Bornfight® x photomath

Software Prototyping Workshop

Bornfight®

Matea Tomić

- Product Designer @ Bornfight
- Mentor, speaker and product designer.
- 7+ years of experience in the design field of work, 6+ years focused on digital products, user experience and user research.
- Working on camping property management system and is responsible for design execution and UX strategy.

BORNFIGHT

We create digital product companies

Founding successful companies by combining great ideas with business expertise, capital and technical execution.

photomath

Filip Fajdetić

- Engineering Manager @ Photomath
- 7+ years of product development experience
- Currently leading the Internal Tools team at Photomath

Quick Facts

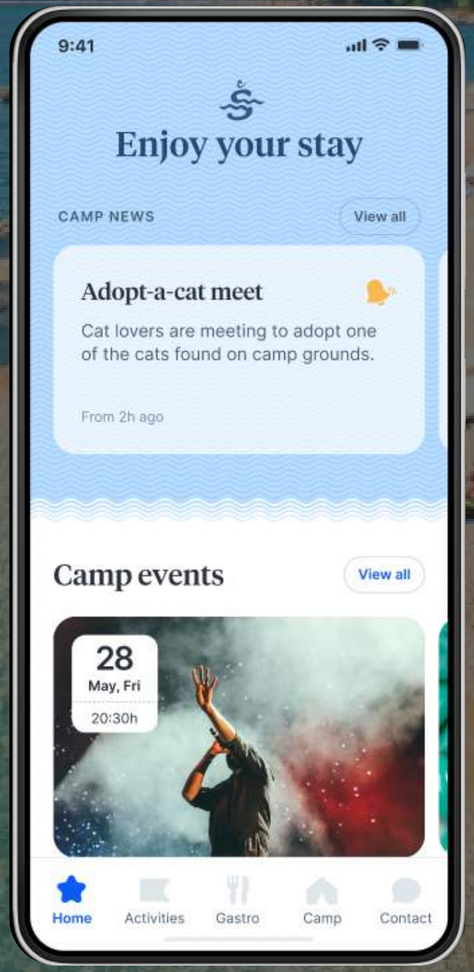
- #1 App in the world to learn math
- Over 300 M downloads globally
- 30+ languages
- 195+ countries
- 2B math problems solved monthly

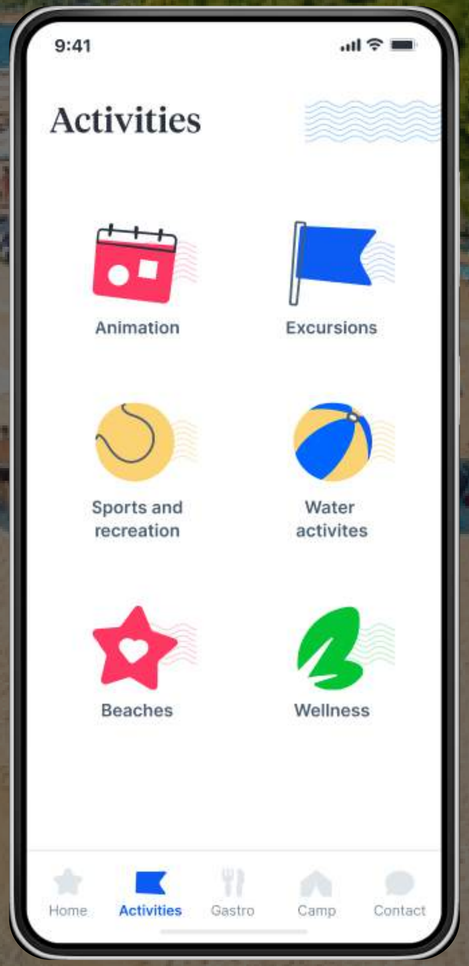
- Founded 2014
- Offices: Zagreb, Croatia & San Mateo, California
- Employees: 170+
- Students: 130+

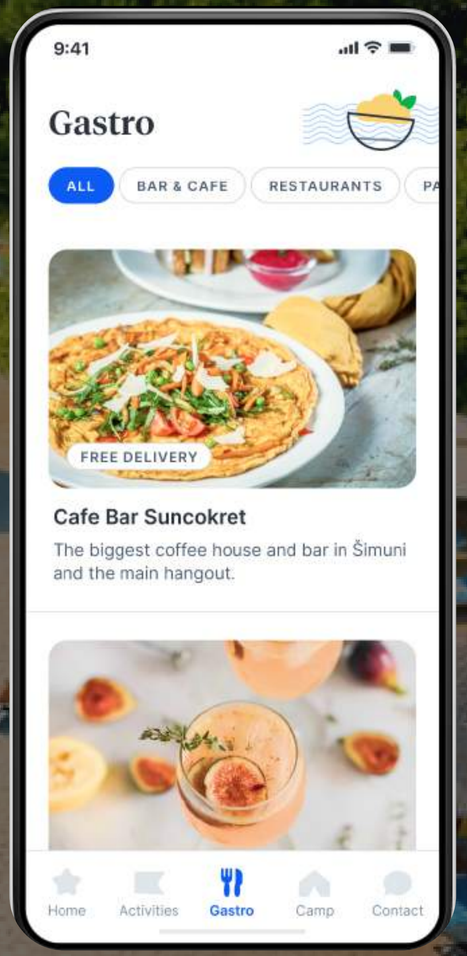
photomath

Bornfight® x photomath

Kamp Šimuni Loyalty App







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01 Product Development

Summary

Product development typically refers to all stages involved in bringing a product from concept or idea through market release and beyond.

Product Development

Ideation

- Explore idea generation
- Competitive analysis
- User interviews
- Fill out narrative, explore ideas
- Define who is the user and what is the problems

Product Strategy

- Define what do users want to do
- What are users willing to pay for?
- Is the solution technically feasible
- Personas

Prototyping

- Validate the hypothesis before building out the MVP
- Usability testing sessions
- Market research

MVP Development

- Discover
- Define
- Write down epics and tasks
- Estimate
- Deliver

Growth

- Consumers have accepted the product in the market
- That means demand and profits are growing
- The growth stage is when the market for the product is expanding and competition begins developing

02 Ideation

Summary

The process of coming up with an idea that can be turned into something valuable

Business Problems

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A business problem statement is a concise description of the problem that needs to be solved.

Who is affected by the problem?

What is the problem?

Where does this problem occur?

When does the problem occur?

Why does the problem occur? **Why** is the problem important?

Example

Business Problem Statement

Camp visitors are not familiar with the content that the camp offers

Lack of onsite sales

There is one shop in the camp, for visitors it can be tiring to go far to buy something.

A limited number of places in restaurants with food due to the Covid-19 situation, people want to order food

For all information about the camp or inquiries, visitors need to go to the reception

User Research

User research helps us to validate if the business problems are actual problems with our users.

Common research methods are usability testing, user interviews, surveys, card sorting, tree testing, field studies, and more. To choose the right UX research method for your project, you first need to understand the problem you're trying to solve and what data you need to collect to solve the problem.

03 Product Strategy

Summary

A product strategy is a high-level plan describing what a business hopes to accomplish with its product and how it plans to do so.

Technology
Strategy
Business Goals
User Needs

User Needs

Value Propositions & Hypothesis

A **Value Proposition** is a product, service, or experience that creates desired gains or relieves existing pains.

A **Design Hypothesis**, is basically an assumption. Something that someone believes to be true.

Example

Value Proposition

Build an application that will encourage loyalty and familiarization of visitors with the camp and its contents

Make it easy for the camp visitors to use different facilities and to order food.

Make sure that the app serves as an info point for the end customer

User personas are archetypical users whose goals and characteristics represent the needs of a larger group of users.

Insights persona provides

- User background
- User goals
- User frustrations

Example

Jonas Strauss

Job	Data Analyst	**Location**	Germany
Age	35	**Kids**	4
Satus	Married		

Background

Data analyst, married, with 4 children with the love of camping. Each summer they travel across the europe but the most favorite country to camp in is Croatia.

Goals

Jonas wants to have a guideance when arriving into camp without taking multiple visits to the camp information center. Since his life with 4 kids is super dynamic ideally he wants proper info on the go.

Frustration

Jonas is often not familiar with the experiences that camp provides, there is limited amount of restaurants and bars that offer food due to covid. It’s often tiring to go to the camp info center and back for the right information.

Business Strategy

Example

Business Strategy

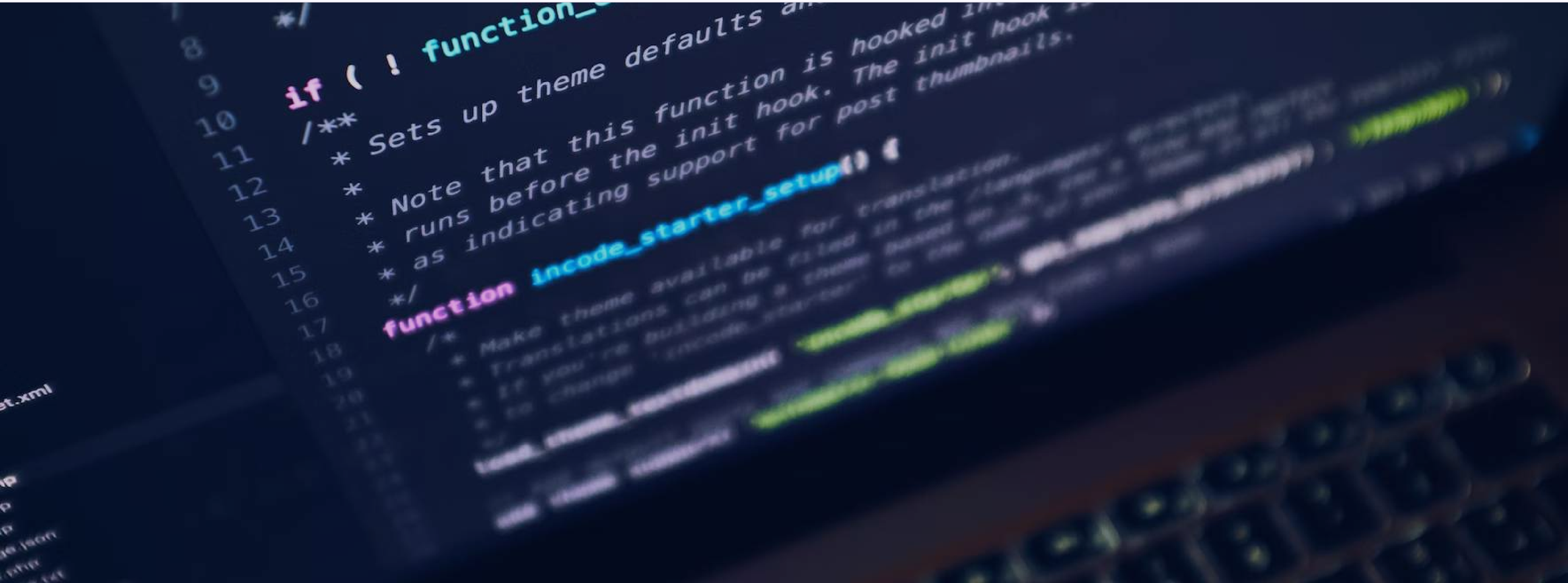
Build an application that will encourage loyalty and familiarization of visitors with the camp and its contents

Earnings through increased use of additional activities in the camp and greater consumption of food inside the camp (focus on Šimuni facilities)

Increased revenue because more camp visitors are coming back next year.

Male/female, 25-55, urban, open to technology, but not necessarily very tech savy. Families.

Tech Strategy



Example

Tech Strategy

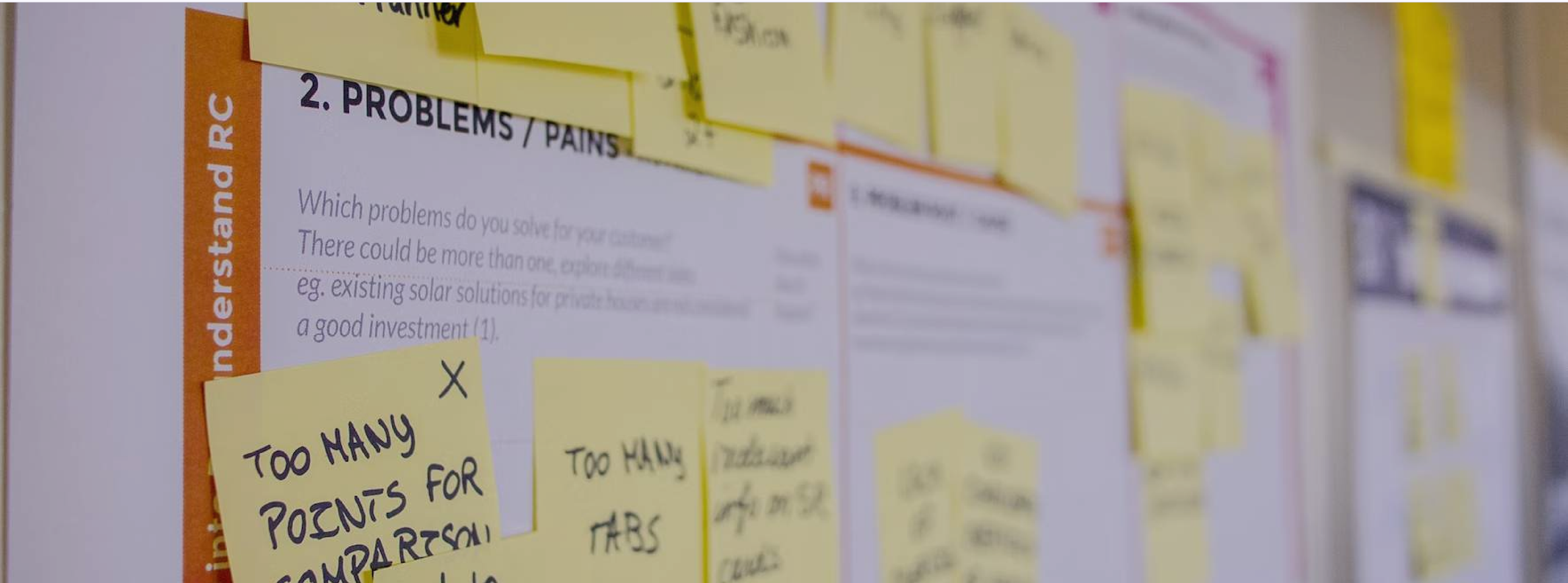
A mobile app developed with Flutter will be cost-effective for this product.

04 Prototyping

Summary

A prototype is a model you can build to help you validate your hypothesis before investing time and money to build the whole MVP.

Business Validation



Reasonably predict whether people will buy your product or service, and whether your business will be profitable.

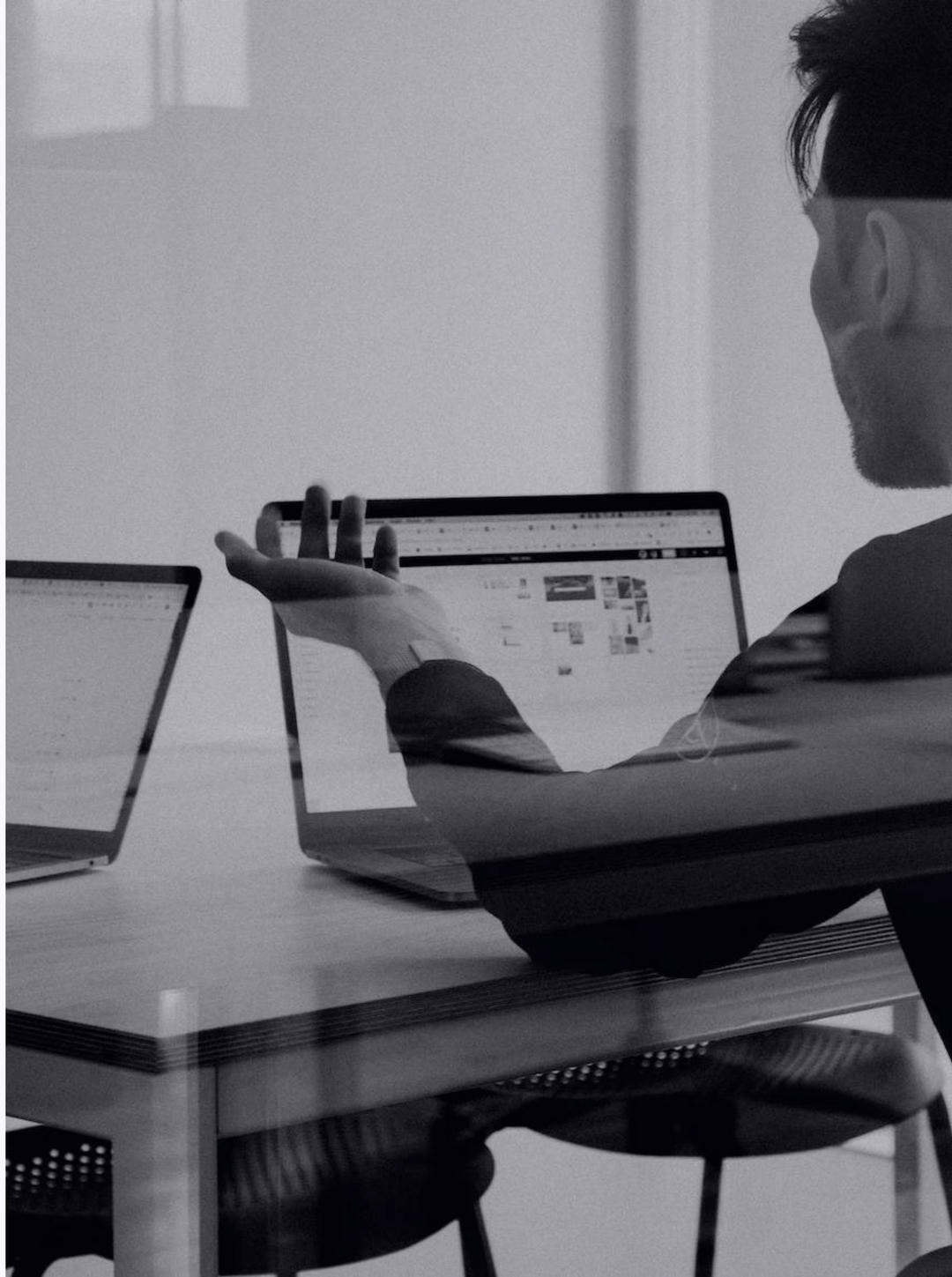
Methods

- Alpha and Beta testing
- Customer Validation Interviews
- Assess market size and share

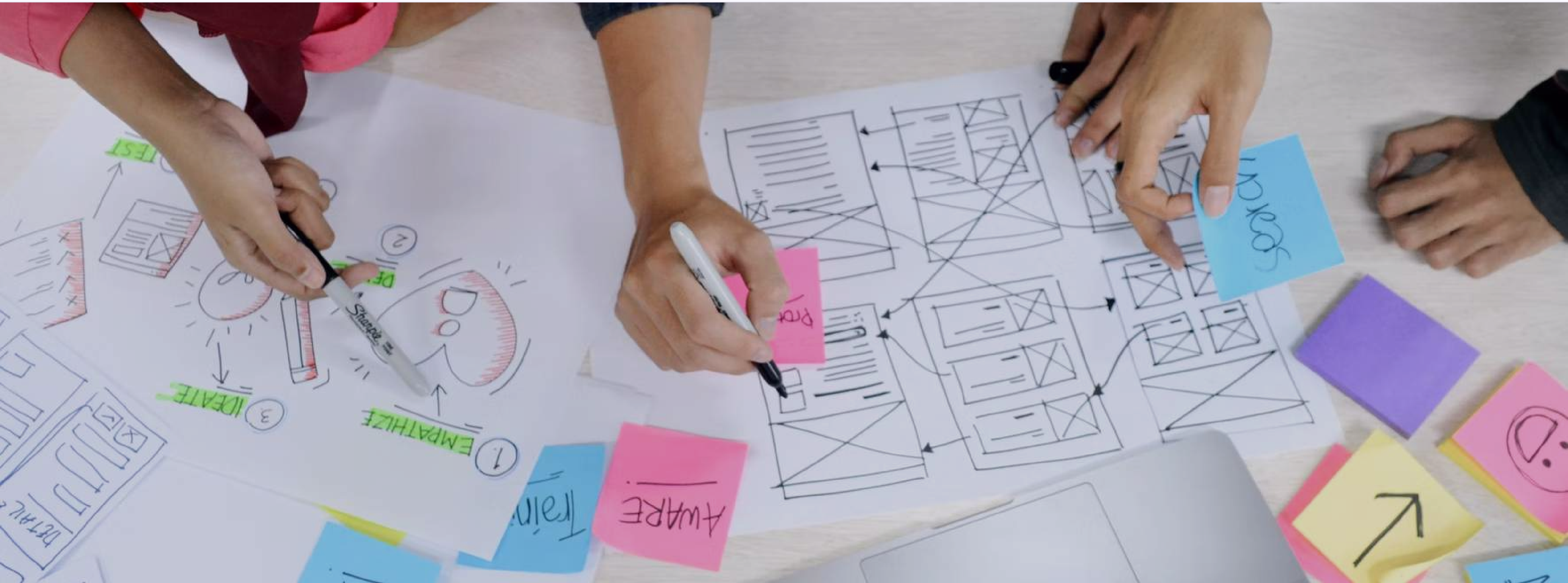
Proof of concept

Avoid possible technical and other problems in the future, and obtain valuable feedback at an early stage of the development cycle.

Shows whether the software product or its separate function is suitable for solving a particular business problem

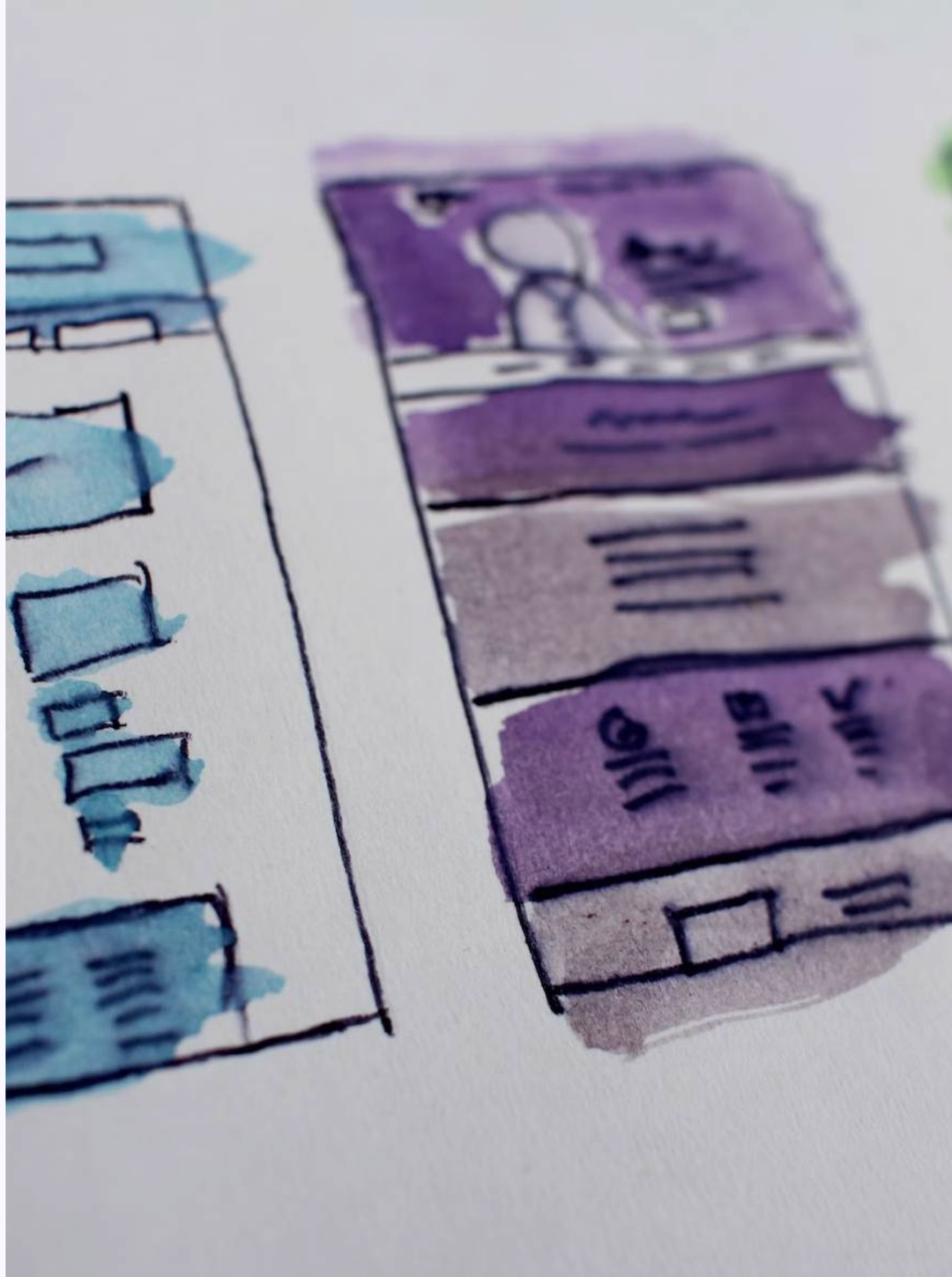


Design Prototype



Prototypes help UX/UI designers show stakeholders how the final product would look and function.

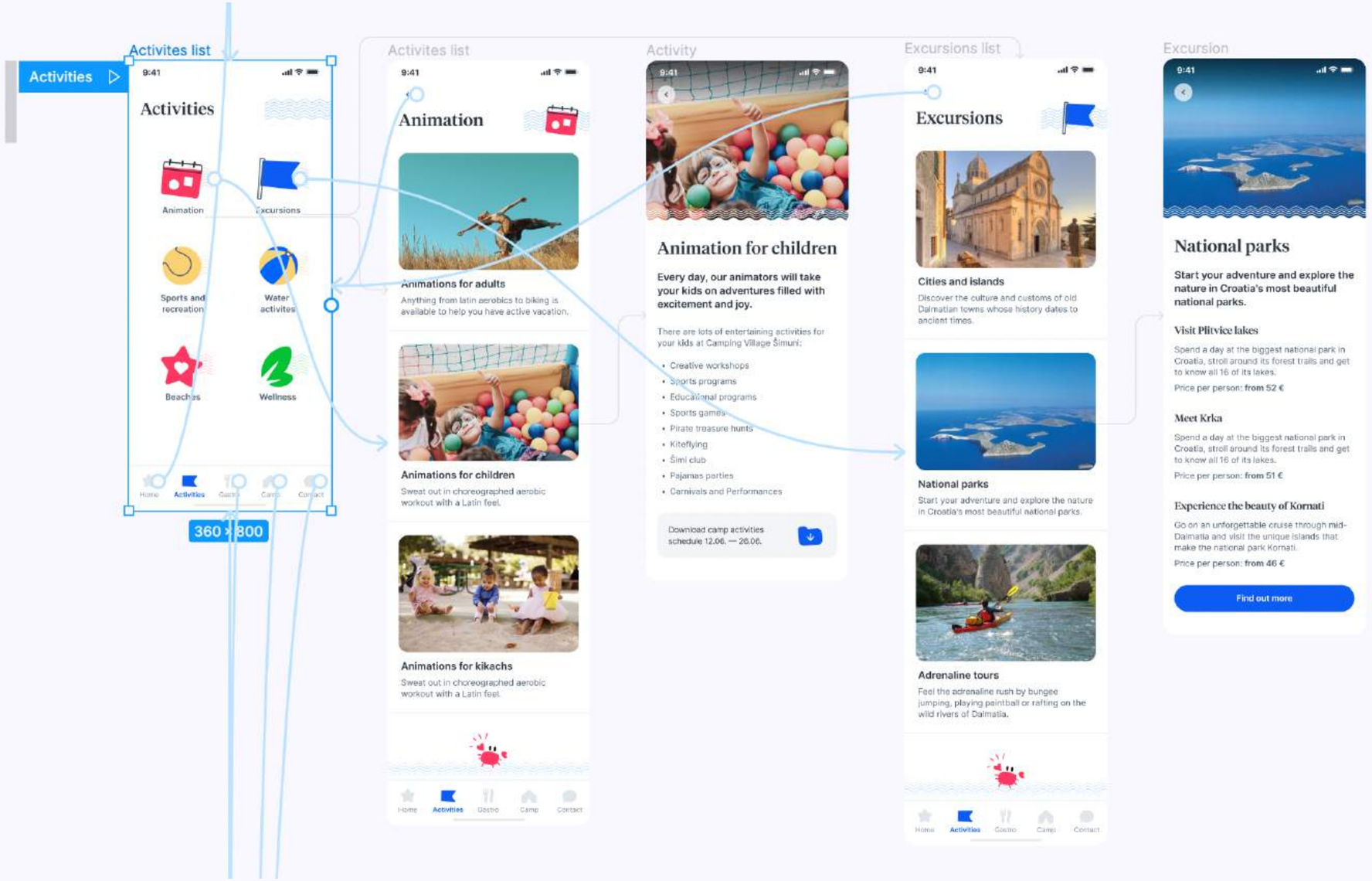
You can mock-up every feature and interaction in your prototype as in your fully developed product, check if your idea works, and verify the overall user-experience (UX) strategy



Example

Play Prototype

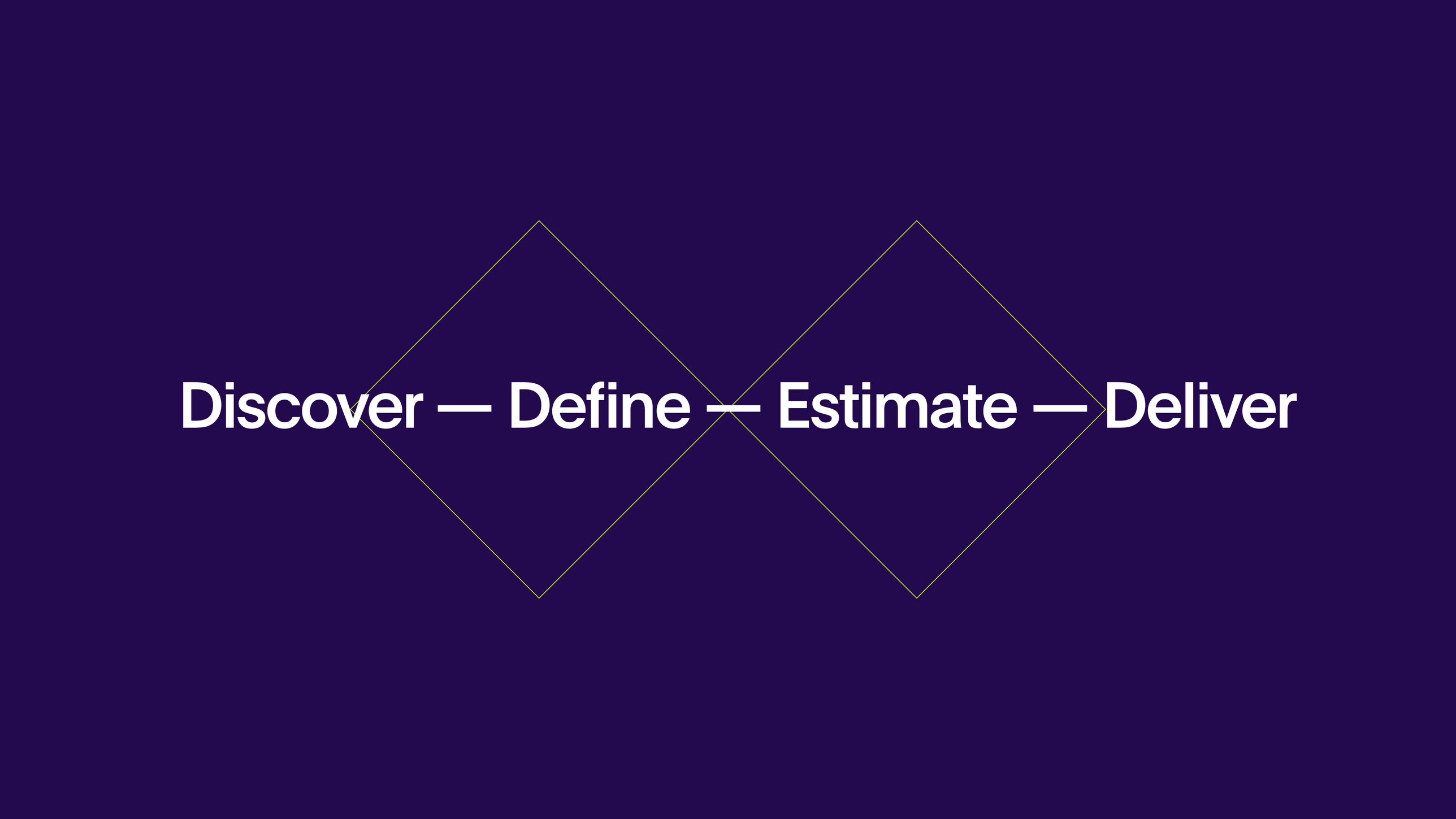
Activities and list



05 MVP Development

Summary

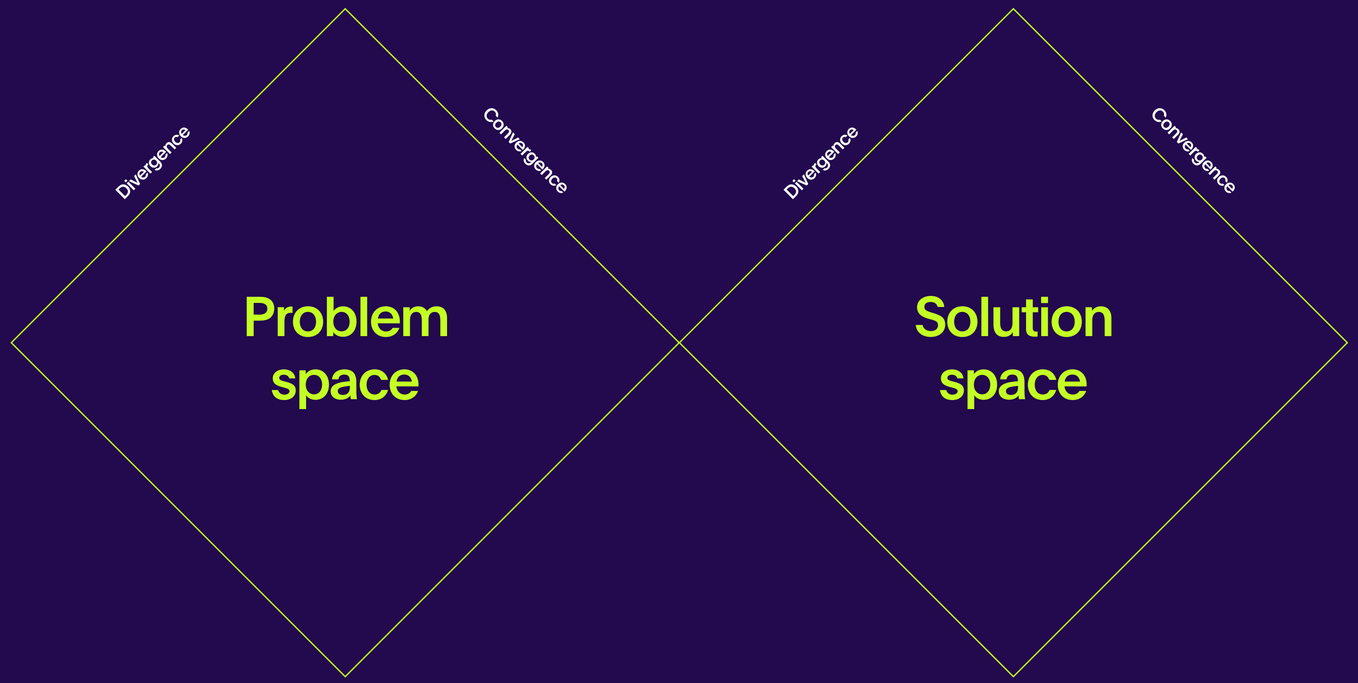
MVP Development is usually done in 4 phases: Discover, Define, Estimate and Deliver


Discover — Define — Estimate — Deliver

Doing the right thing

Doing things right

Don’t know, could be



Do know, should be

Discover

The act of gathering key project information so you can gain a high-level understanding of the project.

Discovering features and ideas that can help make a unique product.

Methods:

- Discovery Workshops
- Event Storming
- Impact & Effort matrix

Discovery Workshops

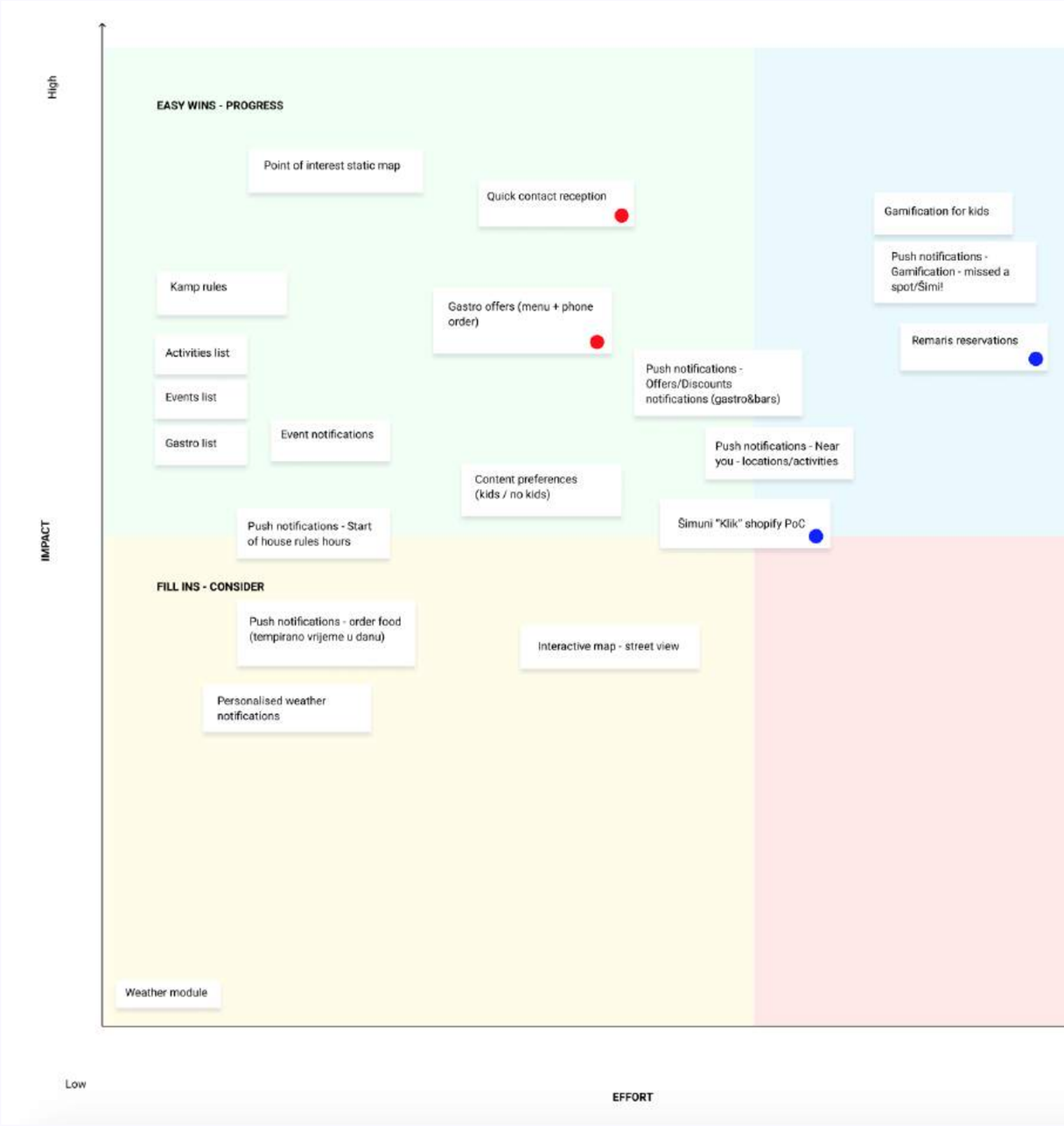
- Explore the subject area
- Identify bottlenecks
- Describe high-level solutions to the expected or existed problems
- Identify priorities and form a backlog
- Create the roadmap of the project

Event Storming

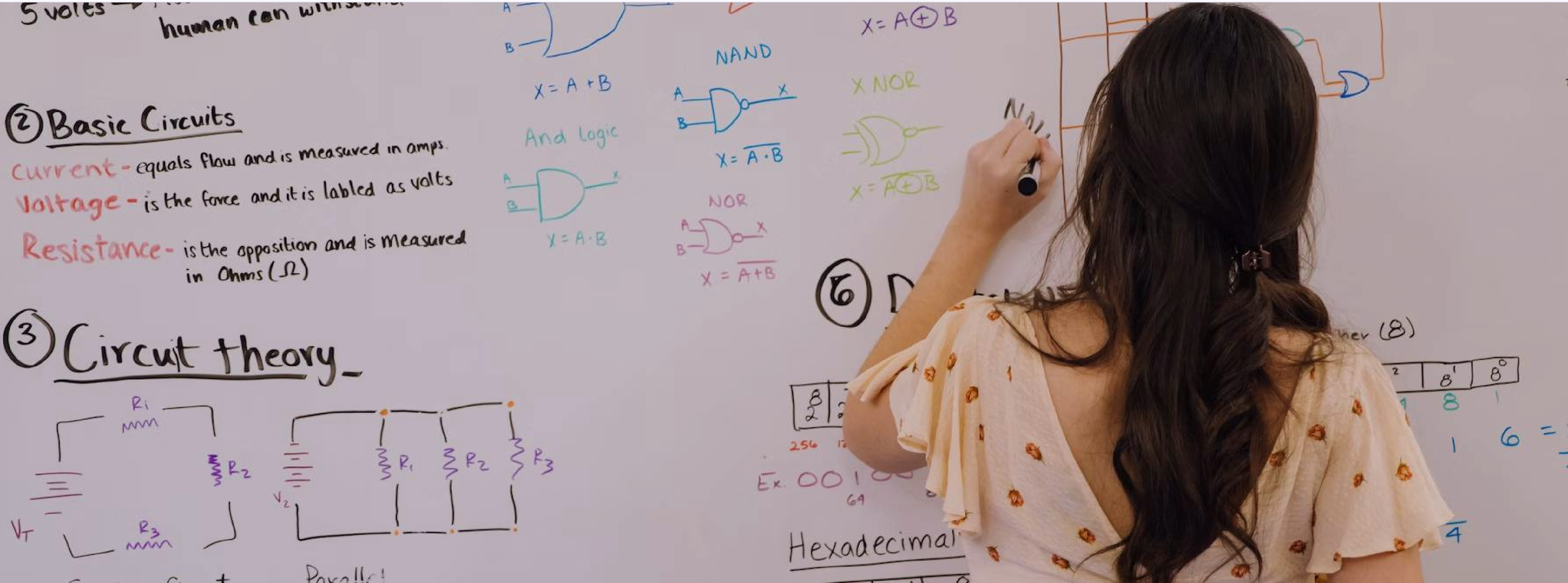
Event storming is a workshop-based method to quickly find out what is happening in the domain of a software program.

Impact-Effort Matrix

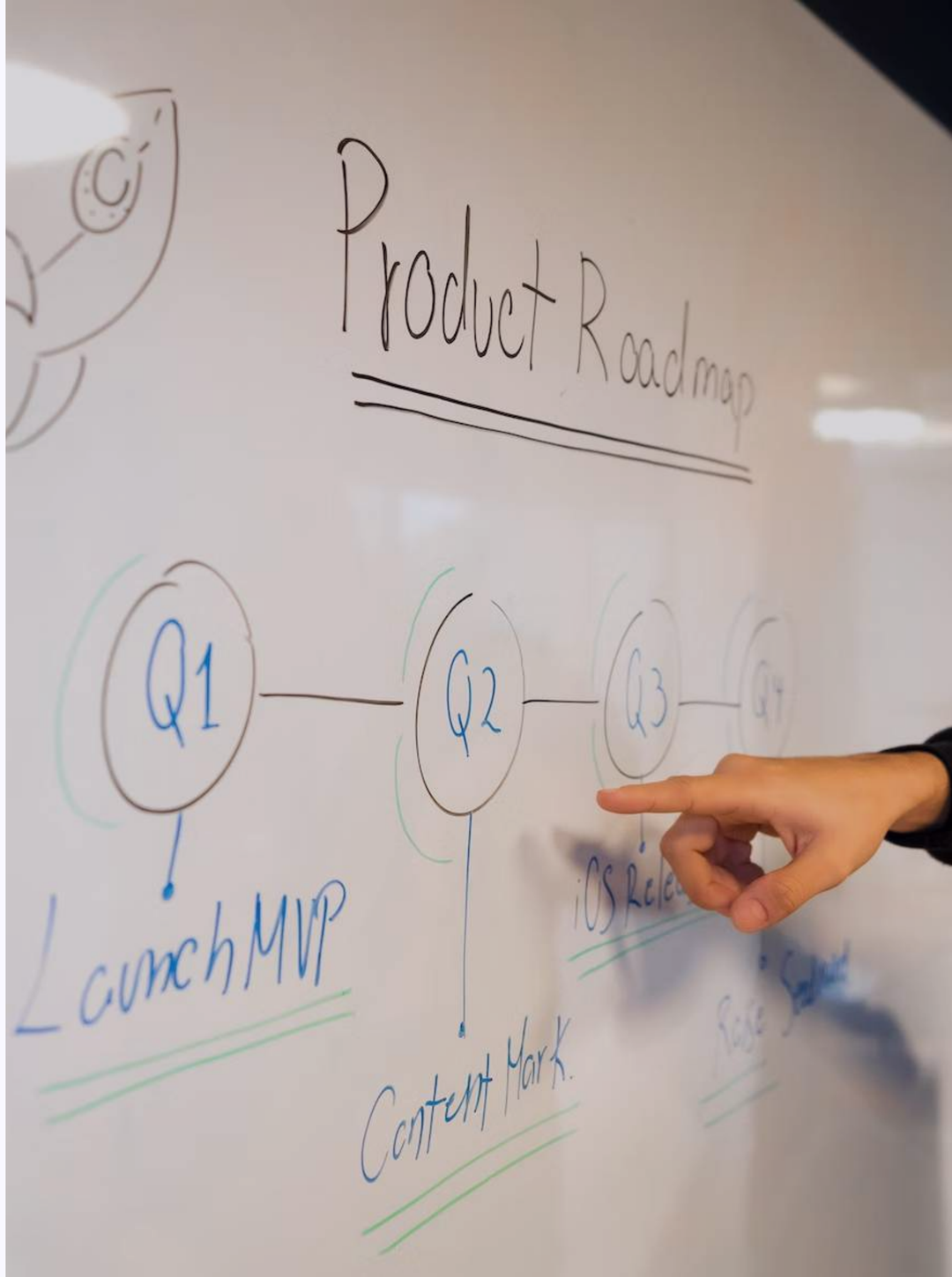
A visual tool designed to help teams prioritize tasks and maximize their efficiency while ensuring that their goals are aligned.



Define


5 volts
human can
② Basic Circuits
Current - equals flow and is measured in amps.
Voltage - is the force and it is labled as volts
Resistance - is the opposition and is measured in Ohms (Ω)
X = A + B
And Logic
X = A · B
NAND
X = $\overline{A \cdot B}$
NOR
X = $\overline{A + B}$
X = A ⊕ B
X NOR
X = $\overline{A \oplus B}$
③ Circuit theory
R1
R2
R3
VT
V2
Parallel
Hexadecimal

Here we define the scope, risks, analytics, key metrics, roadmap and technology



Scope definition

Epics are a helpful way to organize your work and to create a hierarchy.

User story is an informal, natural language description of features of a software system.

```
As a < type of user >
I want < some goal >
so that < some reason >
```

Development Technology

Platforms

- Web
- Mobile
- Other (Desktop, IoT)

Platforms

- Architecture
- Intrastructure
- Framework

Task

Example

Think of one of your epics. Create 2 user stories. Optionally break them up into tasks.

Epic: Gastro offers

Story: As a camp visitor, I want to order food to my campsite location so I don’t have to walk and get the food myself.

Acceptance Criteria:

- The minimum amount for delivery is 50 kn.
- The visitor can place an order from a restaurant in less then 5 clicks.
- The visitor can choose more than 1 item from the menu.

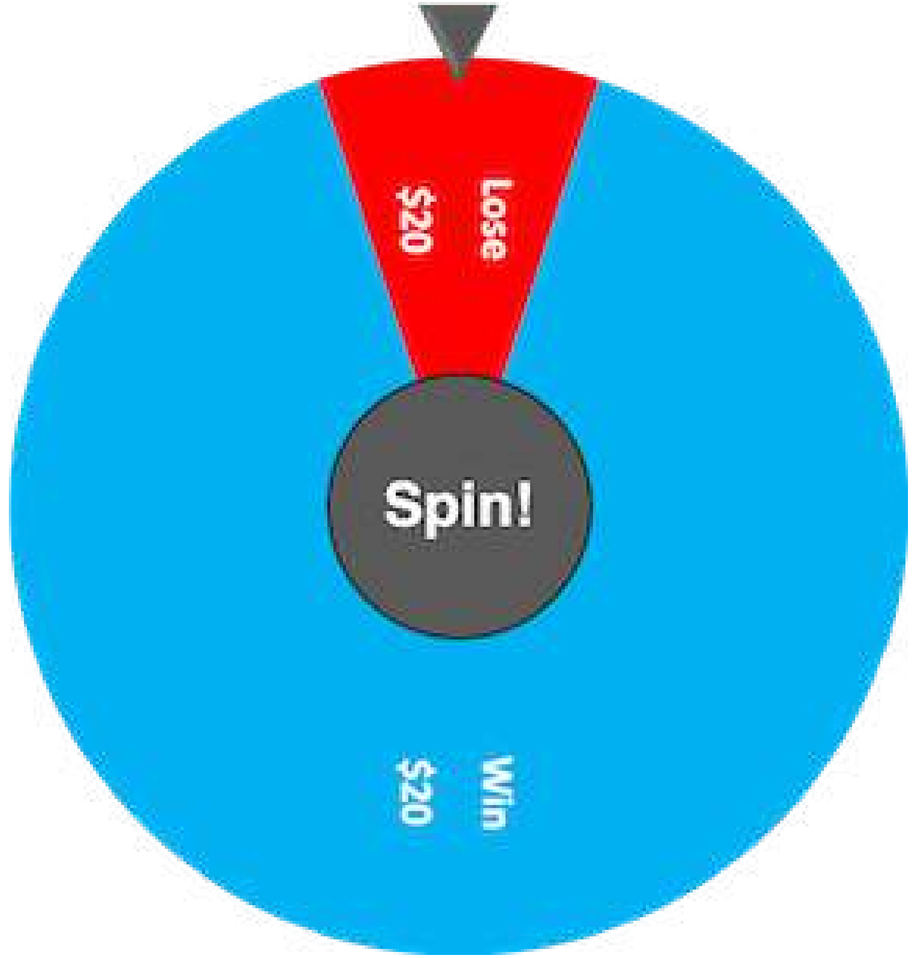
Tasks: On restaurant screen, list all items on the menu.

Estimate

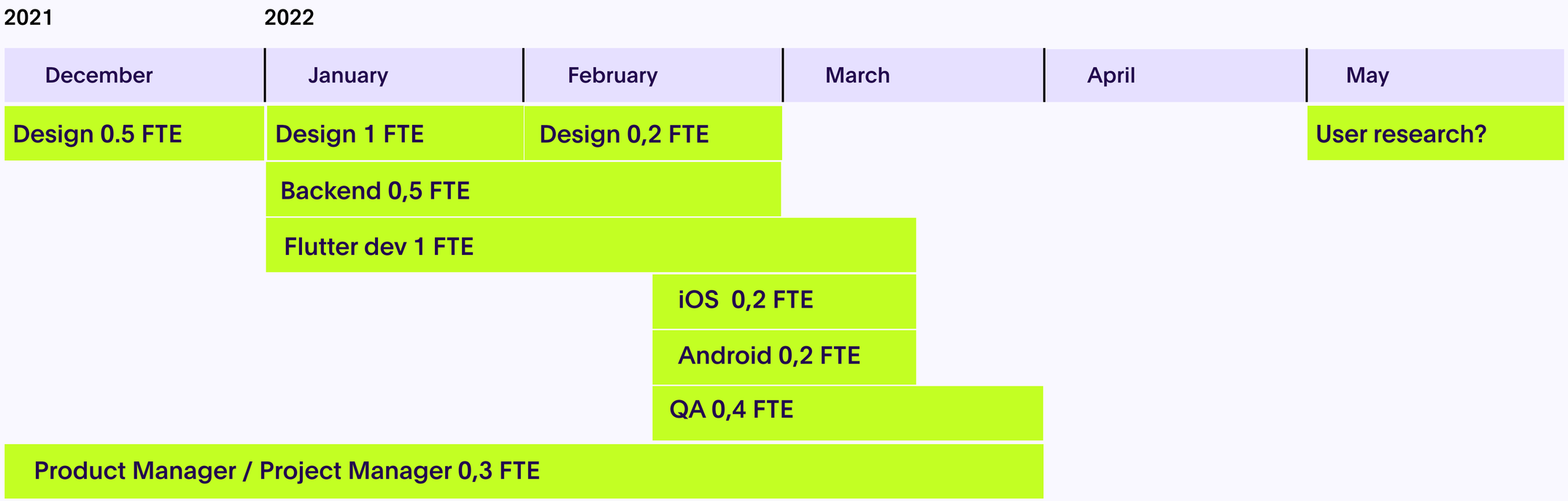
How long it will take to make your MVP?

Estimation tools:

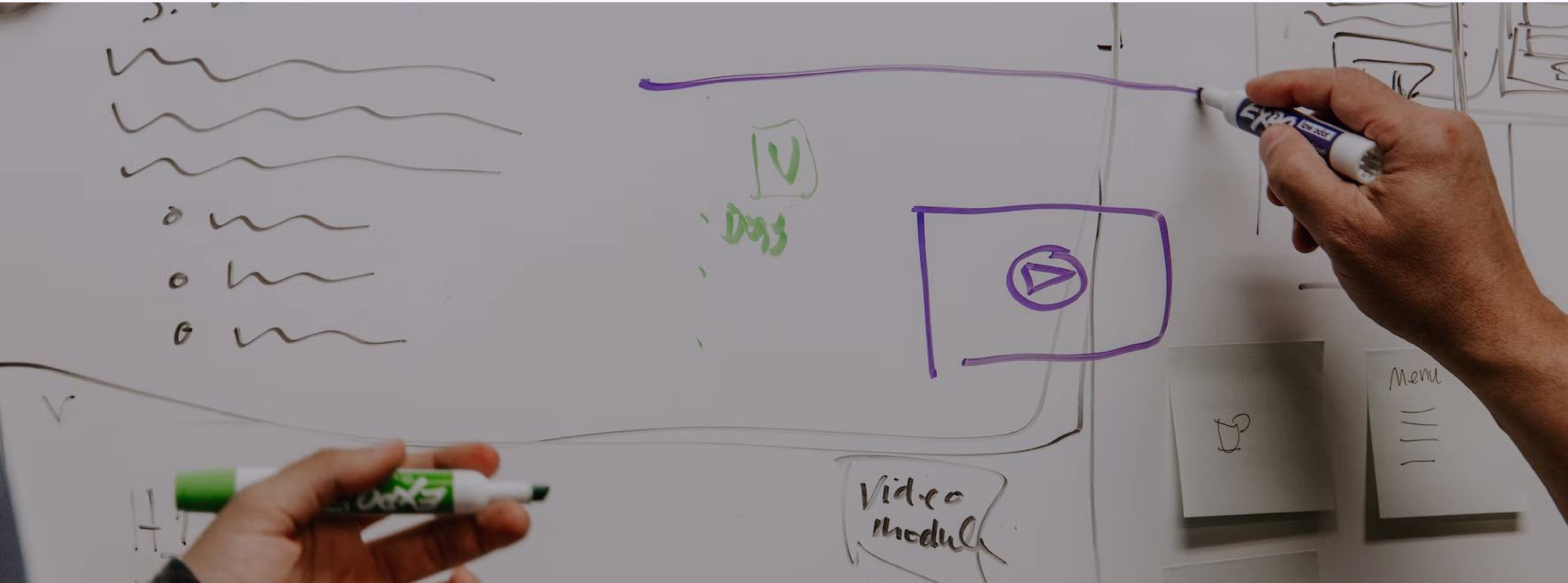
- 3-point estimate
- Equivalent bet test
- Checklists



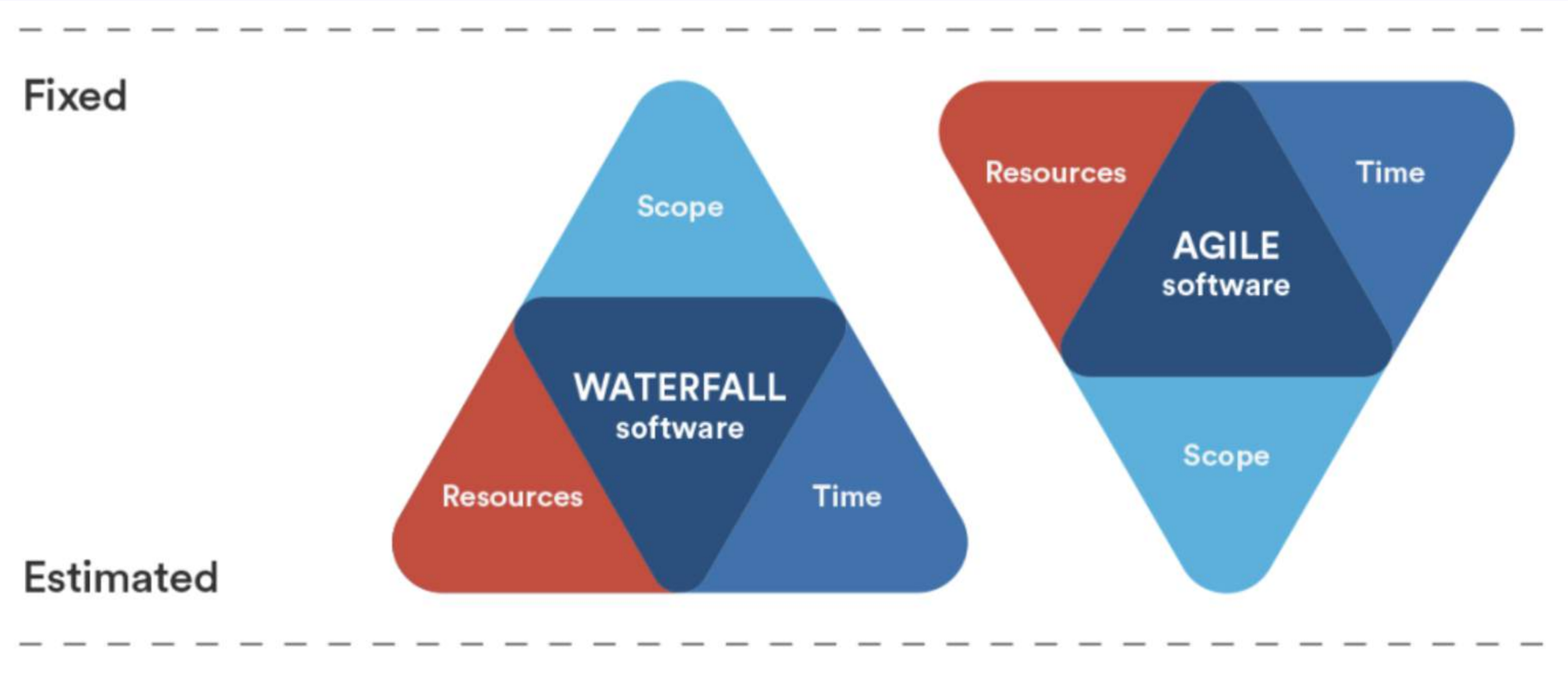
Example


2021
2022
December
January
February
March
April
May
Design 0.5 FTE
Design 1 FTE
Design 0,2 FTE
User research?
Backend 0,5 FTE
Flutter dev 1 FTE
iOS 0,2 FTE
Android 0,2 FTE
QA 0,4 FTE
Product Manager / Project Manager 0,3 FTE

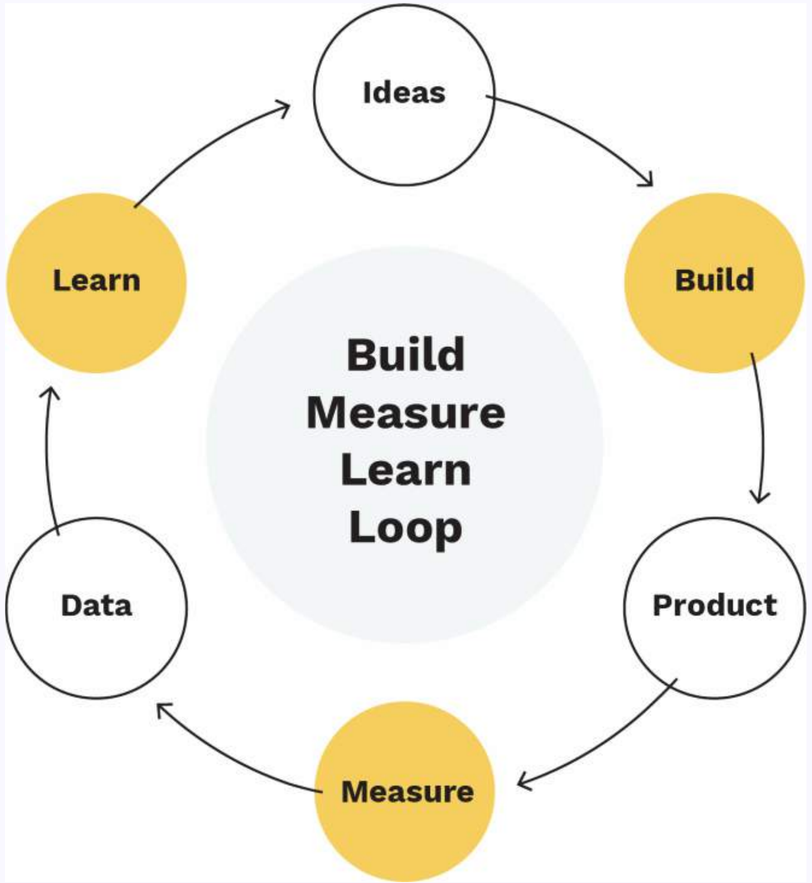
Deliver



Waterfall vs Agile

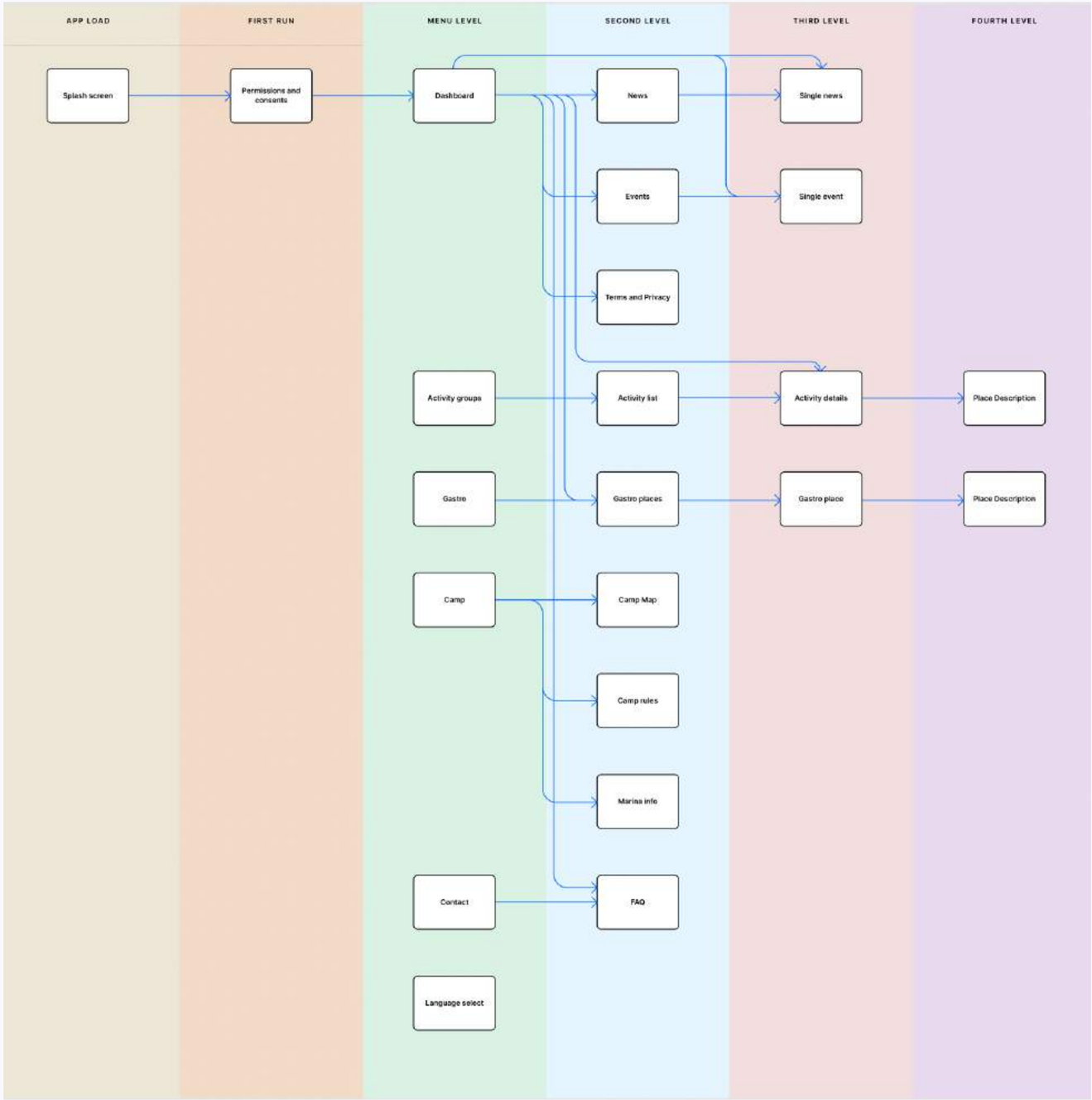


Build measure Learn Loop

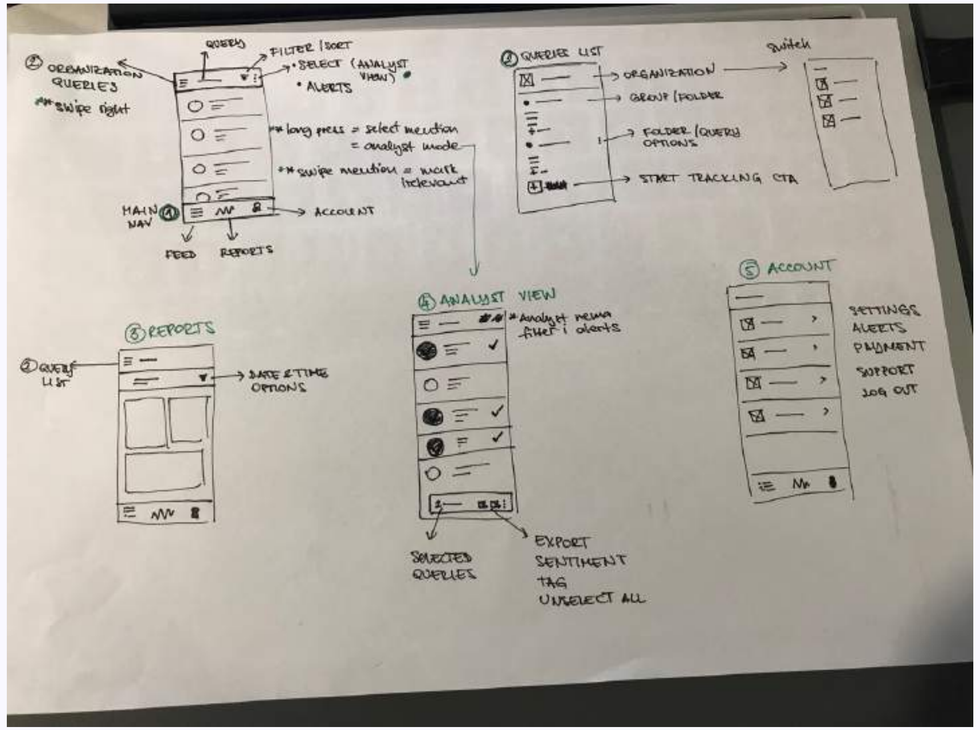


Design

User Flows

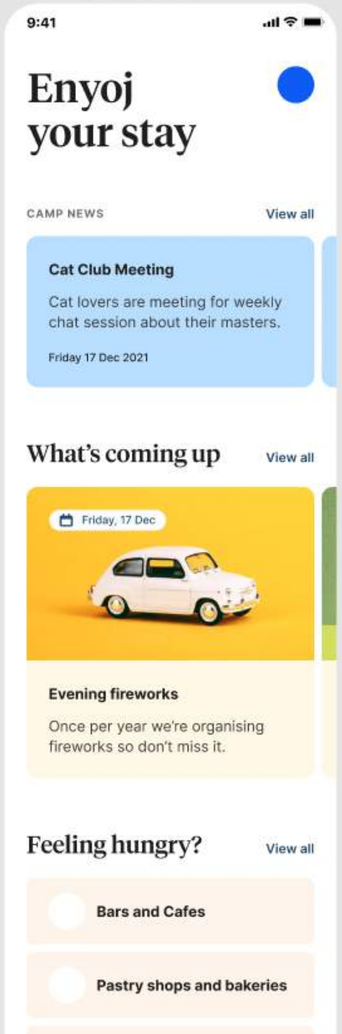

APP LOAD
FIRST RUN
MENU LEVEL
SECOND LEVEL
THIRD LEVEL
FOURTH LEVEL
Splash screen
Permissions and consents
Dashboard
News
Single news
Events
Single event
Terms and Privacy
Activity groups
Activity list
Activity details
Place Description
Gastro
Gastro places
Gastro place
Place Description
Camp
Camp Map
Camp rules
Marina info
Contact
FAQ
Language select

Low fidelity wireframes and sketches



Art direction exploration process

Search_results



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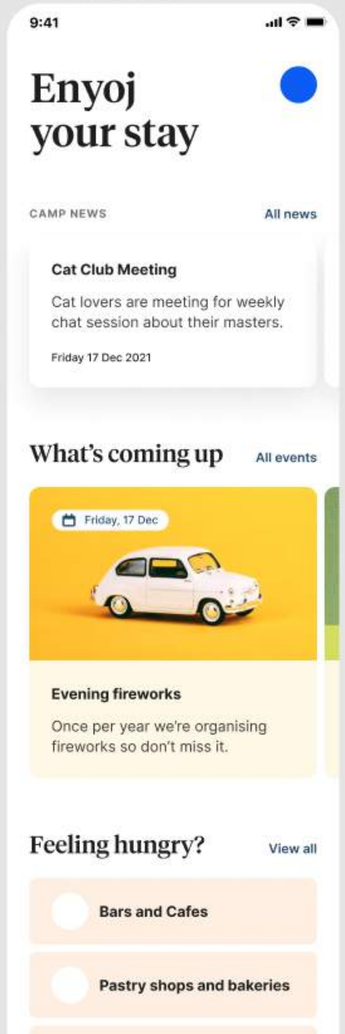

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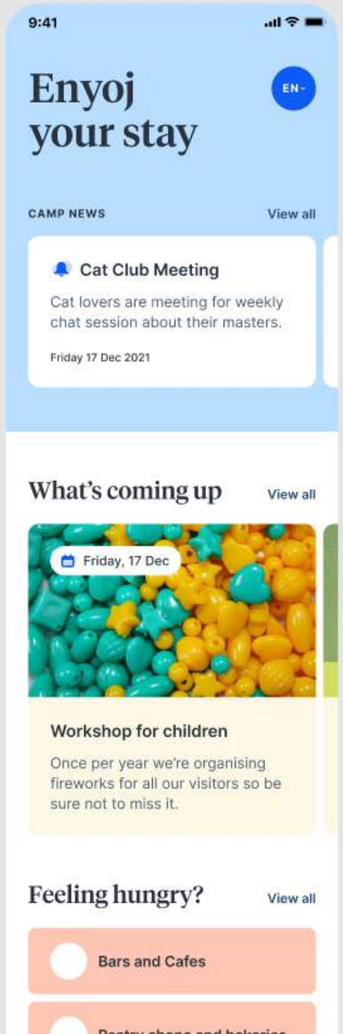

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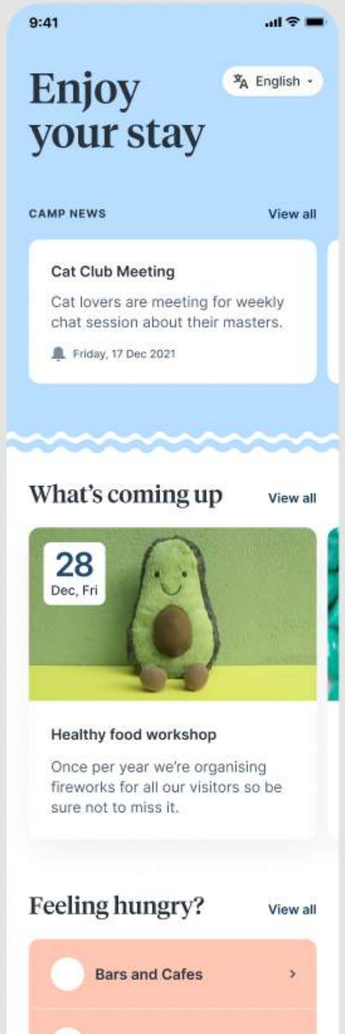

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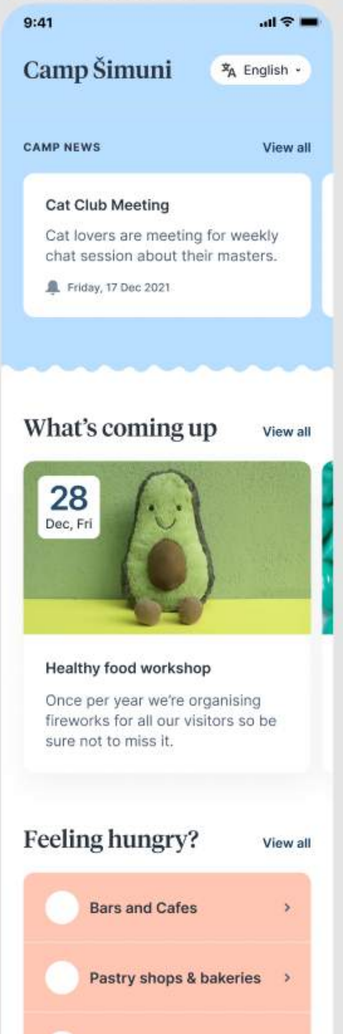
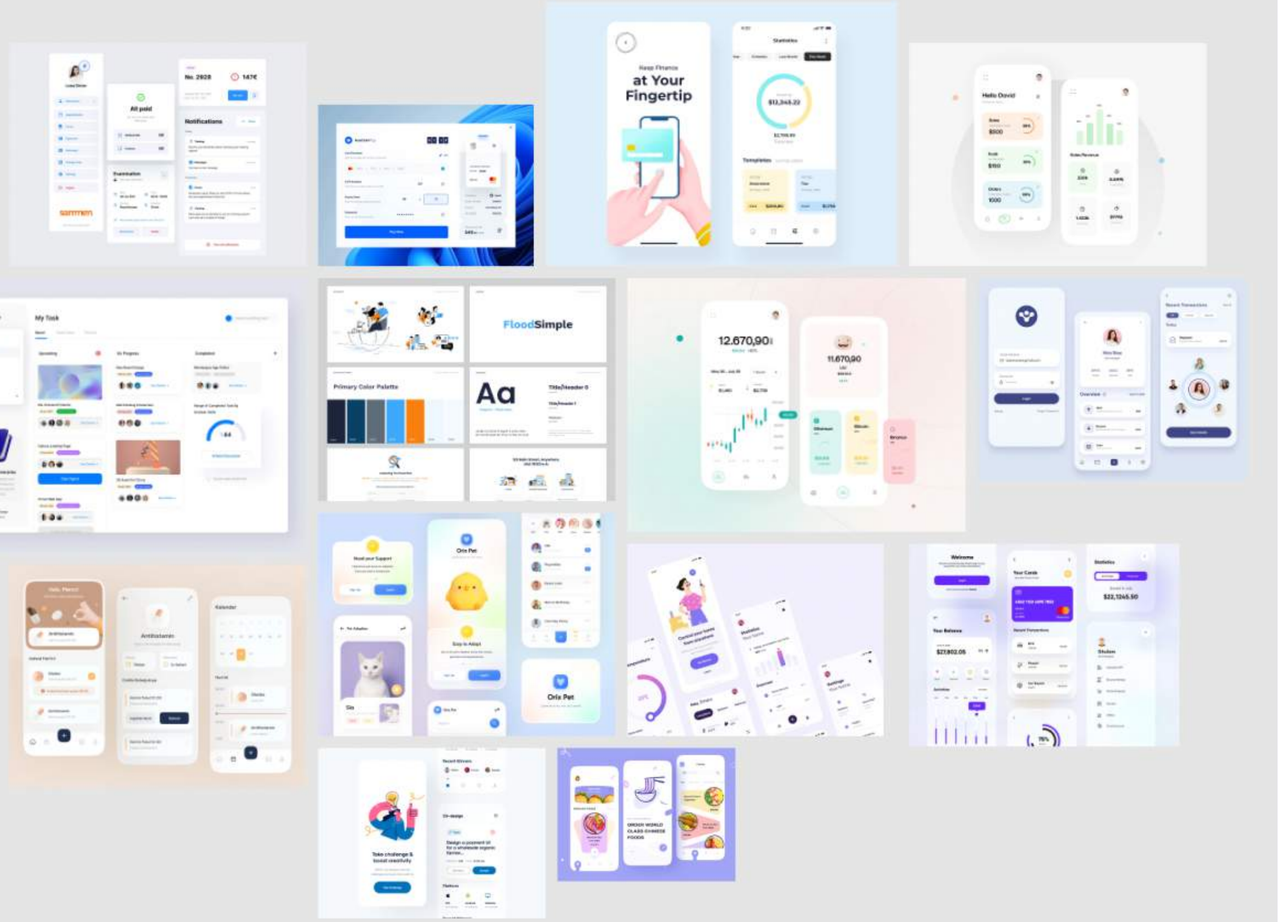
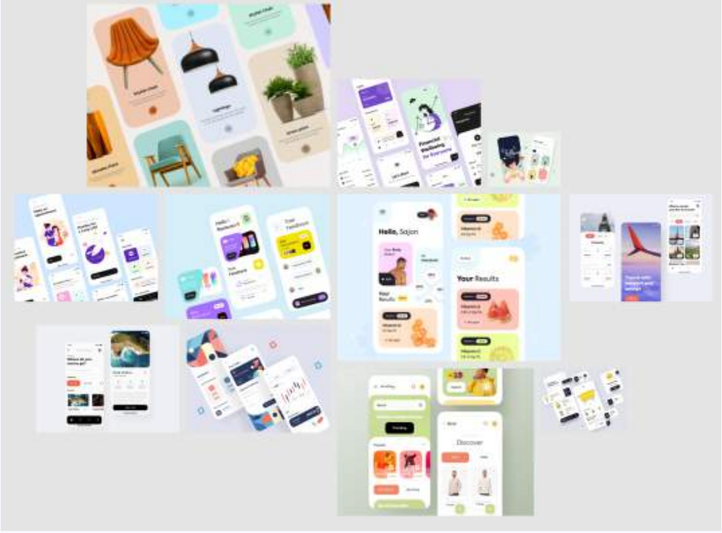


Moodboard

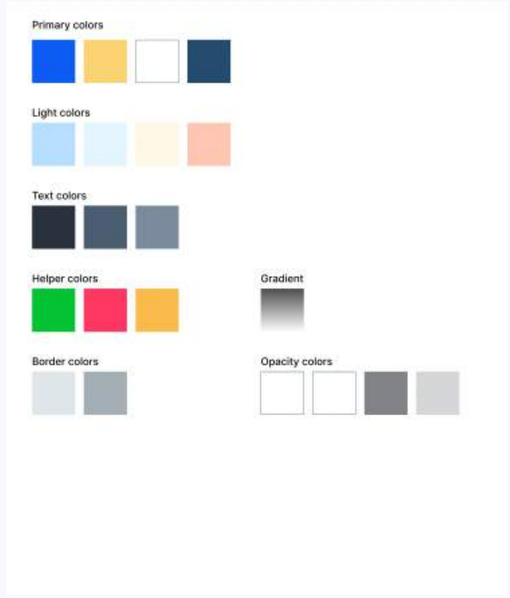
Light approach

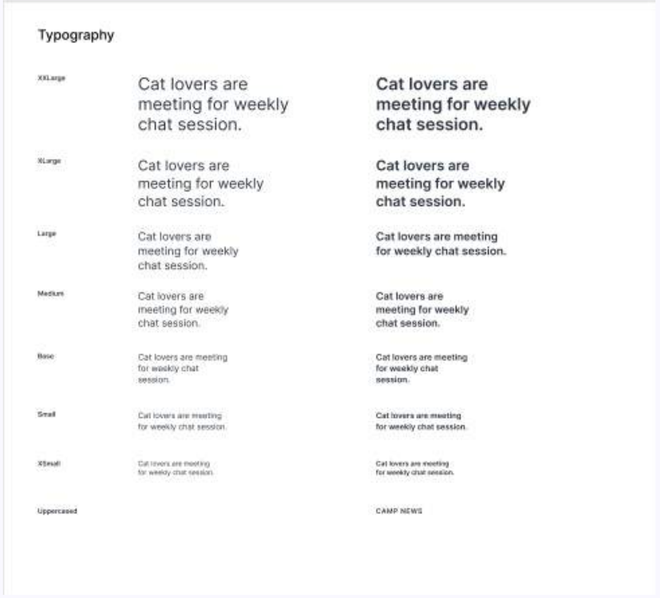


Light with strong sections

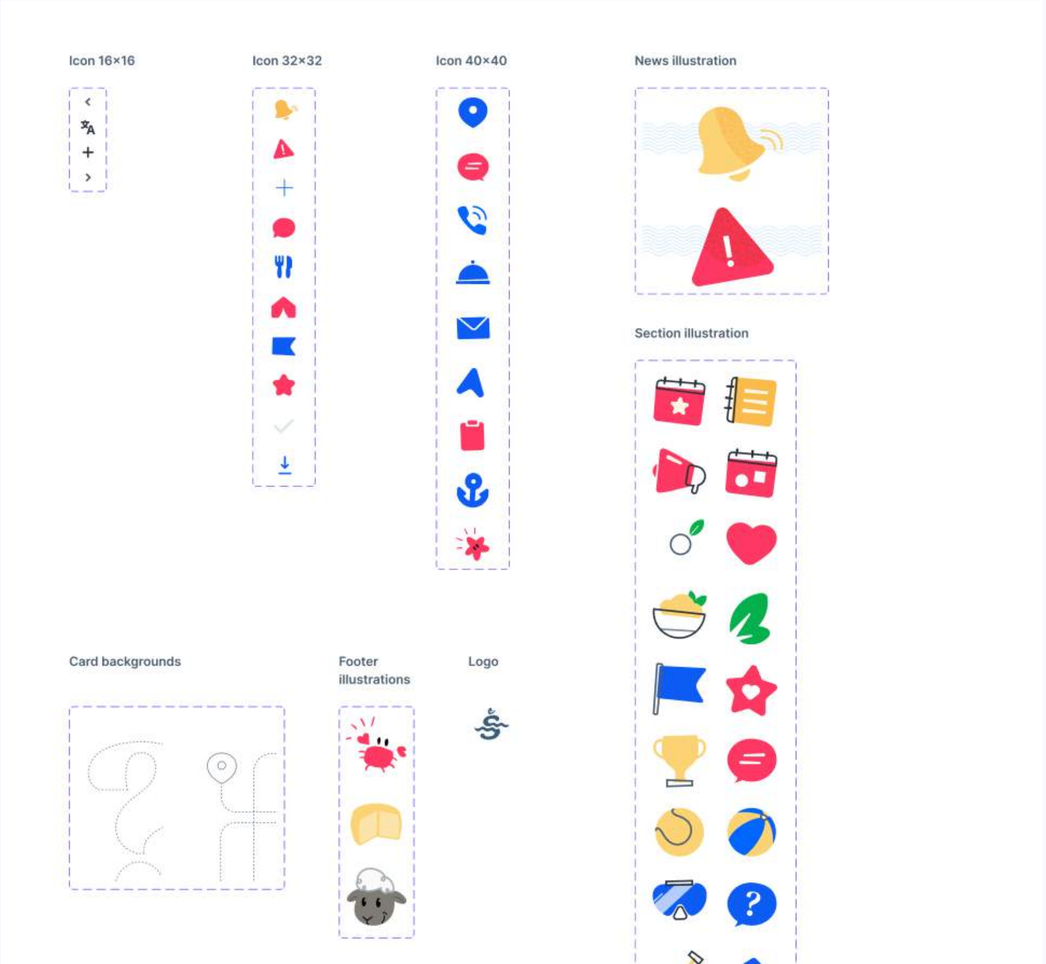


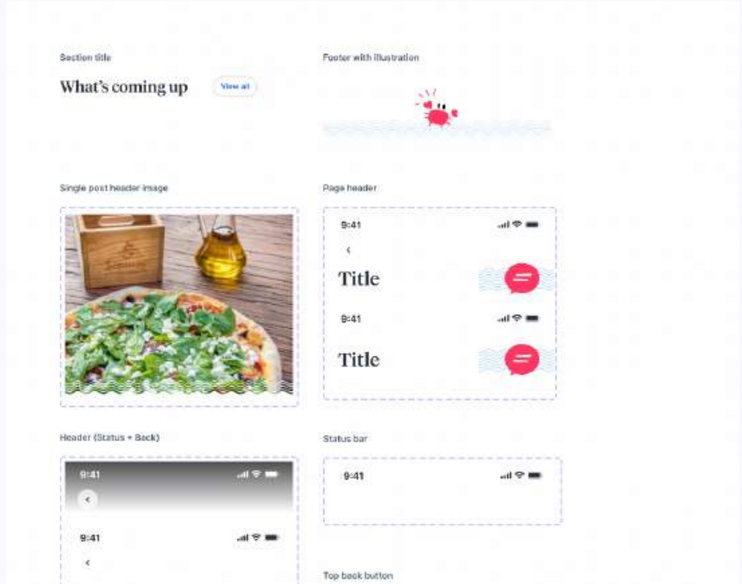
Strong approach





UI components & design system

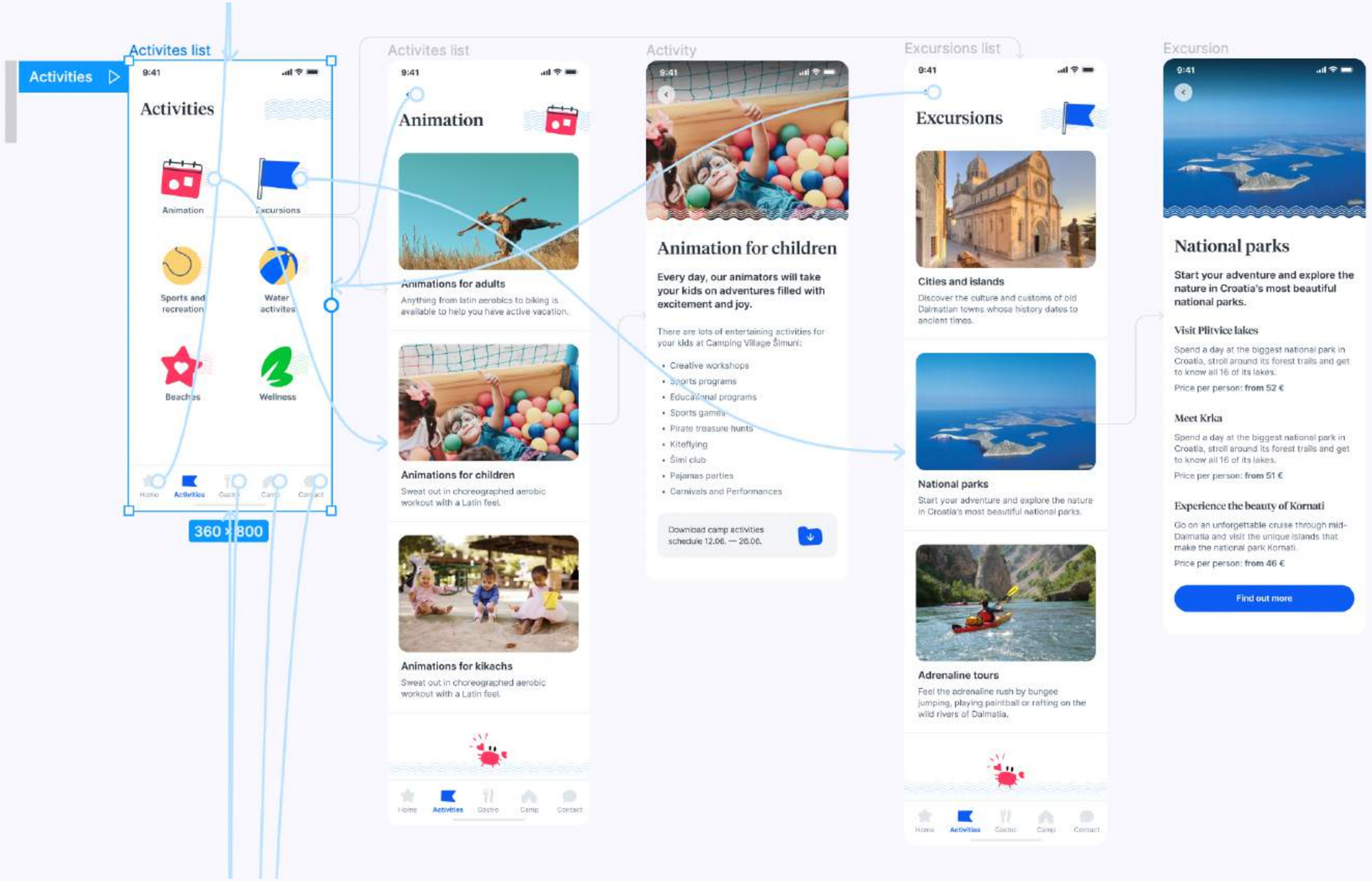




Prototype

Play Prototype

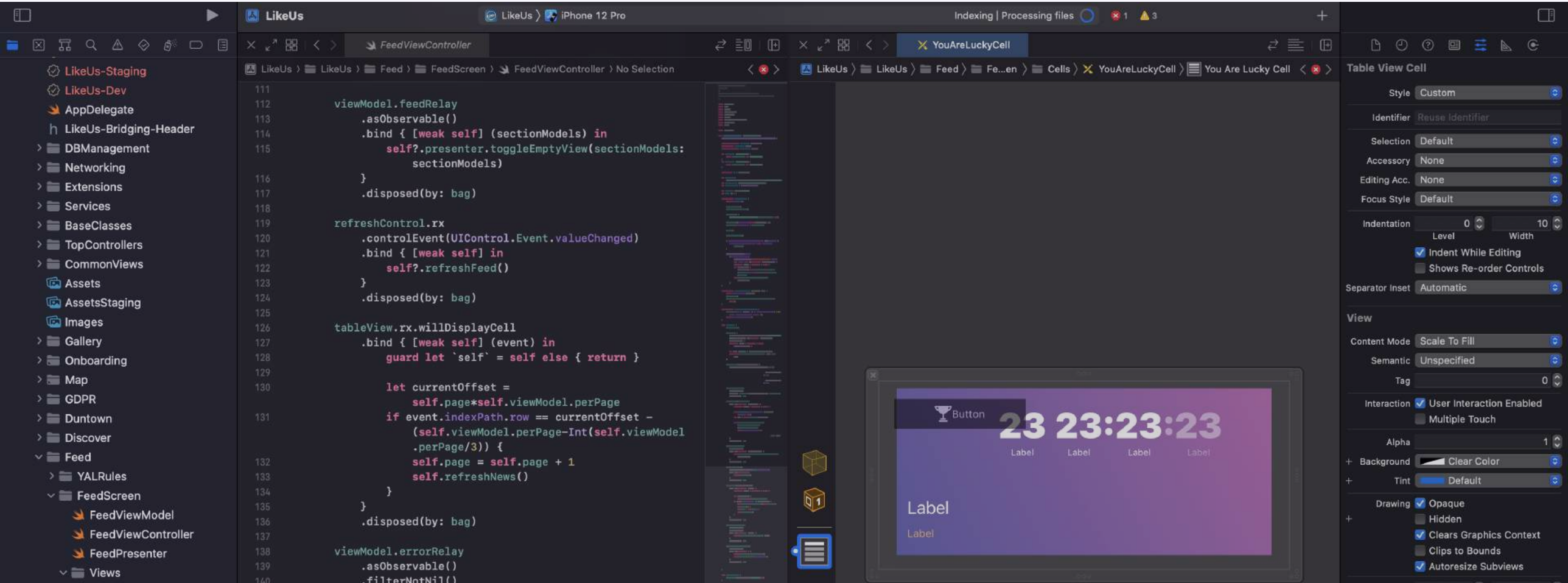
Activities and list



Task

Create a moodboard for your app, explain why did you choose that color/font set and what emotions did you try to evoke.

Development



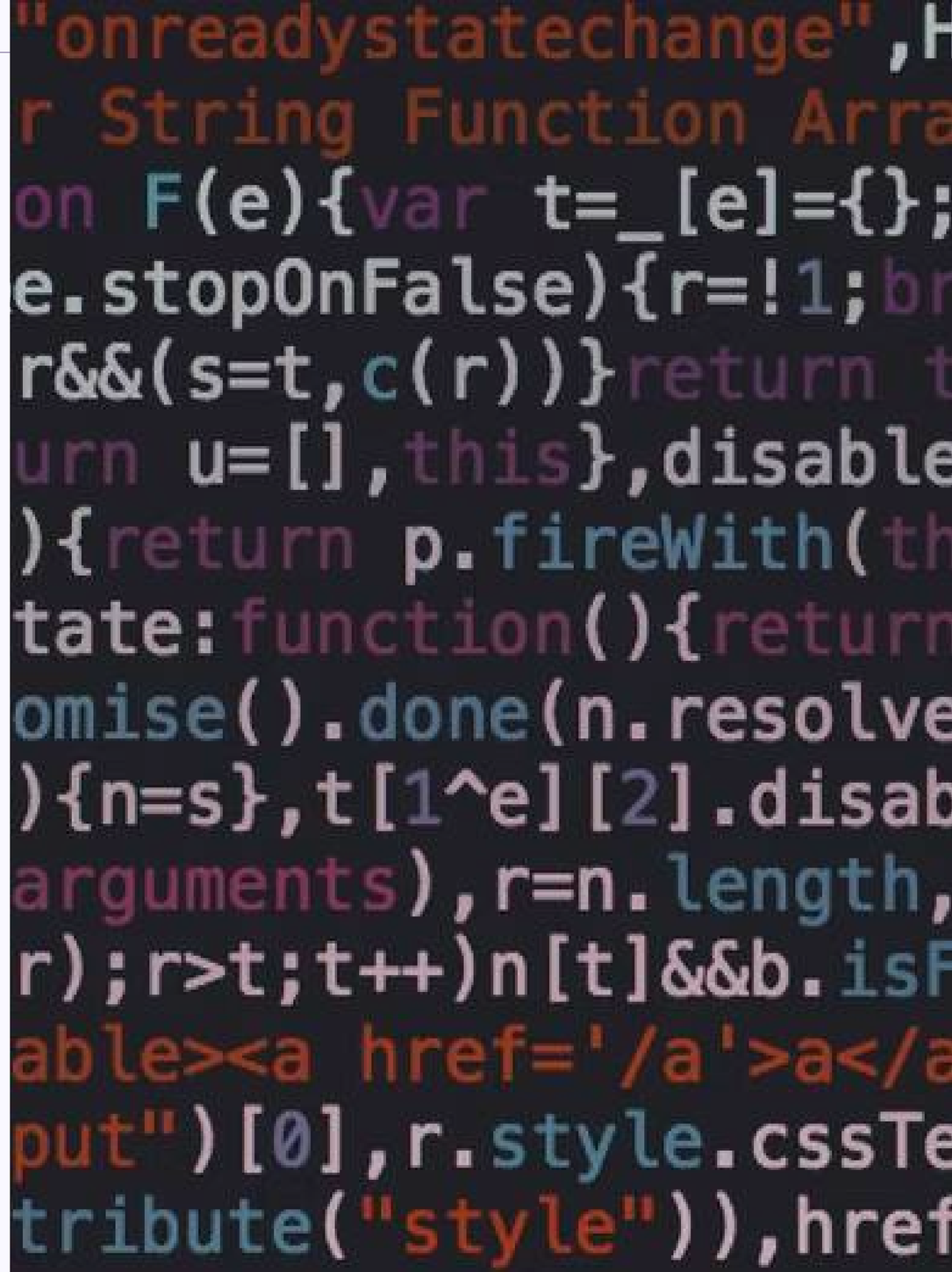
The act of writing computer code that enables computer software to function

Quality Control

- CI / CD
- Automated testing
- Lint
- Code review
- Coding standards

Quality Assurance

- e2e testing
- Manual testing
- System testing
- Regression testing



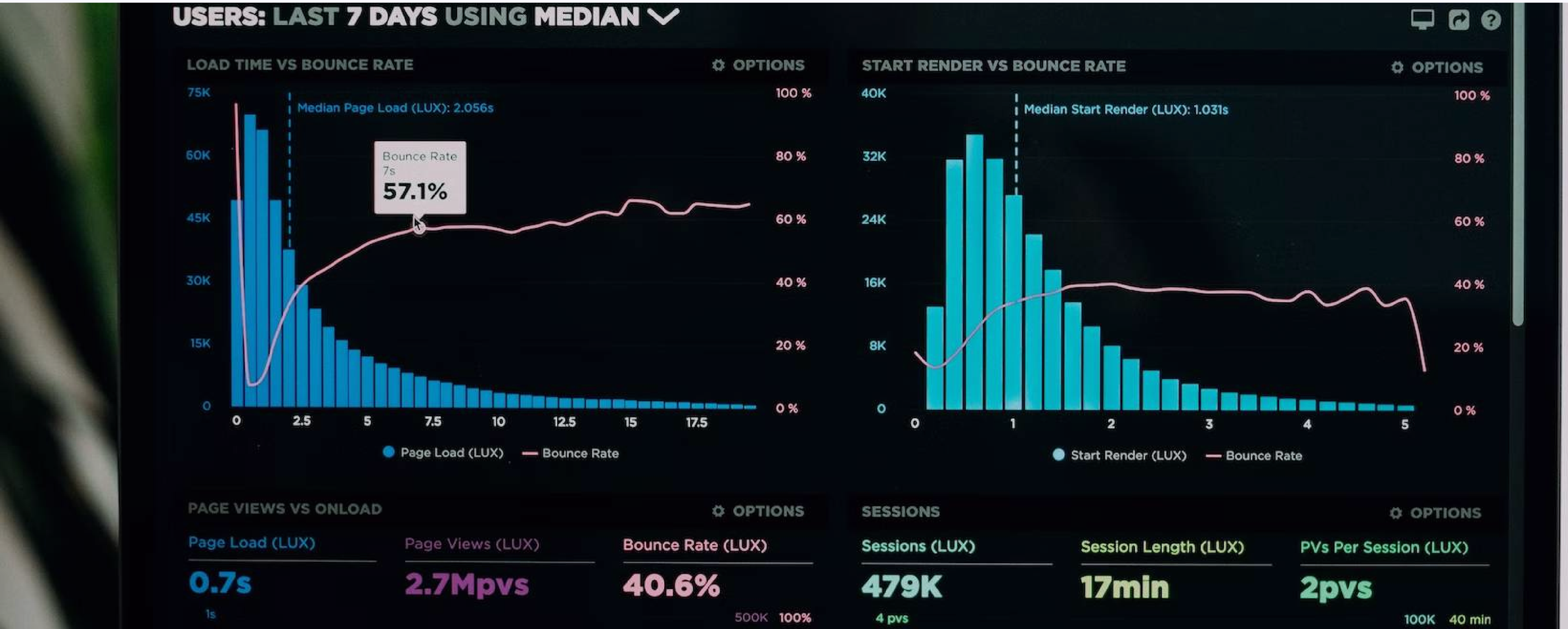
Launch

Mobile app launch is less a fixed point and more the continuous process of listening and iterating.

Steps to take before launch:

- Pre-launch checklist
- Marketing

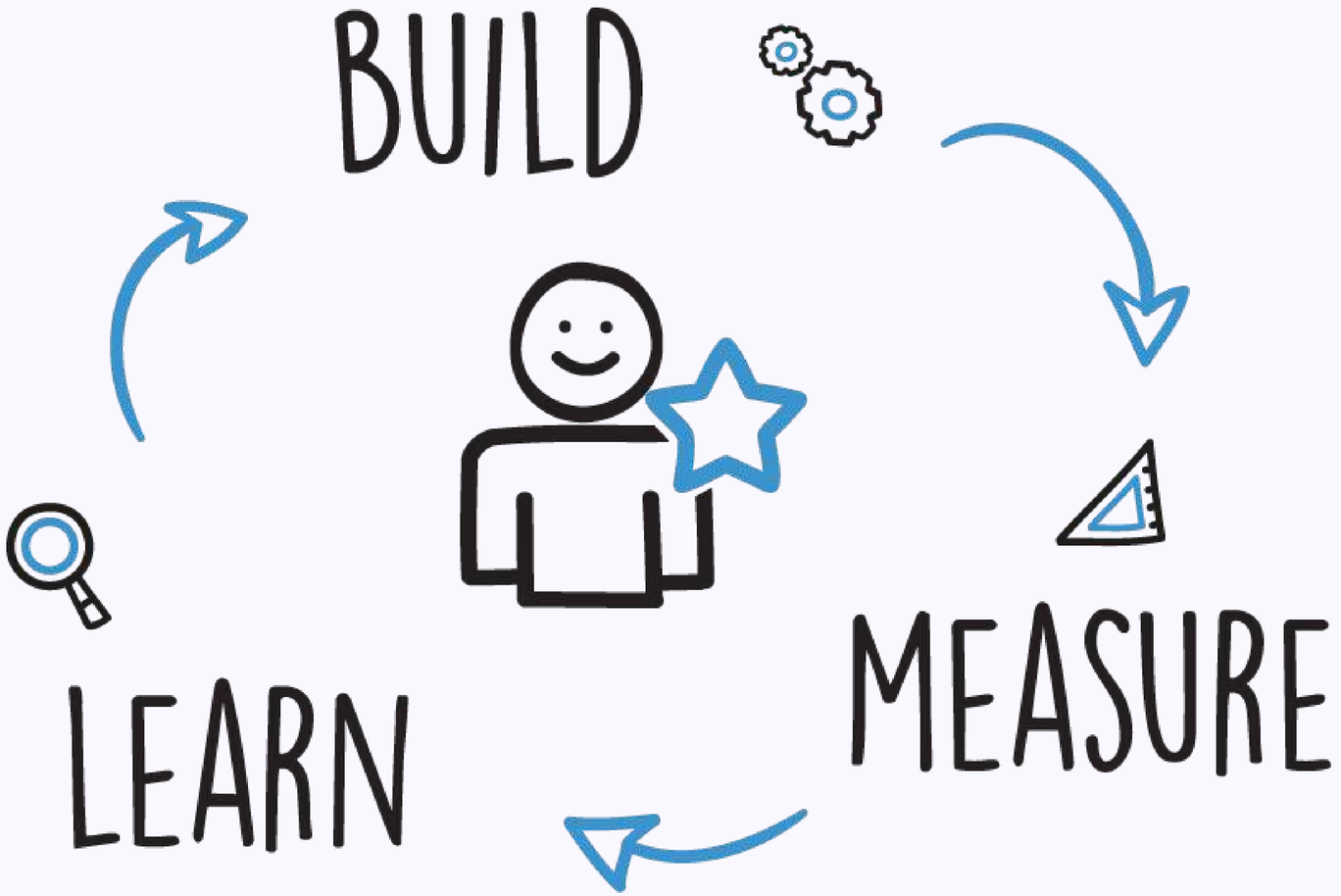
After-Launch



The minimum viable product is now live, waiting for users to test drive.

Steps to take after launch:

- Track the metrics that matter most to you and keep the focus on what you've learned with each iteration.
- Usability testing is the practice of testing how easy a design is to use with a group of representative users.


BUILD
MEASURE
LEARN

Questions?

Note this

There are no stupid questions. Ask away! :)

Bornfight®

Thank you

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