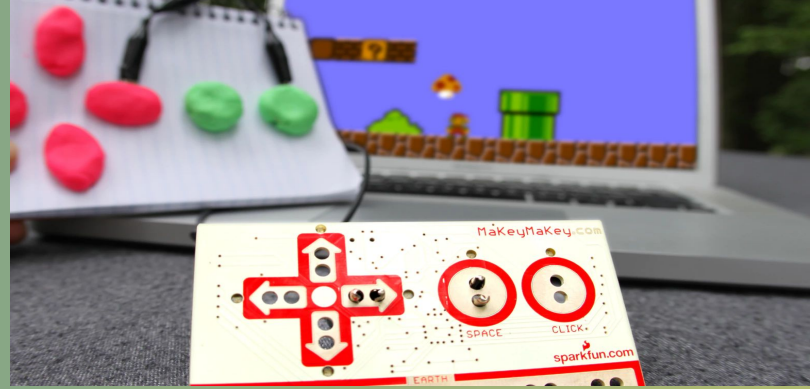
HARDWARE PROTOTYPING



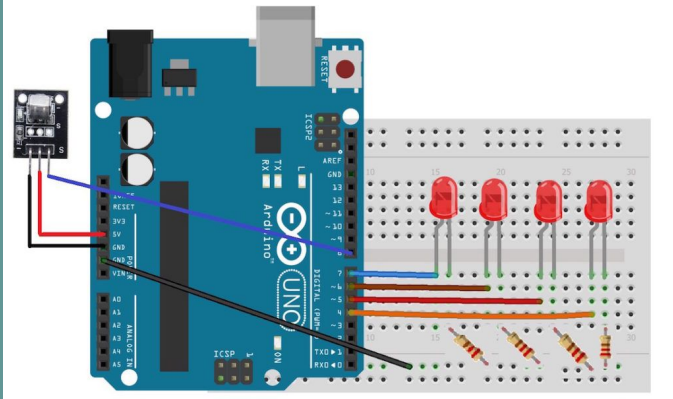
micro:bit



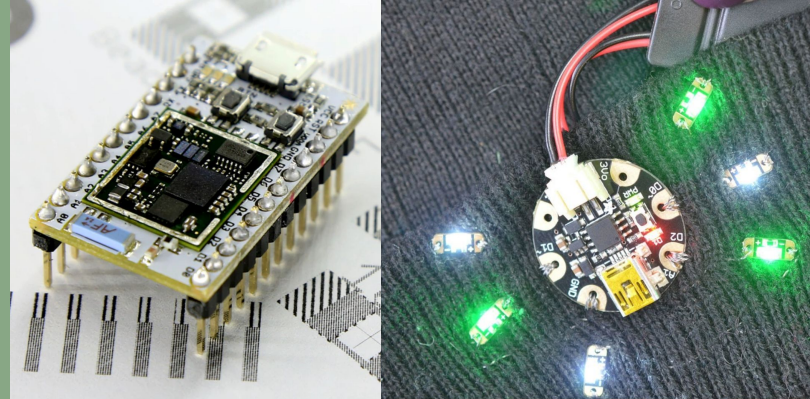
Makey Makey



Arduino



Spark (IOT) & Flora (Wearable)



ELECTRONICS WITH micro:bit



SOFTWARE PROTOTYPES

TOOLS FOR SOFTWARE PROTOTYPE



Web App



Mobile App
iOS & Android



Wireframe + Prototyping Tools

1. DATABASE

Notifications

Permissions

Project

Role

Settings

Tasks

Templates

User

DATA TYPES

New type

Create

Type name

avatar

image

lang

text

name

text

notifications

number

permissions

permissions

phone

text

settings

settings

email

text


Modified Date

date

Created Date

date

Create a new field

default  see clear

default

default

default

Built-in field

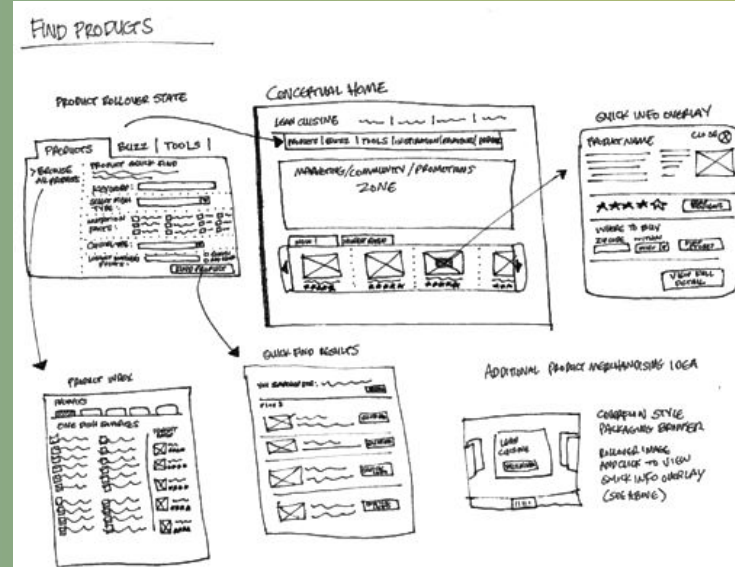
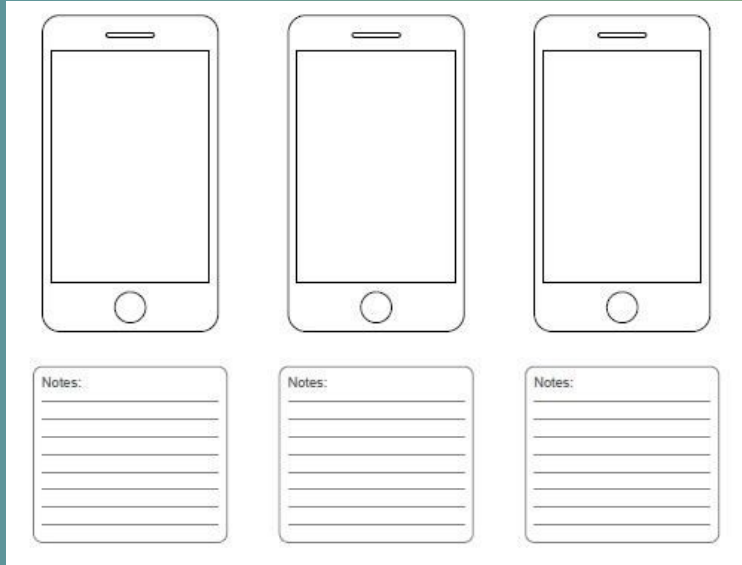
Built-in field

Built-in field

INFO EACH DATA TYPE STORES

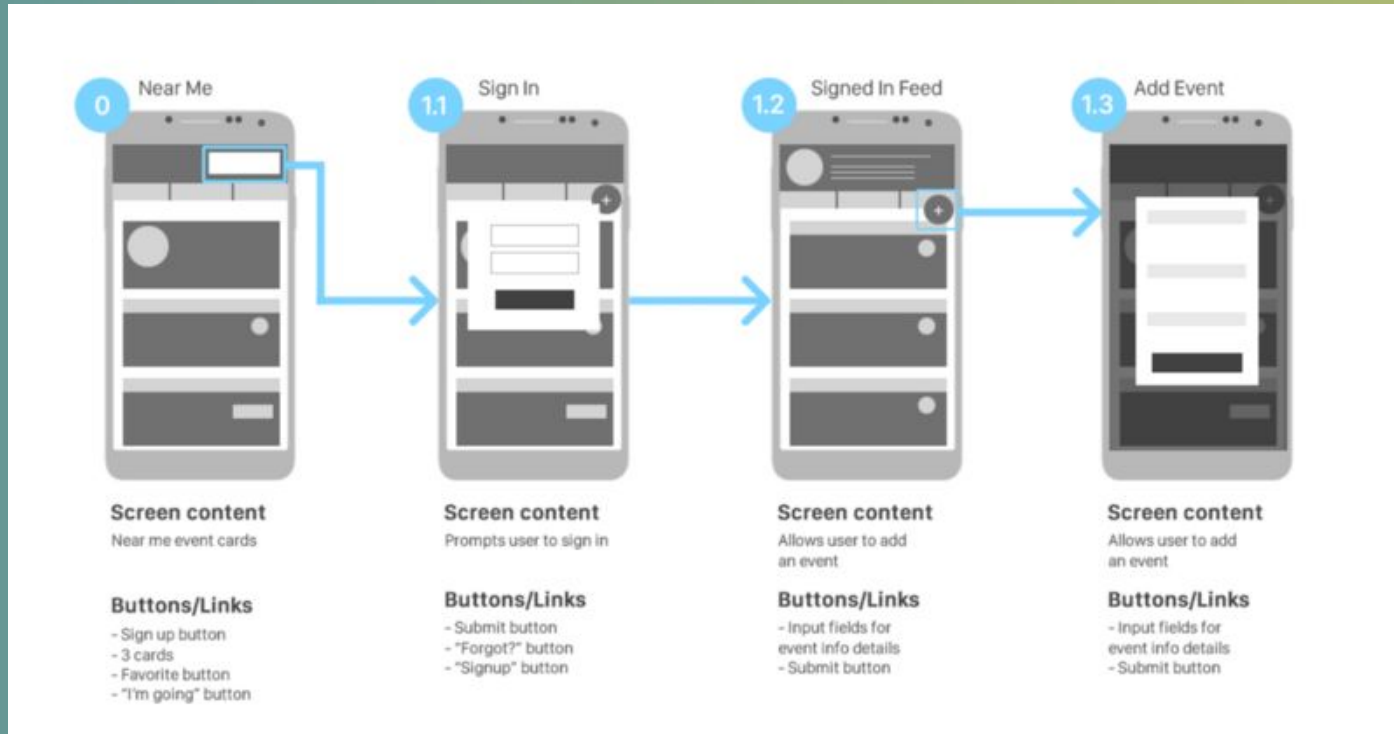
List the **DATA TYPE** and the **FIELDS** [input/information] each data type will store.

2. WIREFRAME YOUR WEB APP - UX



SKETCH OUT the overall look of each page and the components needed in your web/mobile app.

2. WIREFRAME YOUR WEB APP - UX



Design the user experience, workflow of events, transitions & buttons

3. COLOR SCHEME & TYPEFACE - UI

Decide the color scheme - not more than 5 colors

Use it consistently

color.adobe.com

colorhunt.co



3. COLOR SCHEME & TYPEFACE - UI

Limit to 2 to 3 typeface that suits the tone and audience of your project e.g sporty, professional, classy etc

HEADER

HEADER

Header

HEADER

Header

Body

Body

Body

Body

Body

typ.io

femmebot.github.io/google-type/

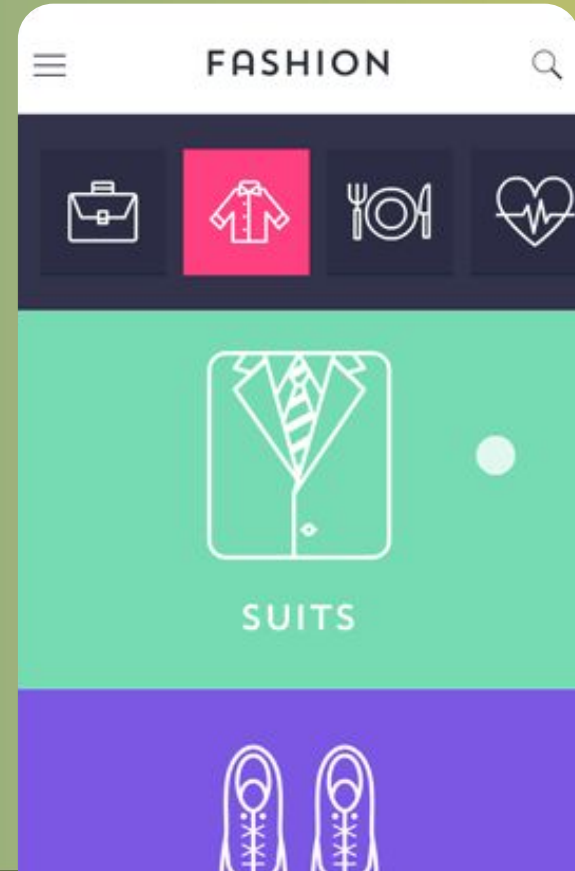
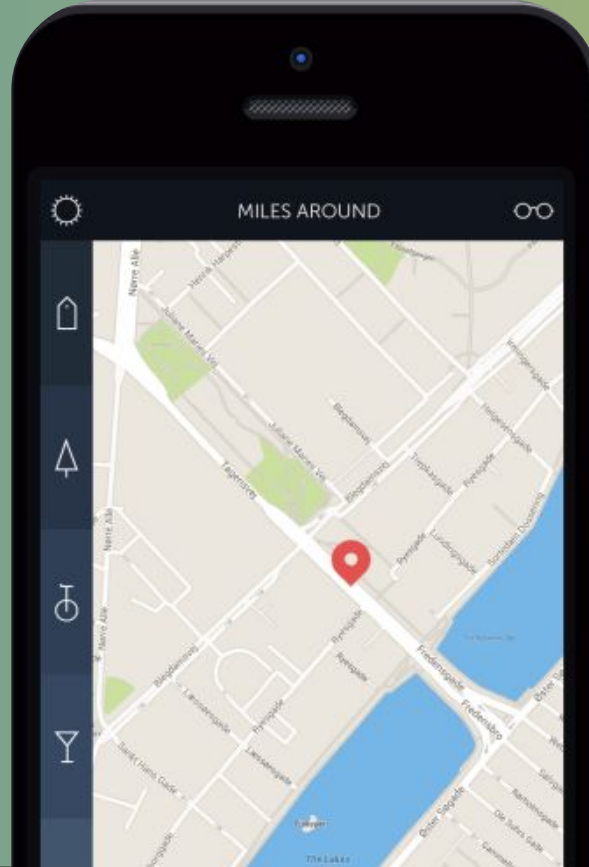
OPEN SANS, GENTIUM BASIC

THE RIVERS AND THE SEA

Once upon a time all the Rivers combined to protest against the action of the Sea in making their waters salt. "When we come to you," said they to the Sea, "we are sweet and drinkable; but when once we have mingled with you, our waters become as briny and unpalatable as your own." The Sea replied shortly, "Keep away from me and you'll remain sweet."

4. MAKE IT FUNCTIONAL

Based on your draft and sketches, start building your apps



5. TEST IT

Test the functionality, user friendliness of the web app.

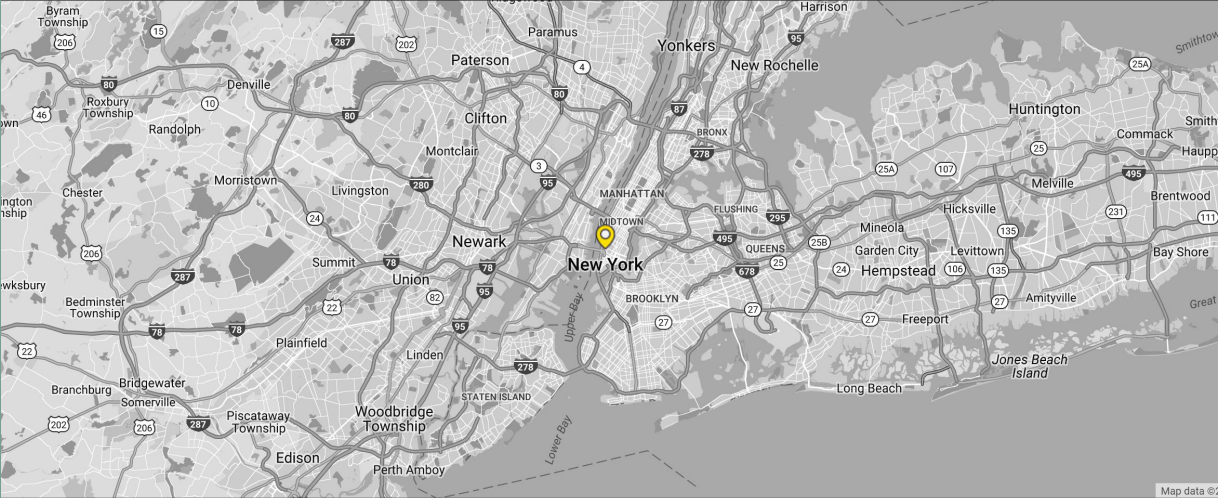


WEB APP WITH

bubble

IMBY

LOG INSIGN UP



Map data ©

BACKALLEYS | EVENTS

+ Add a new site

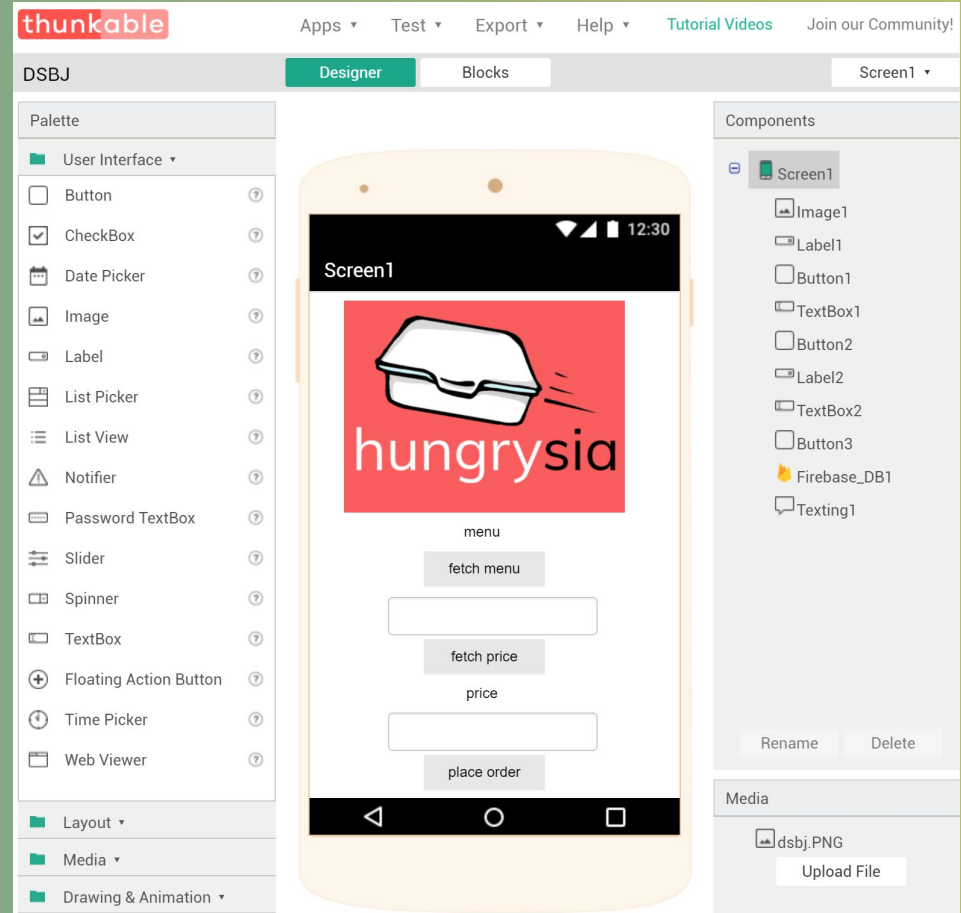
Current cell's Backalley Site's Image of Backalley	Current cell's Backalley Site's Image of Backalley	Current cell's Backalley Site's Image of Backalley	FILTER <div>AREAS<div>Choose an option...</div></div> <div>CAPACITY<div>Choose an option...</div></div>
--	--	--	--

Workflow

1. Listing down data types and fields each data type requires
2. Relationship between each data types
3. Inputs, Saving Data
4. Containers - Groups, Repeating Group List
5. Display Data

MOBILE APP WITH

thunkable



Workflow

1. Wireframe your UI
2. Replicate in Designer view
3. Create necessary databases
4. Program the events and logic through the Block View
5. Deploy on your android phone

**VOTE FOR THE WORKSHOP YOU WANT
US TO PROVIDE ON 10 NOV 2017**

Go to **www.menti.com** and use the code **20 09 93**