



APP CASE STUDY

Farmer's Guide



The project

App to help small farm producers

Helps them to Choose the best time to spray pesticides

Receive other important information



Discovery Phase

Understand the Problem
Competitive Analysis
Primary research

Discovery Phase:

Understand the problem

THE PROBLEM

Farmers don't know when it's the best time to spray the pesticides;

Small farm must know what is the best time to spray;

Common issue to small farmers in Brazil

Weather changes and small farmers waste a lot of resources and money;



Discovery Phase:

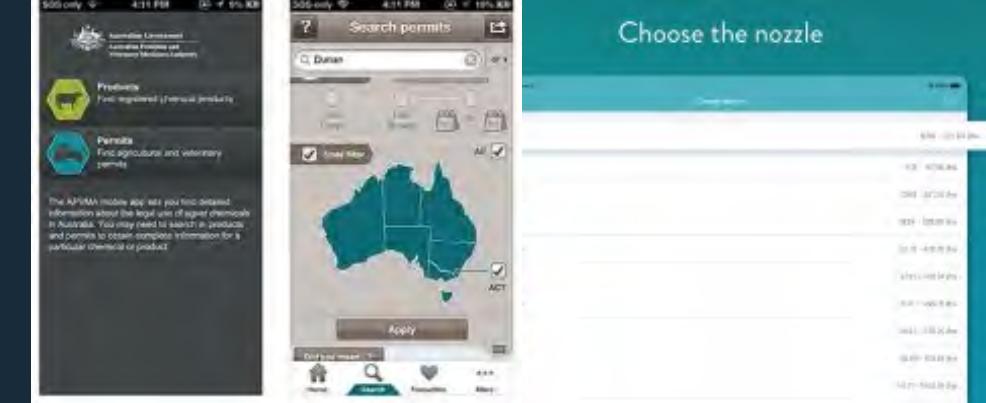
Competitive Analysis

User's don't use any kind of app

Most of the apps are in English;

The apps seems to solve specific problems, but not the Brazilians problems;

Some information is not easy to understand;



OSU.EDU Help BuckeyeLink Map Find People Webmail Search Ohio State

FARM | Field Application Resource Monitor

Sign In Statewide Condition Map Tutorial

THE OHIO STATE UNIVERSITY

Register Map Fields Dashboard

Field Set-Up

Locate your field by **Street Address** or **Coordinates (Latitude/Longitude)**.

By Address By Coordinates

Enter a **name or ID for your field** and then enter a full street address or select GPS button to use your GPS location (mobile only).

Field's Name/ID: Field name... Field's Address: Full street address and City/Zip (e.g. 1090 Carmack Rd, 43210) Use GPS

Spray and track

12.3 H Pct - Wed May 9

Calibrate

0.00 km/hr 3.59 448.42

Discovery Phase:

Primary research hypothesis

"Is that really useful?"

Simple white paper research, with user interviews

We have the chance to interview the farmers in a huge rural event in Brazil

Discovery Phase:

Primary research

THE QUESTIONS

How do you know when is the best time to spray pesticides? How important is this information?

Do you use any type of application or service? If yes, how does it help you?

How do you know about the occurrence of pests in your region? How important is this information?

Do you use some type of application or service? If yes, how does it help you?

Sebrae Agro

Pesquisa

Pulverização

Como você sabe a melhor hora para pulverizar?

Qual a importância desta informação:

Muito importante Importante Média importância Baixa importância

Comentários:

Utiliza algum tipo de aplicativo ou serviço? Se sim, de que forma ele te ajuda?
Não esquecer de detalhar os pontos fracos de outras soluções

Pragas

Como você sabe sobre a ocorrência de pragas em sua região?

Insights & Analysis

Analyzing the data

Persona

How Might We (HMW)

User journey

Analyzing the data

30 farmers 120 Qualitative answers 10 insights

About the pesticides:

- 90% don't use apps information;
- 98% is a important information;
- 80% use the personal experience;

About pests:

- 85% don't use apps information;
- 89% is important information;
- 85% use the personal;

Insights & Analysis Phase:

Persona

Basic persona

- Unable to find easily information about the weather, and try to find information about pests asking friends;
- Waste resources by not having accurate information;
- Intermediate user of technologies;



Insights & Analysis Phase:

User journey without apps

Start searching

Start searching when is the best time to spray the pesticide

"This time I'll not waste my resources, it's costing too much"

Finding

Search in different apps and websites, but most of them are imprecise or paid

"Ok, I'll try using this app, but it's not so precise, but I have to try

Deciding

Decide to trust in information, even not trusting

"I'm not feeling confident about the best time to do my work"

Making

Start the work, without precises information;

"It's better just see the simple weather app and see what's happen"



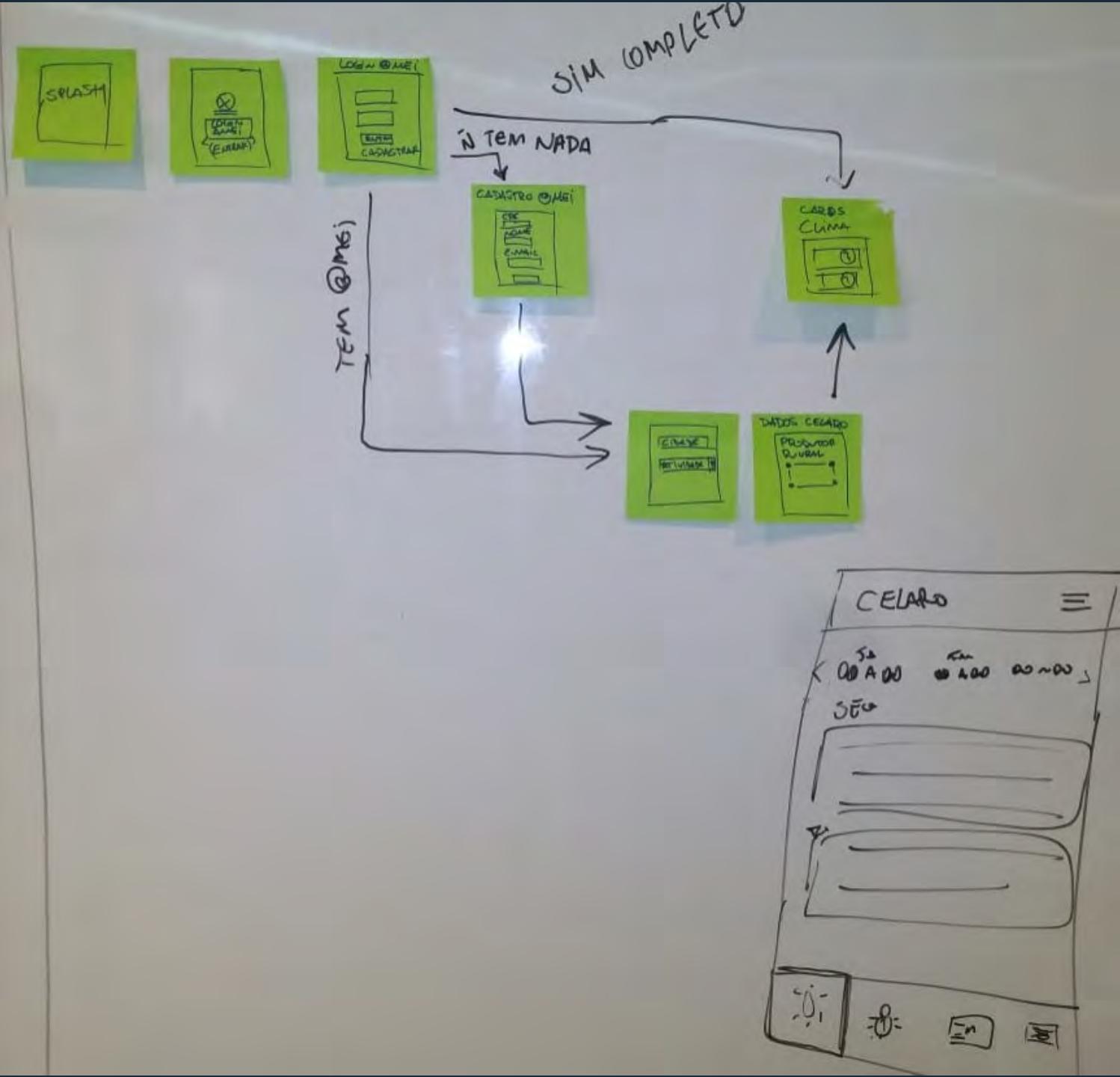
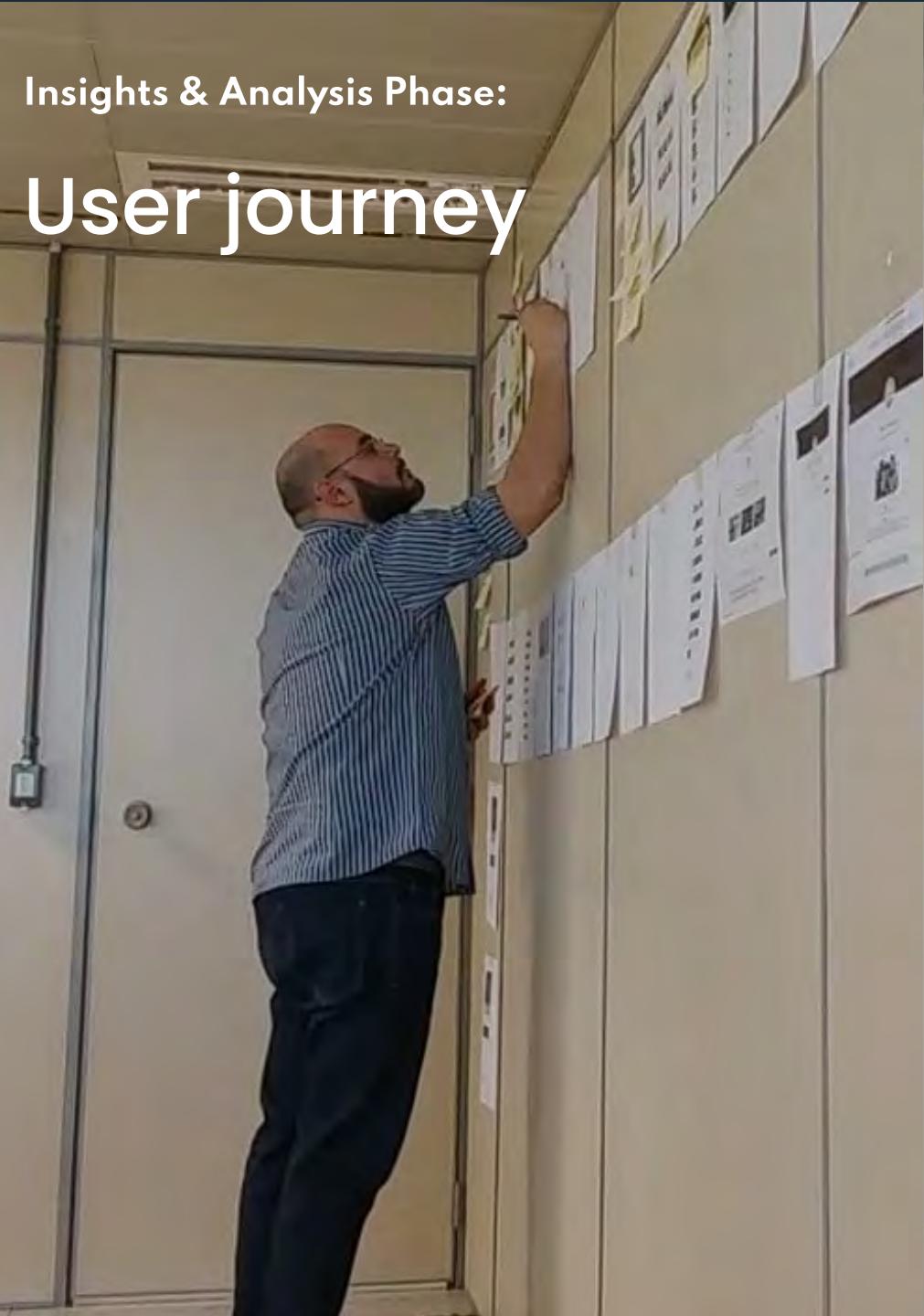
Insights & Analysis Phase:

How Might We

Make farmers feel more safe and use
their resources with more confidence?

Insights & Analysis Phase:

User journey



Insights & Analysis Phase:

Good user journey

Start searching

Start searching what is the best time to spray the pesticide

“This time I’ll not waste my resources, it’s costing too much”

Start the app, using the regions info

Finding

Search in different apps and websites, but most of them are imprecise or paid

“Ok, I’ll try using this app, but it’s not so precise, but I have to try”

See the best time to use pesticides

Deciding

Decide to trust in information, even not trusting

“I’m not feeling confident about the best time to do my work”

Observes the weather and compares to the app

Making

Start the work, without precises information;

“It’s better just see the simple weather app and see what’s happen”

Take the decision based on what he sees in the app, and in the real world



Design

SiteMap & wireframes

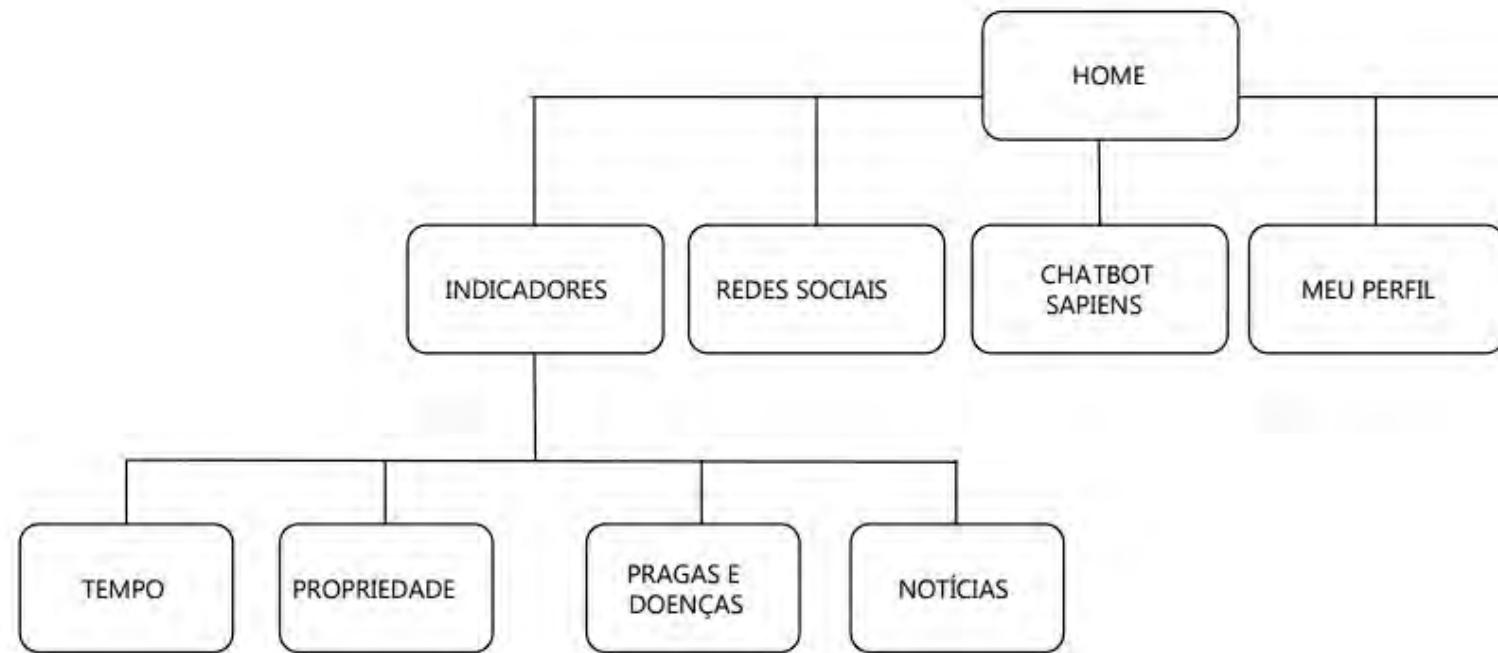
Design concepts

MVP solution & designs

Design:

SiteMap

Basic SiteMap was created



Design:

Wireframe

Basic Wireframe was created

Fazenda boa esperança, Jataí - GO...
Toque para visualizar ou editar

Hoje
Segunda, 20 de setembro | 14:15

21° * 29° 5mm
Sensação Chuva

Alguma nebulosidade. Nuvens prejudicam a passagem da luz do sol em boa parte do dia.

Max. 30° Min. 18°

* 06h35 17h58
Amanhecer Anoitecer

64% 974.2
Umidade Pressão

Janela de pulverização

Vento km/h

Edite sua propriedade no mapa
Isso melhora a precisão os dados

Editar propriedade

Você pode editar as informações sobre sua propriedade

Nome da propriedade
Fazenda Boa esperança no Br

Atividade
Milho

Município
Jataí - GO

Design:

Design concepts

Basic journey was created



Design:

Design concepts



SEBRAEAGRO

An illustration of a female farmer wearing a blue hat and a green apron, standing in a field of young green plants. She is holding a woven basket filled with various vegetables like carrots and tomatoes. The background shows a sun, clouds, and more plants.

Track your property's weather information

Skip

Next

An illustration showing a 3D perspective view of a rectangular plot of land with small green dots representing plants. A blue circular overlay with a map pin icon is centered over the plot. The background is a light blue gradient.

Mark your property on map

Skip

Next

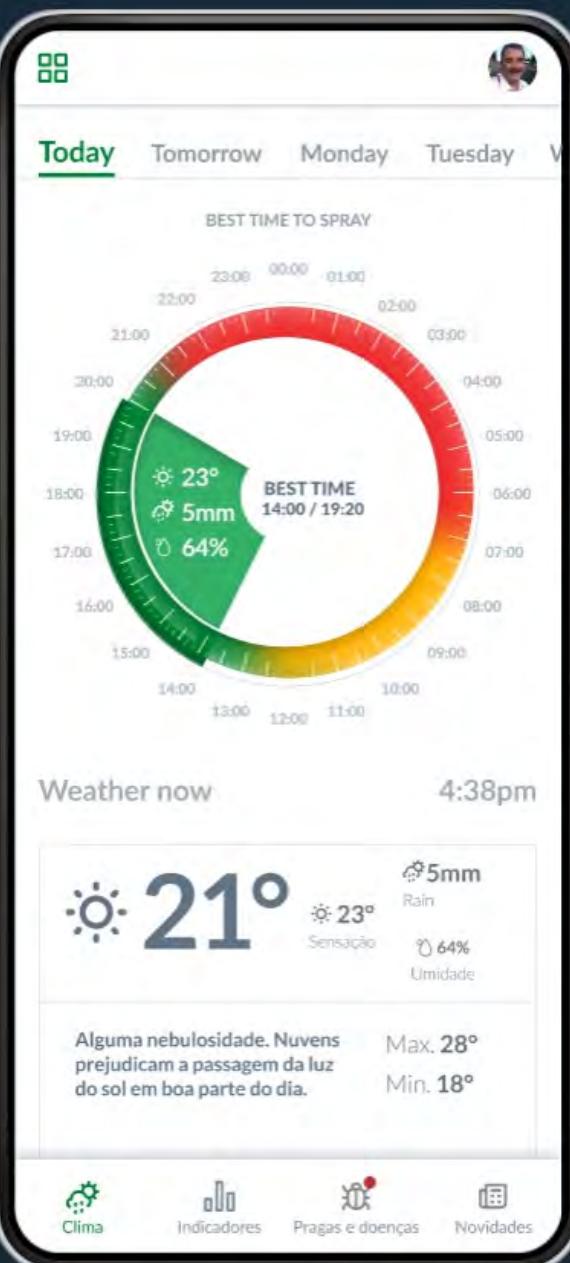
An illustration of a field divided into several rectangular plots. Each plot contains different types of crops. Red circles with exclamation marks and pest icons (a worm, a fly, a tick, and a grasshopper) are overlaid on the plots. The background is a light blue gradient.

Create and follow alerts of pests in your region

Get started

Design:

Design concepts



Design:

Usability tests



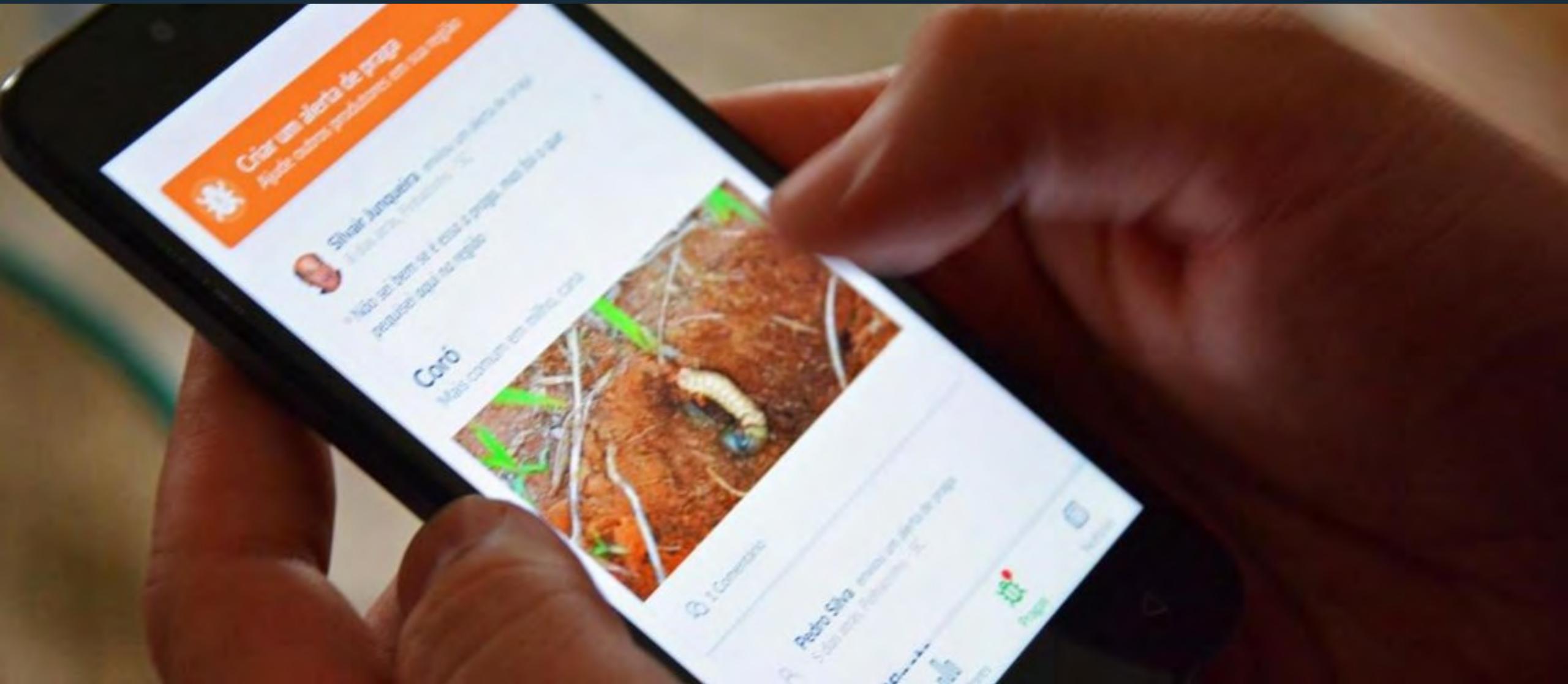
Design:

Usability tests



Design:

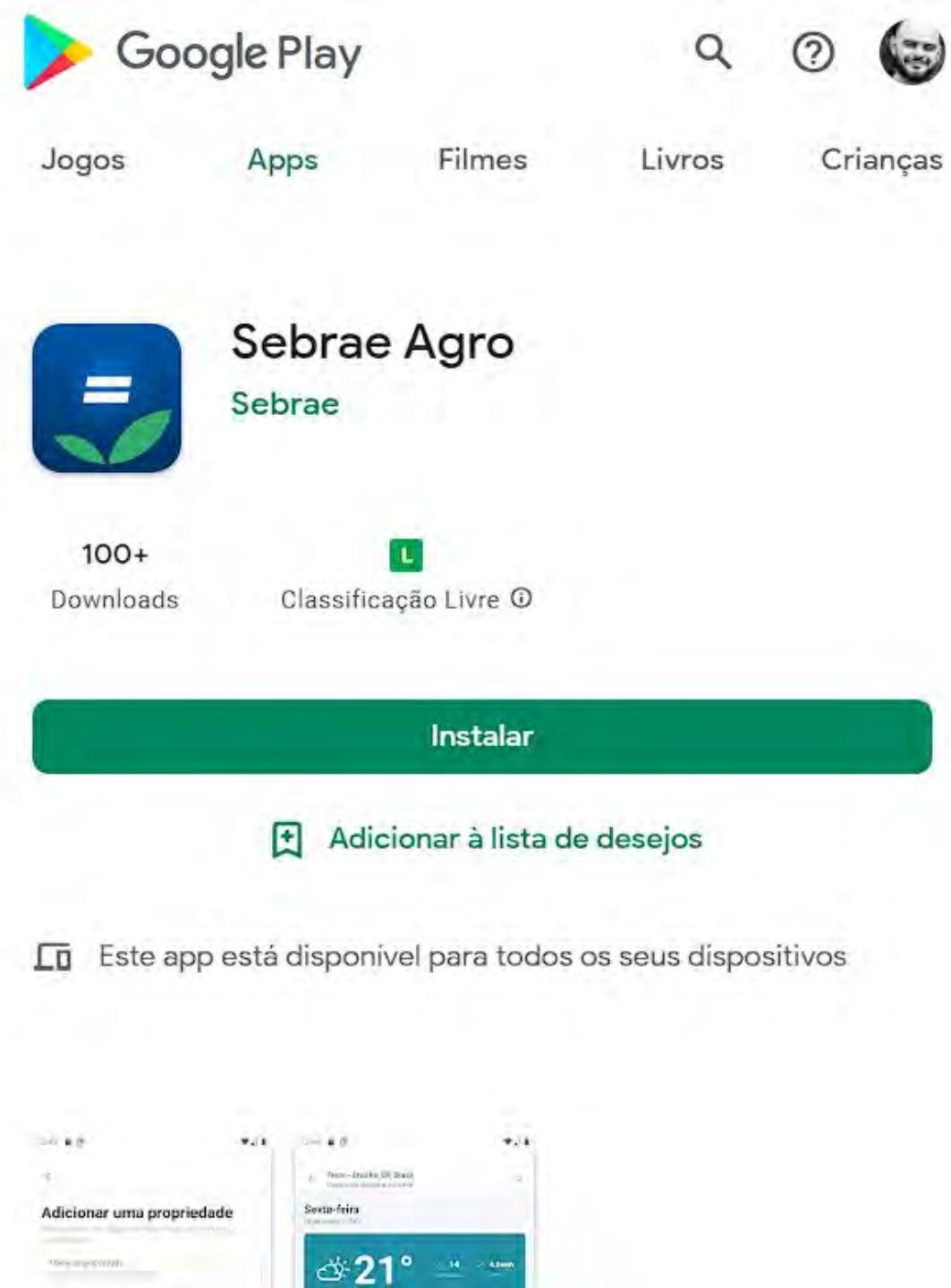
Usability tests



Design:

MVP solution & designs

Basic MVP was created



My Pointers

Lessons learned, and improvements

- Research: reduce the risk of bias

Next steps

- Research: Apply usability tests in every feature
- Design: Improvements on the usability and the visual

Thanks!