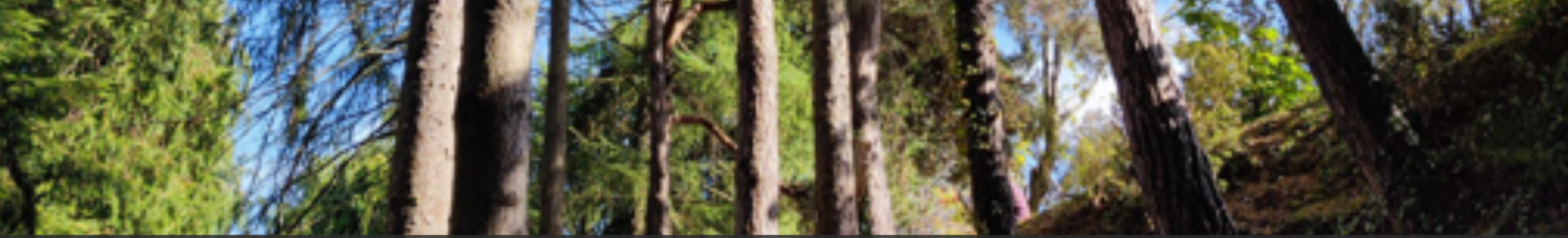


Web Portal Design

St Andrews Botanic Garden Trust

CS5042
User-Centred Interaction Design Project

Jingwen Zhu
jz98@st-andrews.ac.uk

Joseph Cameron
jmc42@st-andrews.ac.uk

Edvin Pohto
ejp27@st-andrews.ac.uk

Anli Hu
ah373@st-andrews.ac.uk

Joseph Cameron

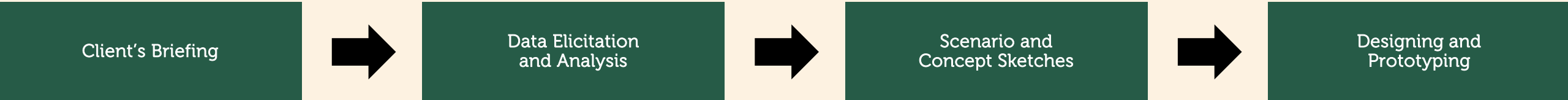
Jingwen Zhu

Edvin Pohto

Anli Hu

Project and Presentation Outline

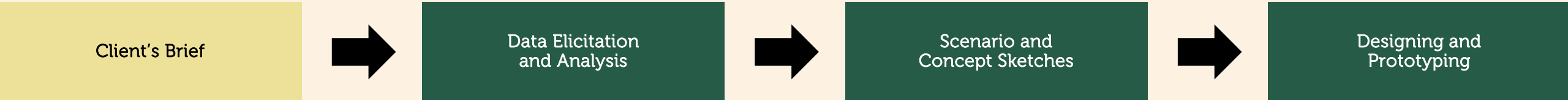
- Client's Brief
- Data Elicitation and Data Analysis
- Scenario and Concept Sketches
- Designing and Prototyping



Client's Brief

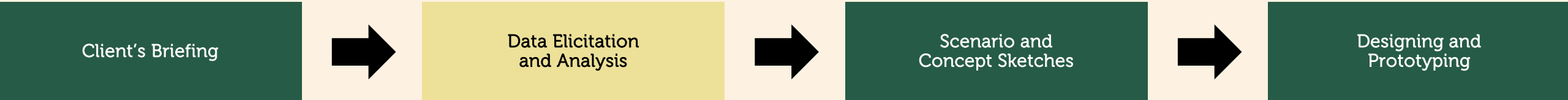
- Designing a web portal for the Garden's new database, which will make the Garden's scientific data accessible to users in a range of formats.

- Designing the portal in terms of its **appearance** and **functionality**, with a **focus on the user**.



Data Elicitation Process

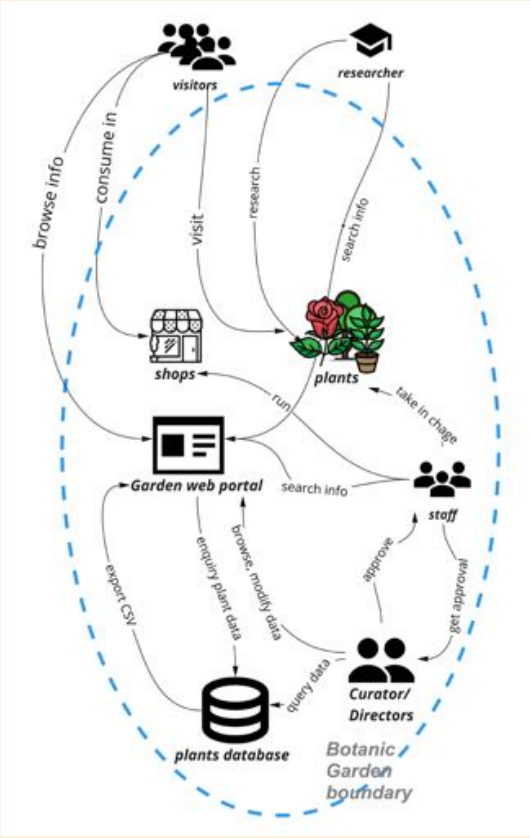
- To understand the needs of the client and different user groups
- Two Subject Matter Expert Interviews
  - To learn about the rationale and purpose of the project.
  - Identifying the context and user groups.
- Questionnaire
  - Designated usability questions to members of specific user groups.
- Observation Exercise
  - To understand the current workflow and issues with the existing system.



Data Analysis and Modelling

- Built an affinity diagram to map elicited data.
- Modelled the data into User Work Roles, a Flow Model, and User Personas.

- Conclusions
  - Three main user groups: Managers, General Staff, and Outsiders.
  - Need for **intuitive** and **effective** usability.
  - Need for balance between **advanced** capabilities and **approachable** usability for different user groups.

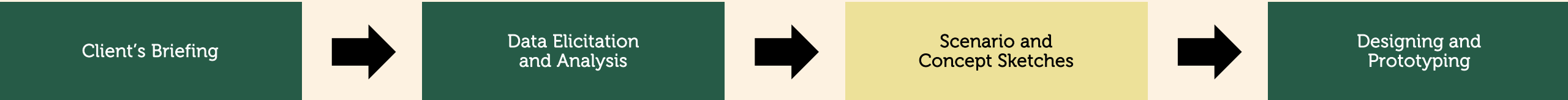


Flow model

Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

Scope

- Aim to provide both a general design and more advanced ideas.
- Prototypes designed with different user groups in mind.
- Design focus on administrators and visitors as they occupy the two ends of the spectrum.
  - For example, researchers share needs with many user groups.

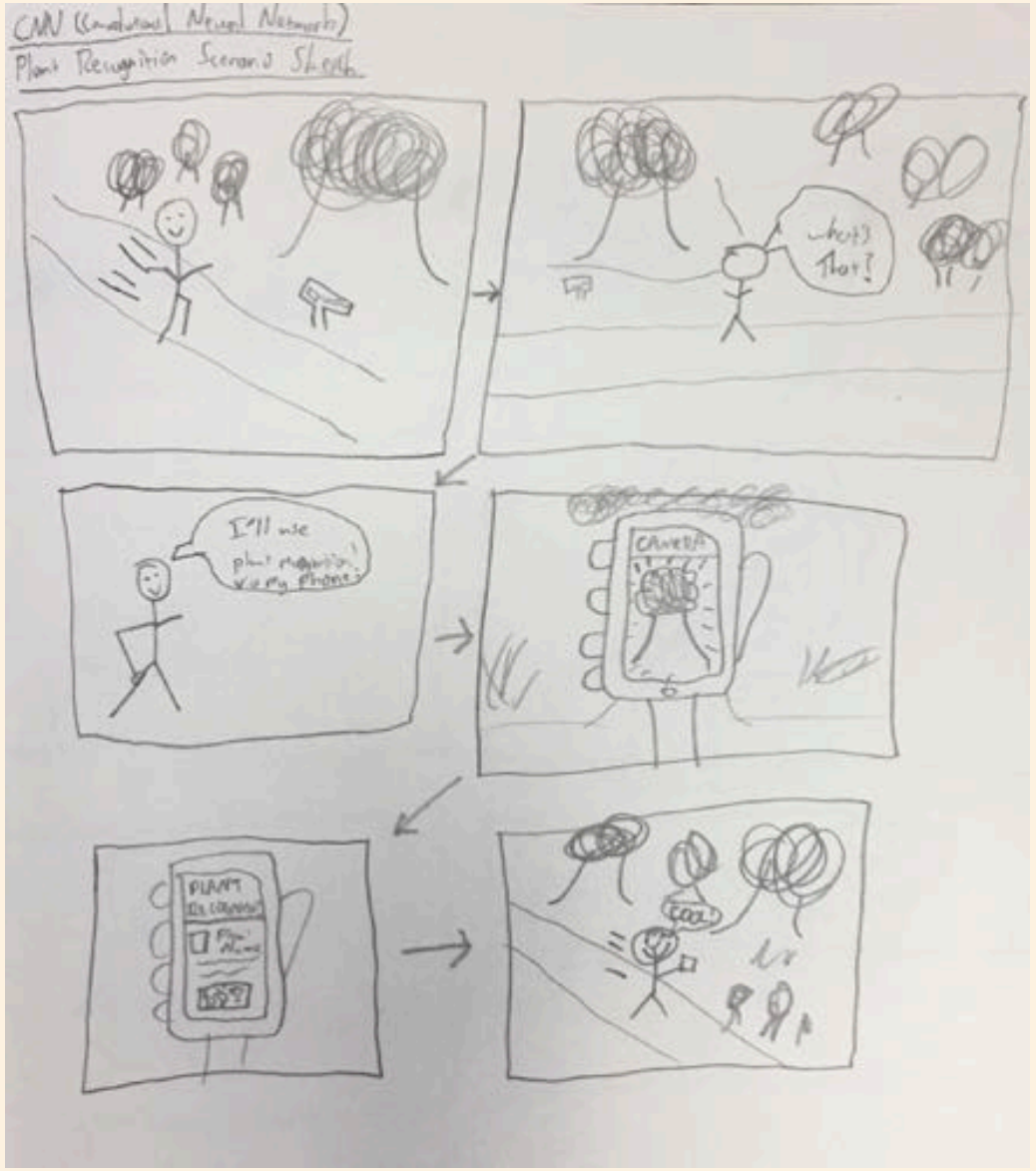


Initial Sketches

Scenario Sketches

- Used to explore various use-case scenarios for the web portal.

- Here, a user is sketched using image recognition for identifying a plant and accessing the web portal.

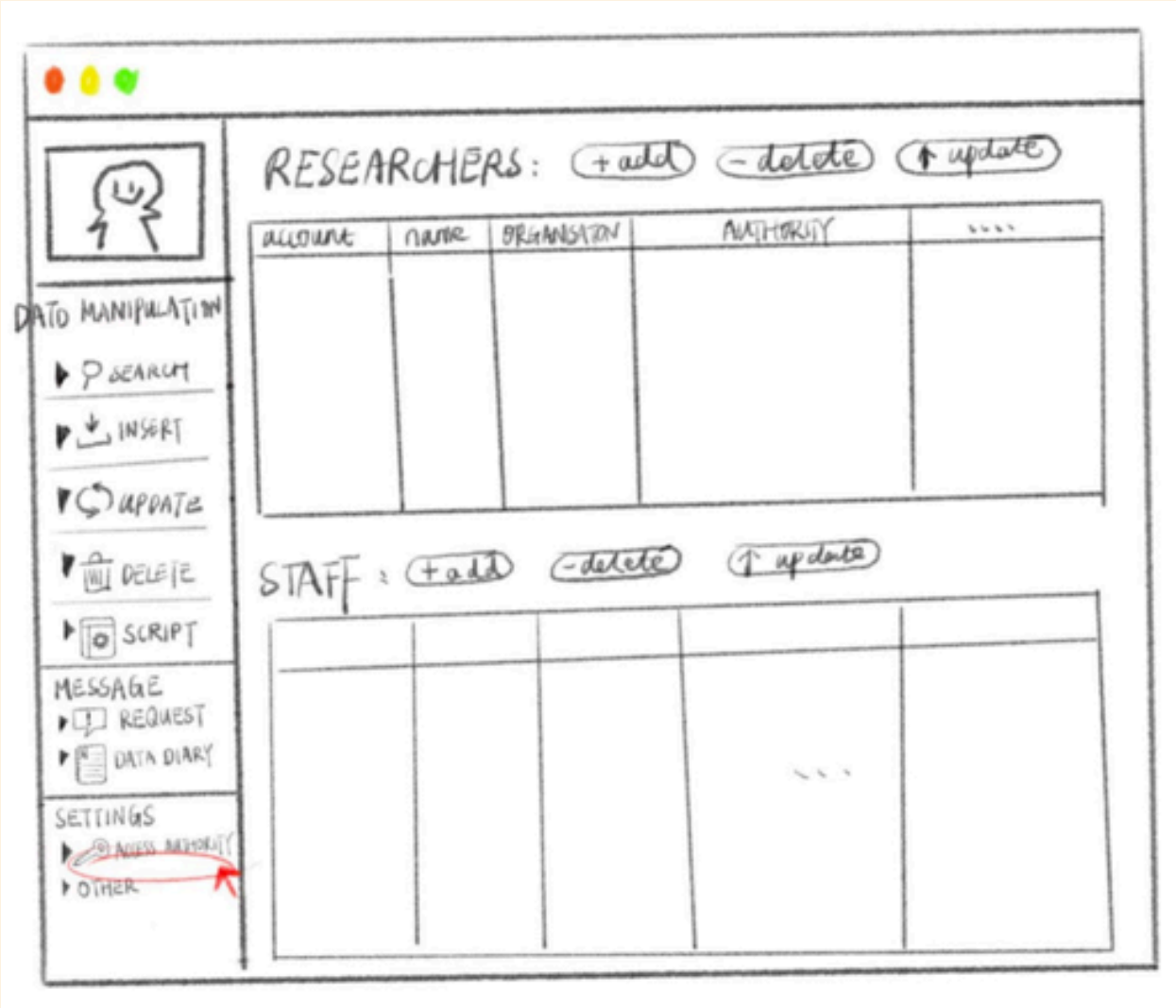


Initial Sketches

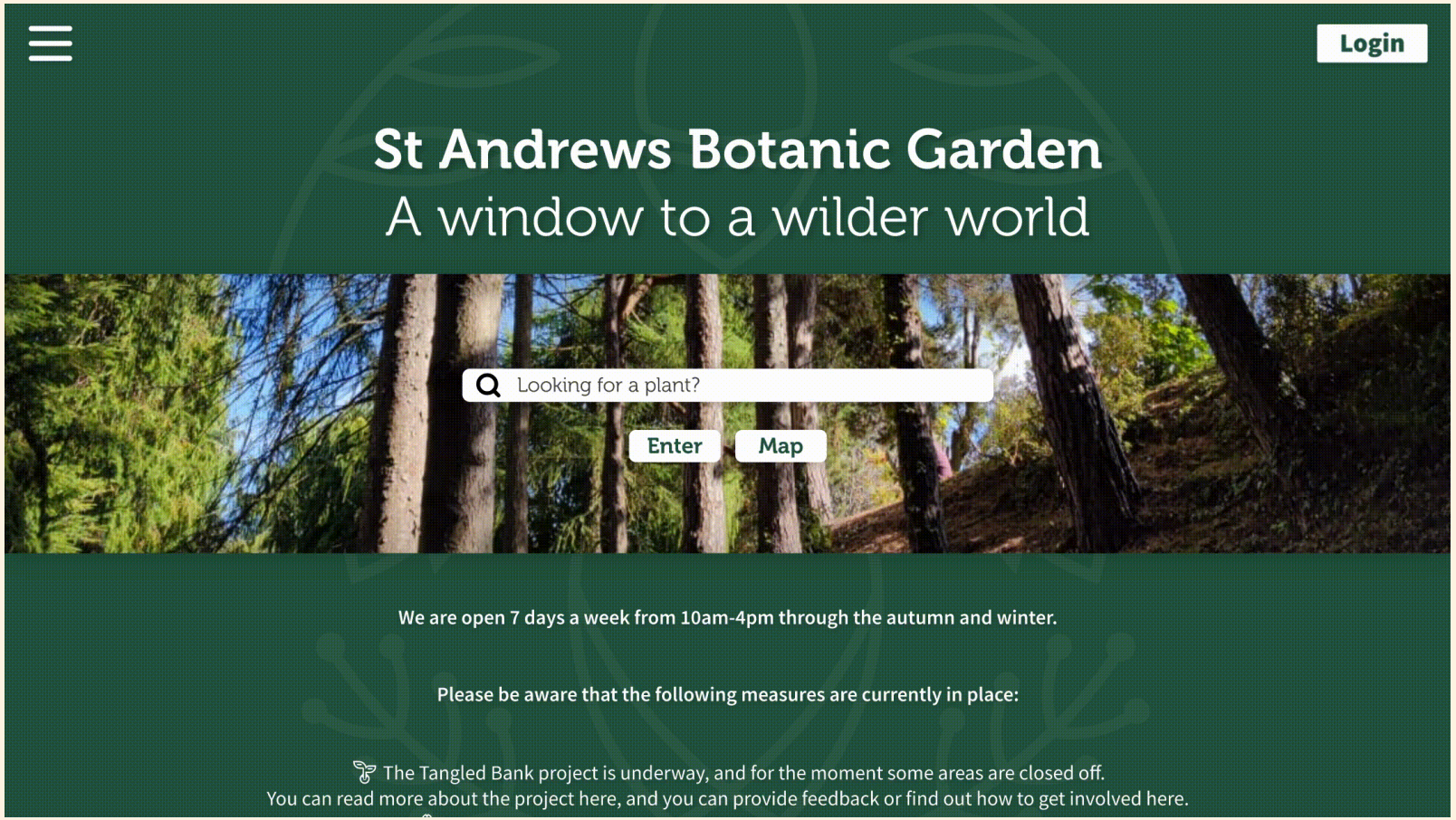
Concept Sketches

- Used for brainstorming and exploring initial design ideas.

- Here, an administrator's capability to allow special access to a user is sketched out as a concept.

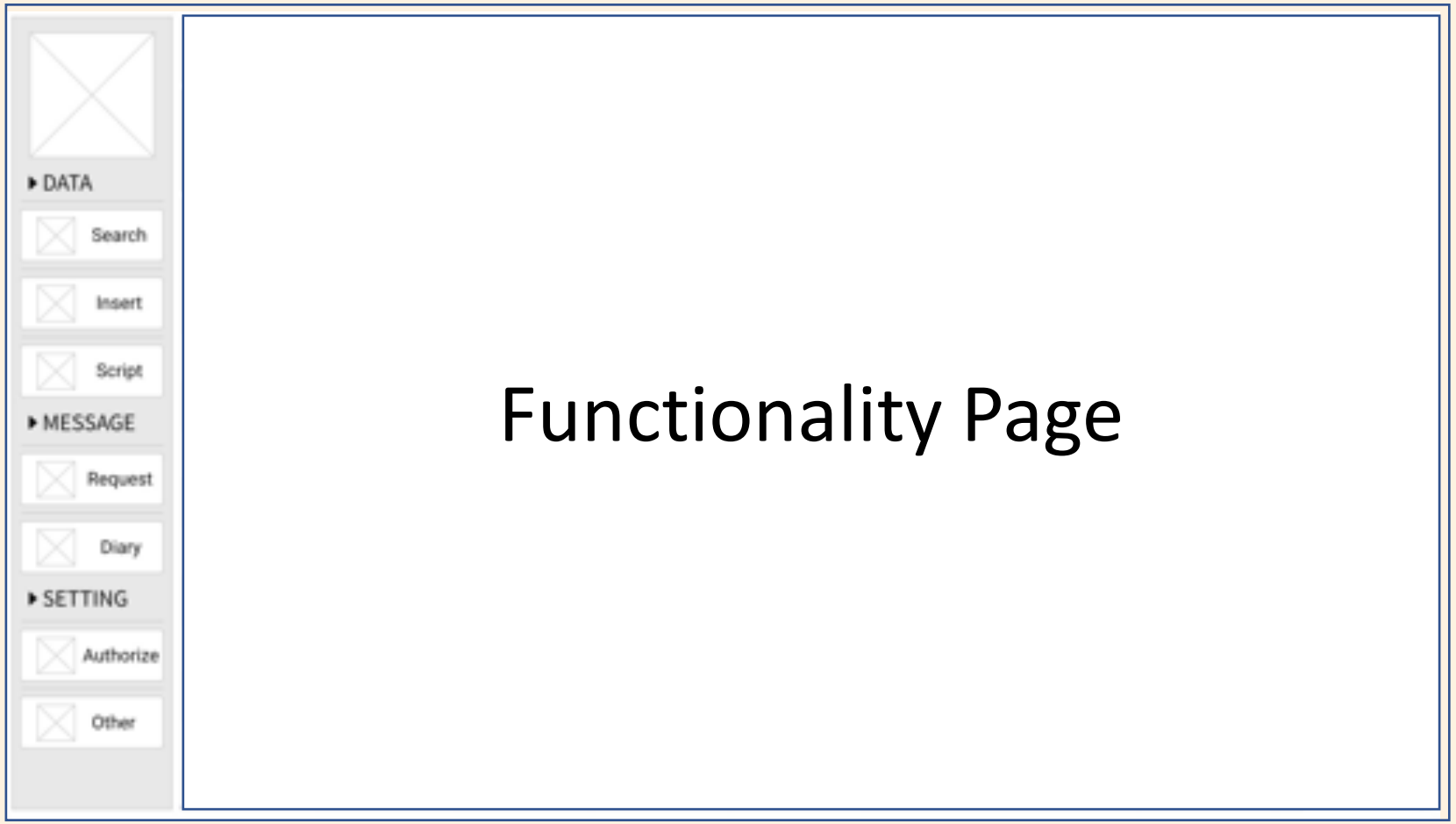


Landing page



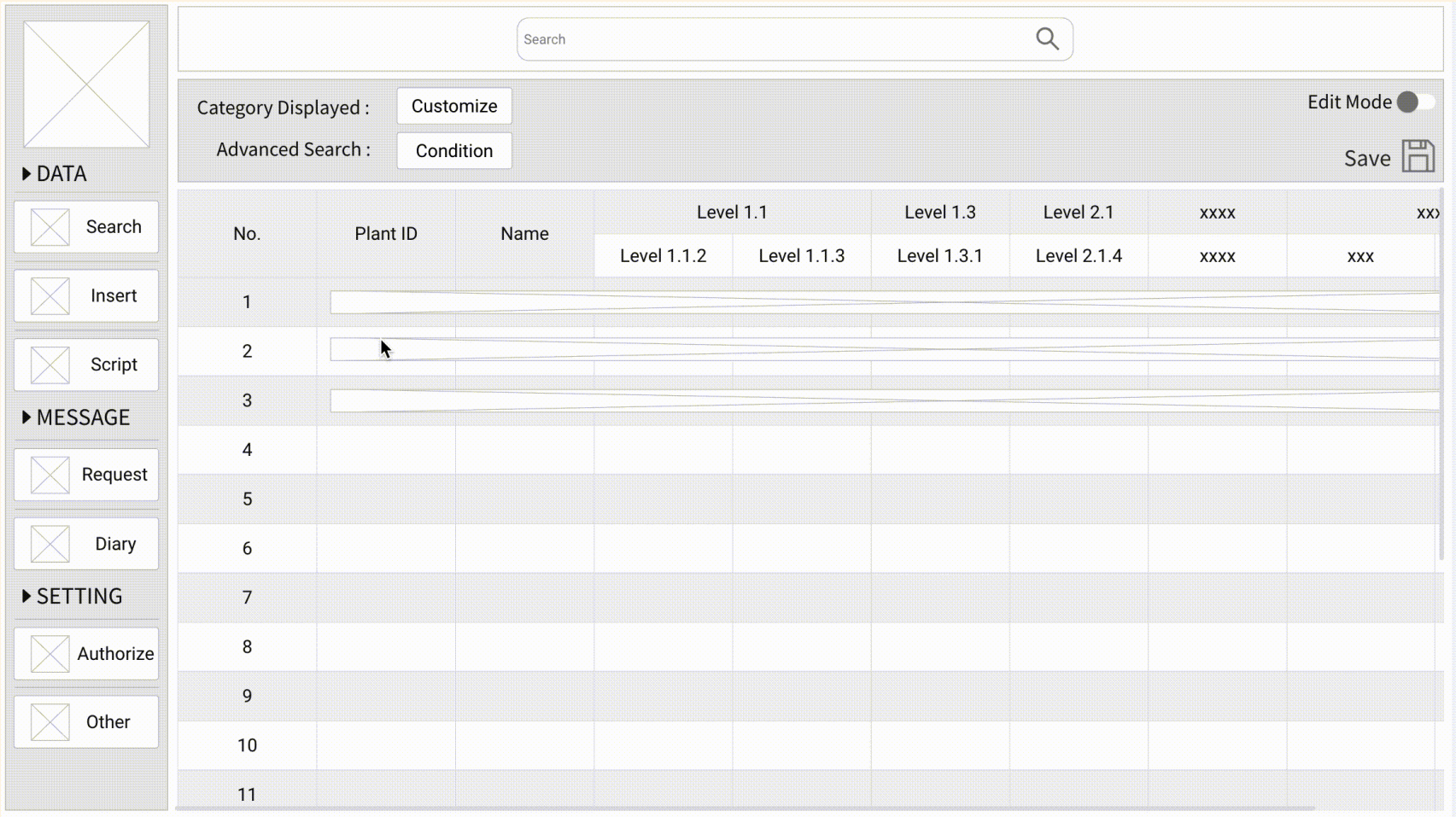
Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

Administrator Page - Overview



Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

Administrator Page - Search

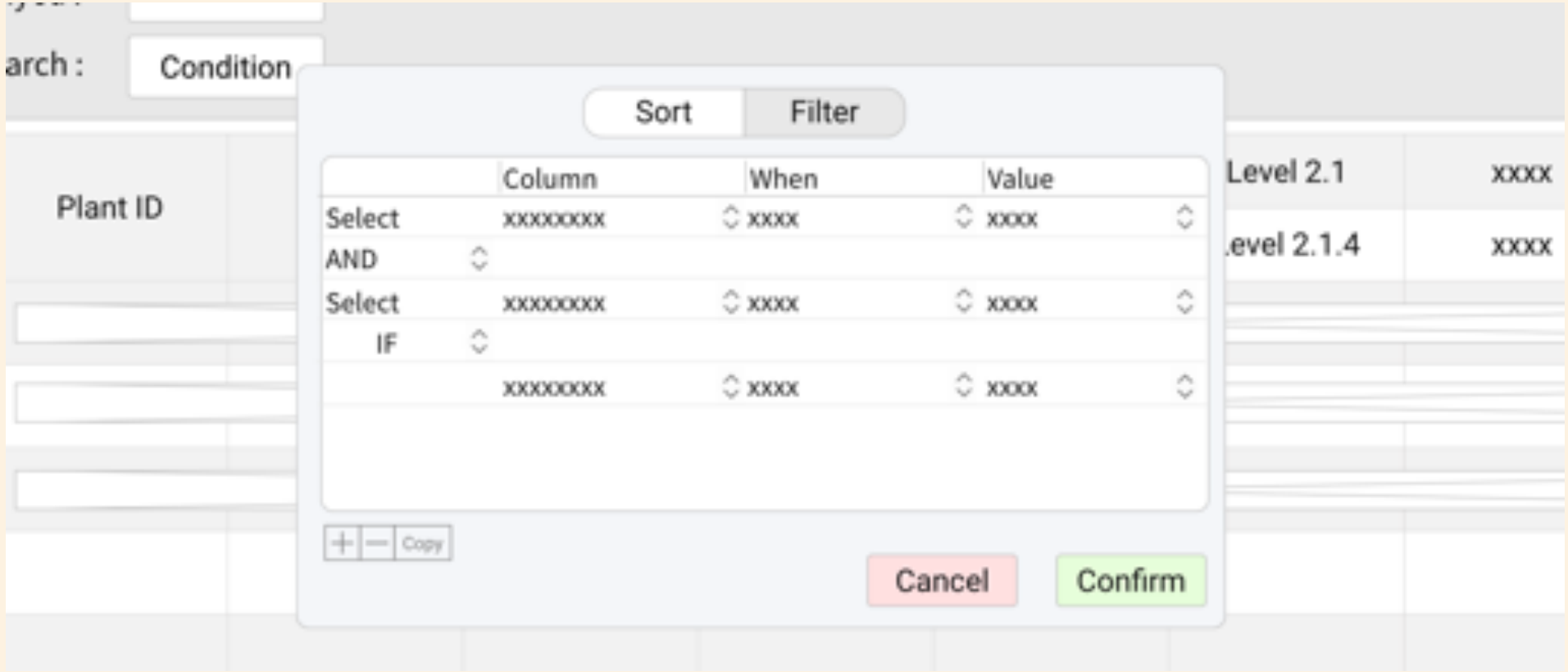


Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

Administrator Page - Search

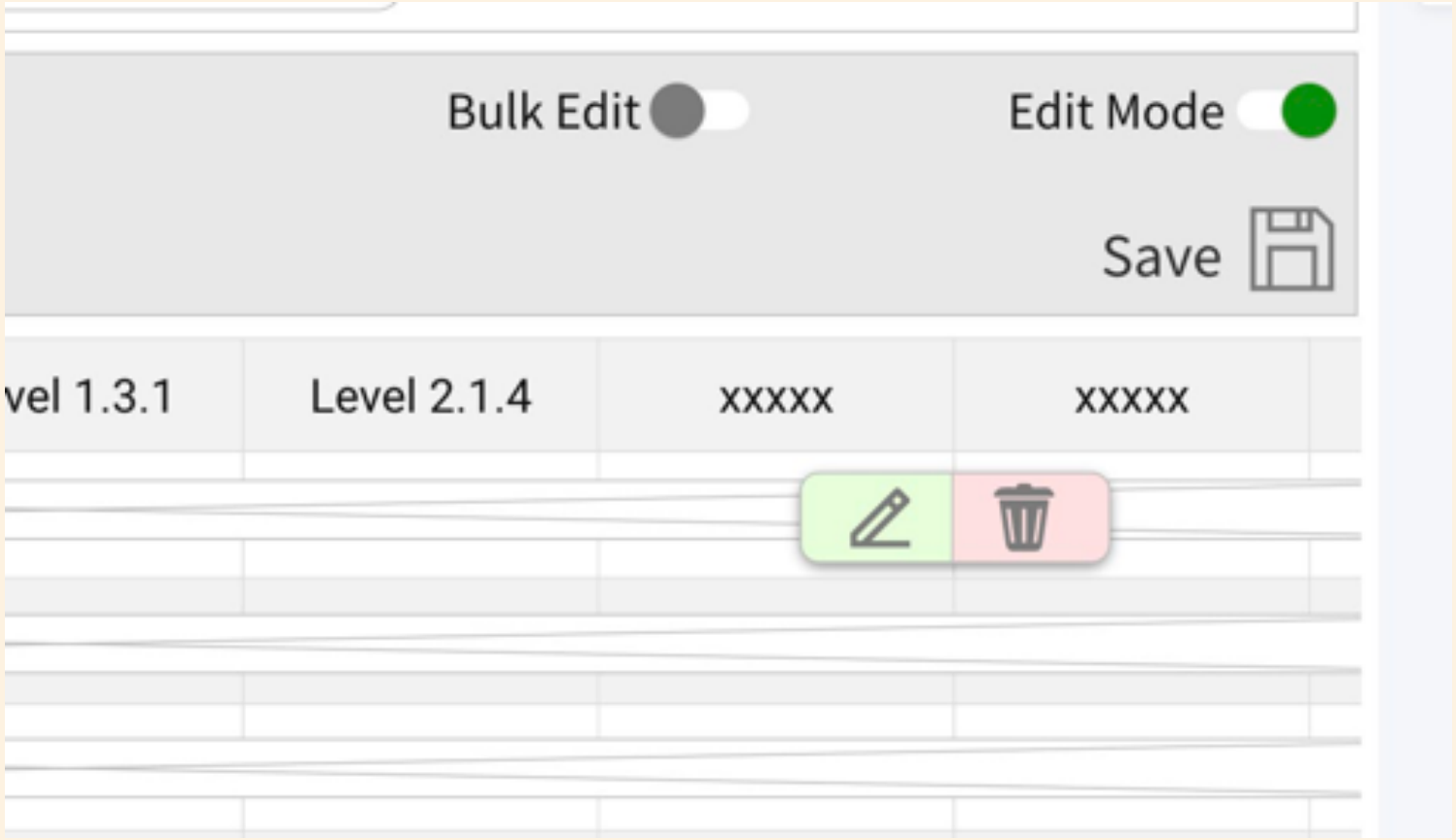
Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

Administrator Page - Search



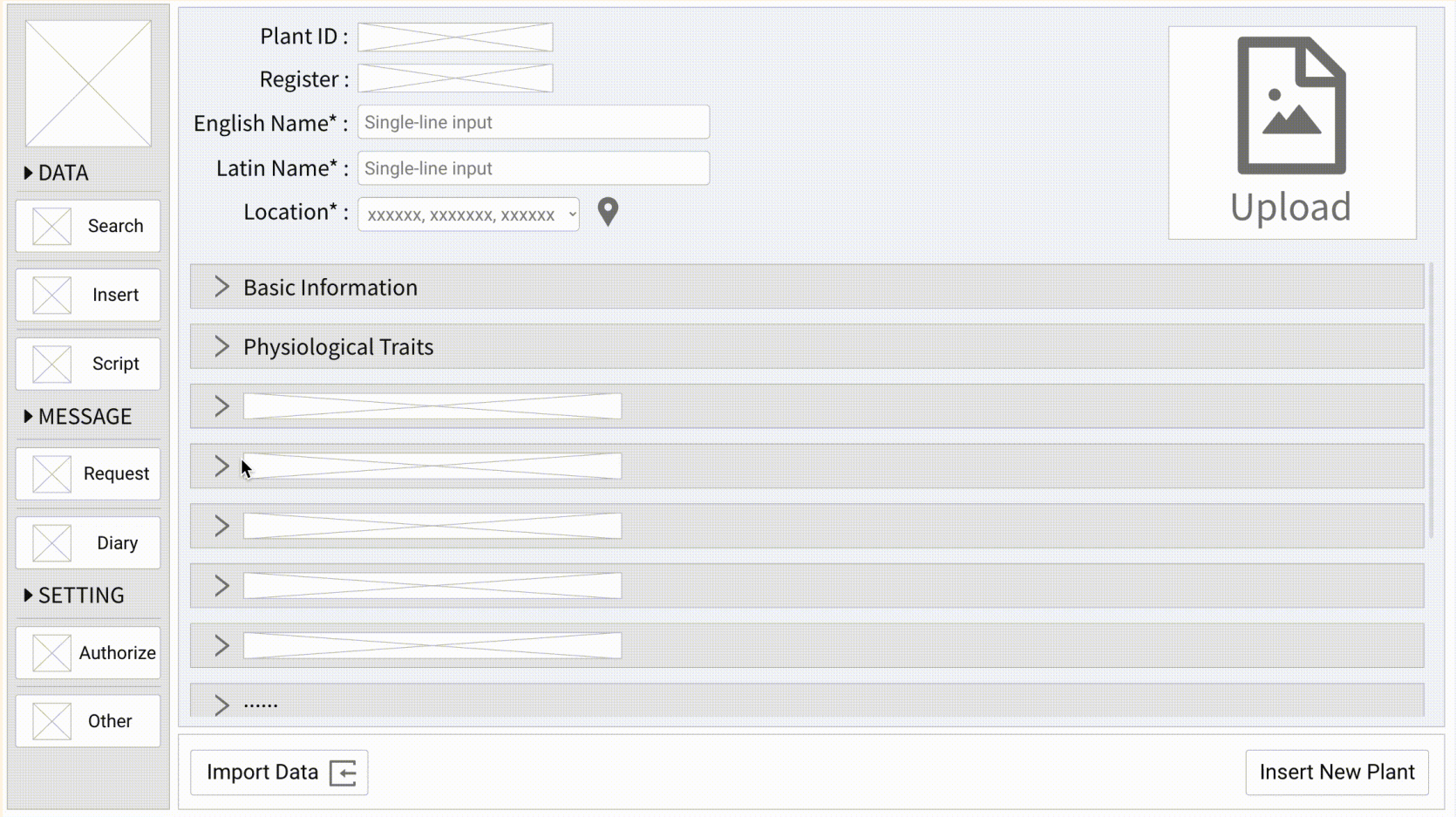
Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

Administrator Page - Search



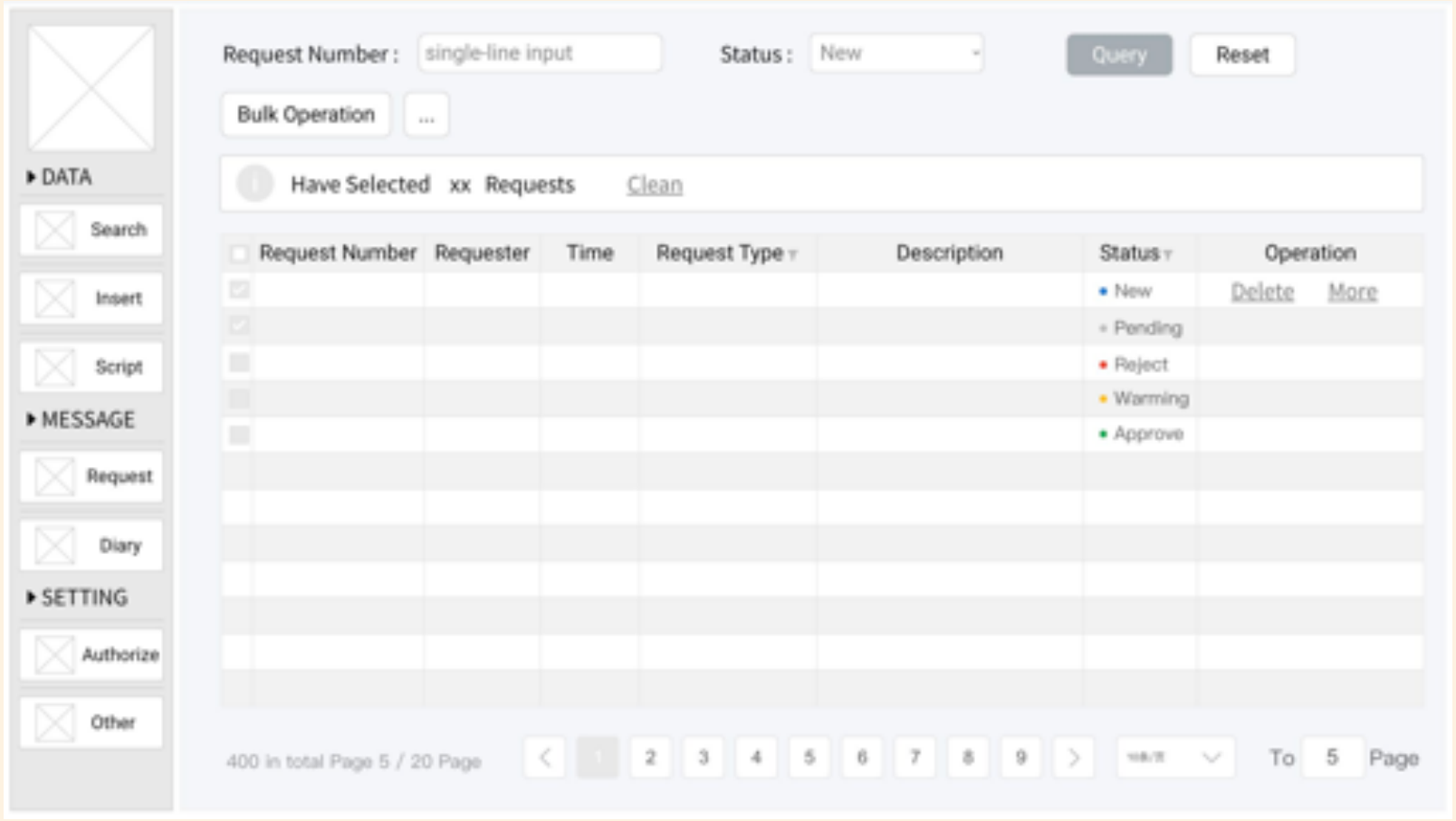
Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

Administrator Page – Insert Data



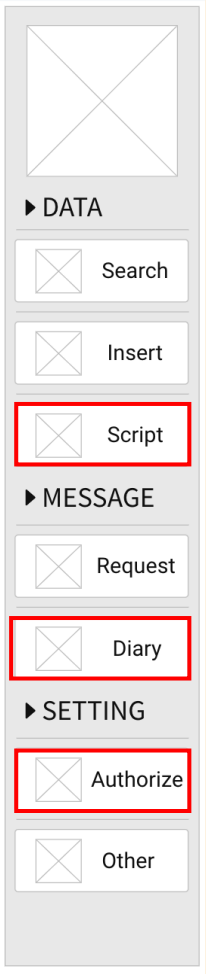
Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

Administrator Page - Request



Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

Administrator Page - Rest



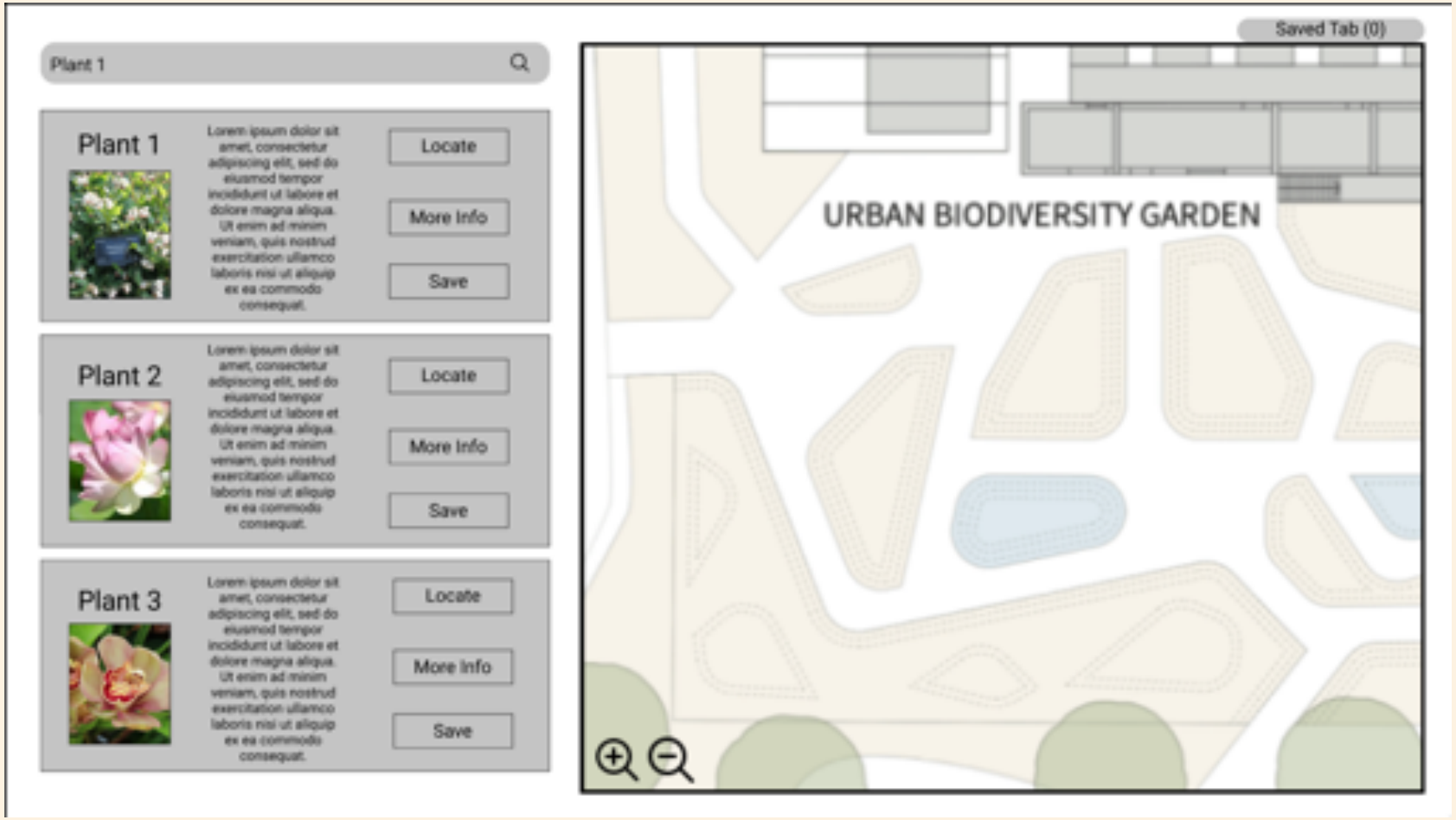
Script
- R / Python
- More powerful way to manipulate data

Diary
- Data modification records
- Different diagrams

Authorize
- Grant access controls
- Staff / Researchers

Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

Map

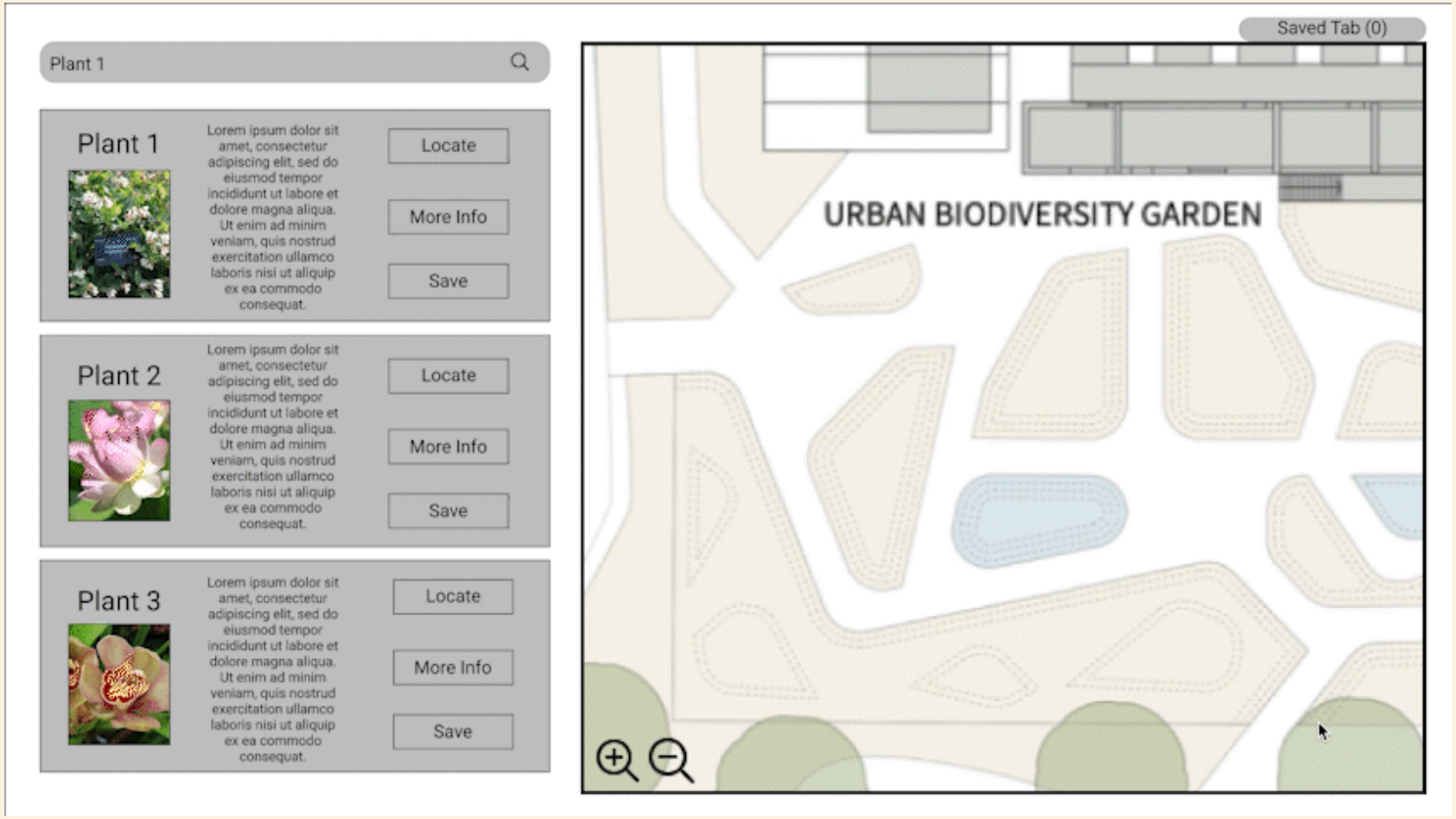


Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

Map

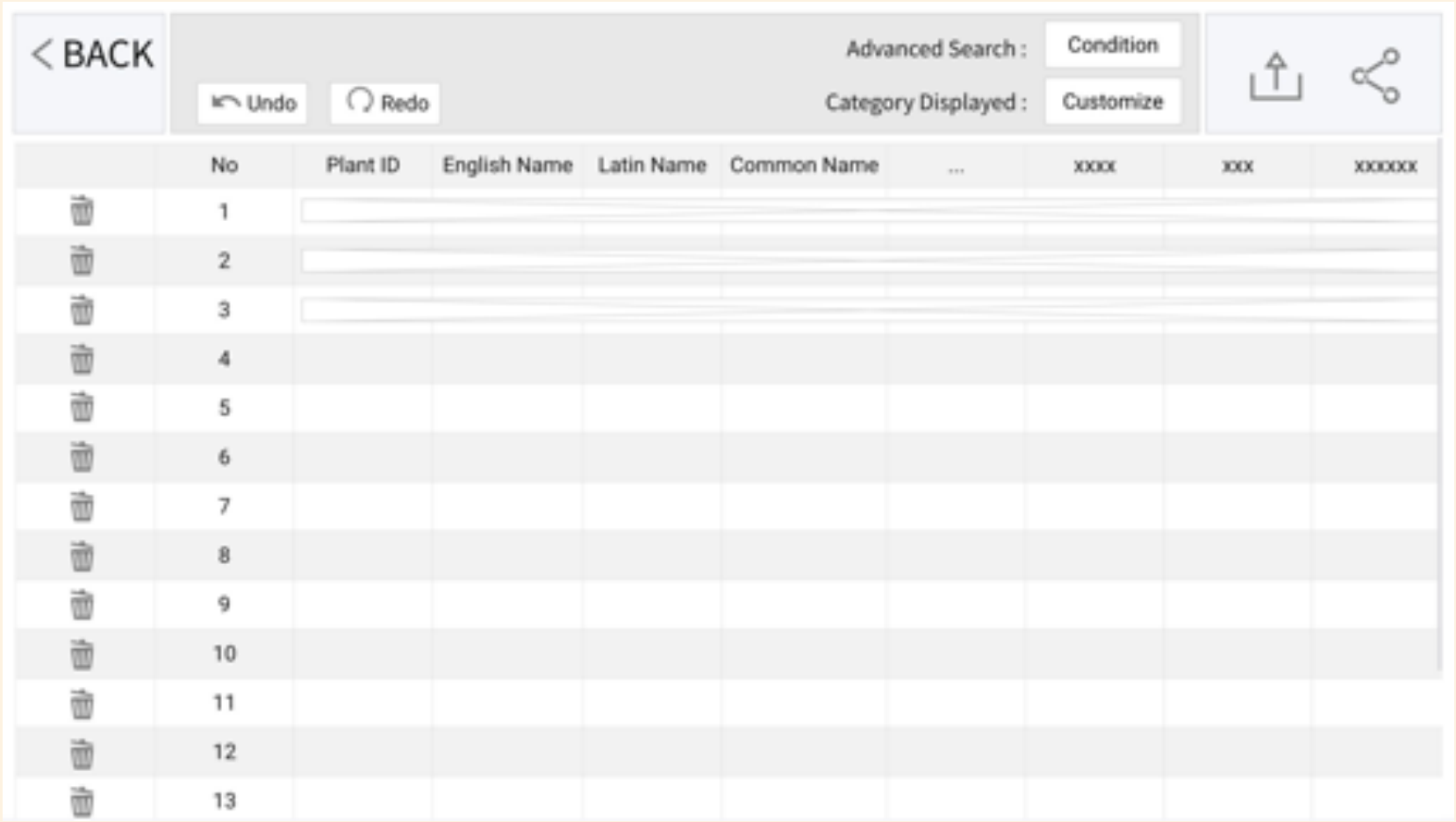
Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

Map



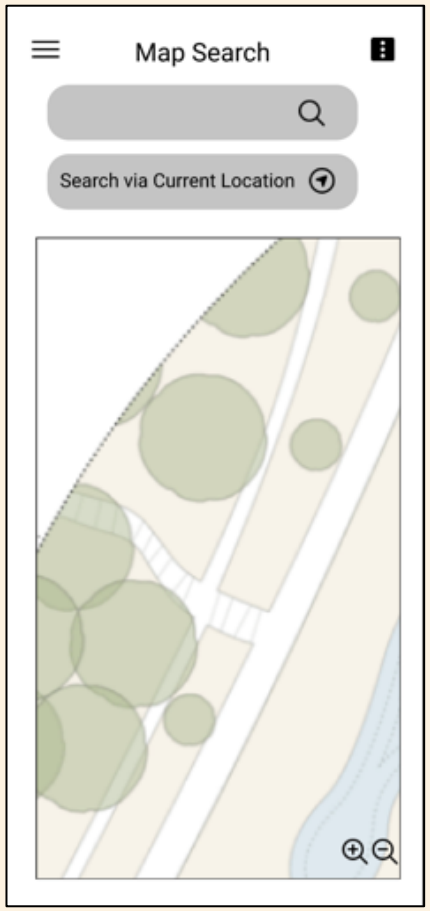
Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

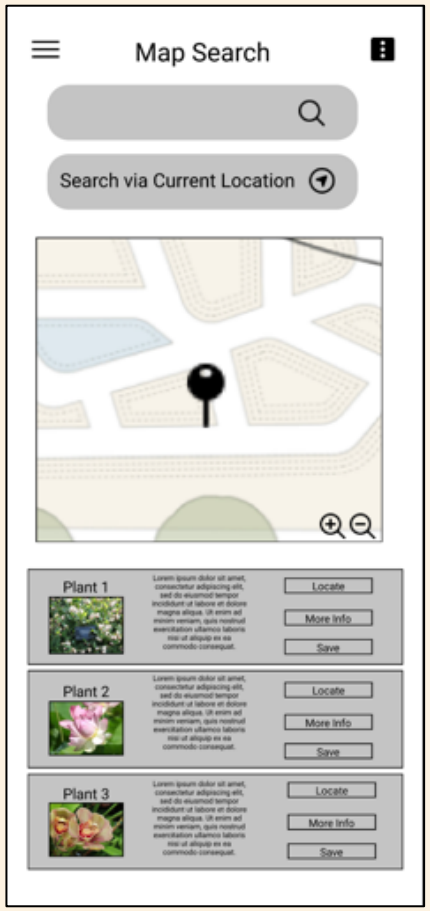
Save Tab



Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

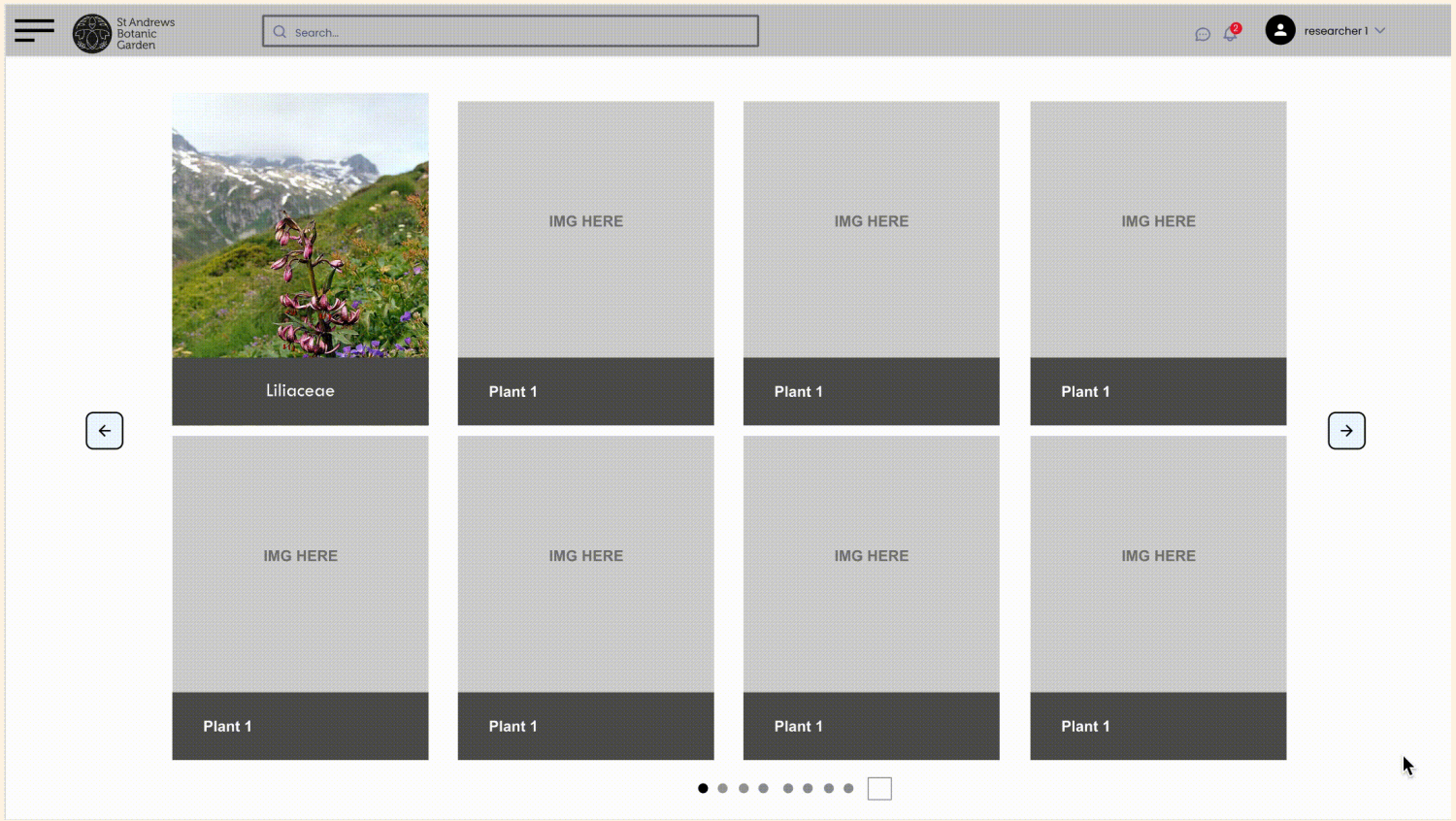
Mobile Map





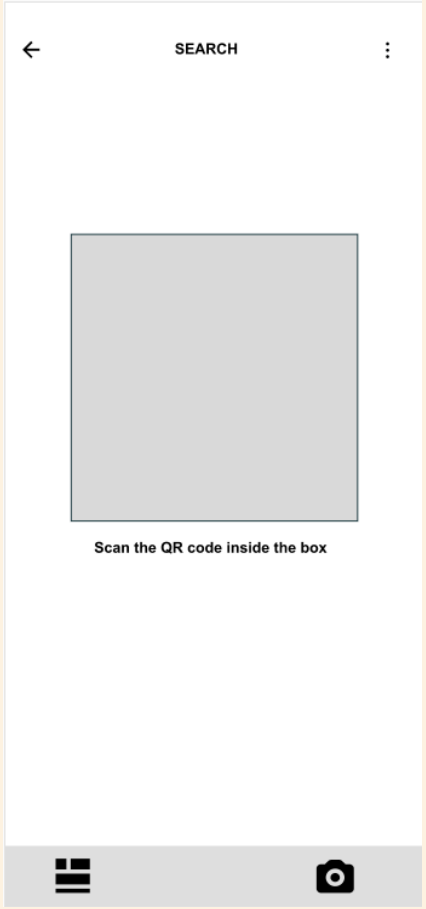
Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

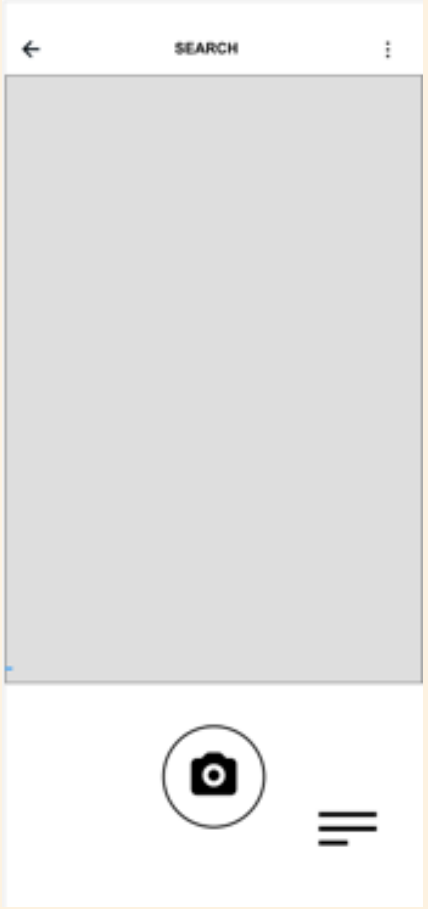
Visitors' Data View

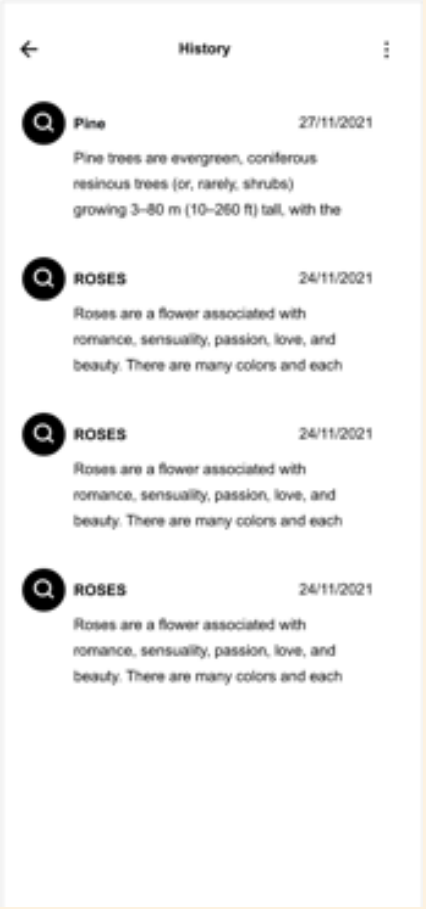


Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

QR Code and Image Recognition Search

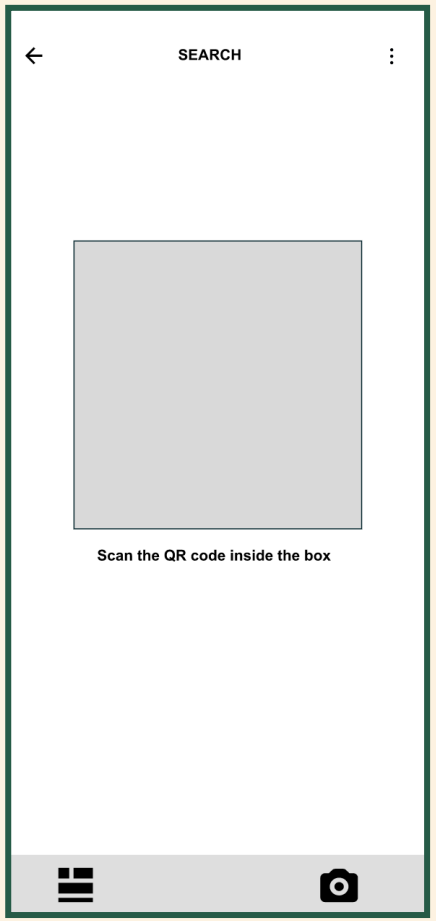


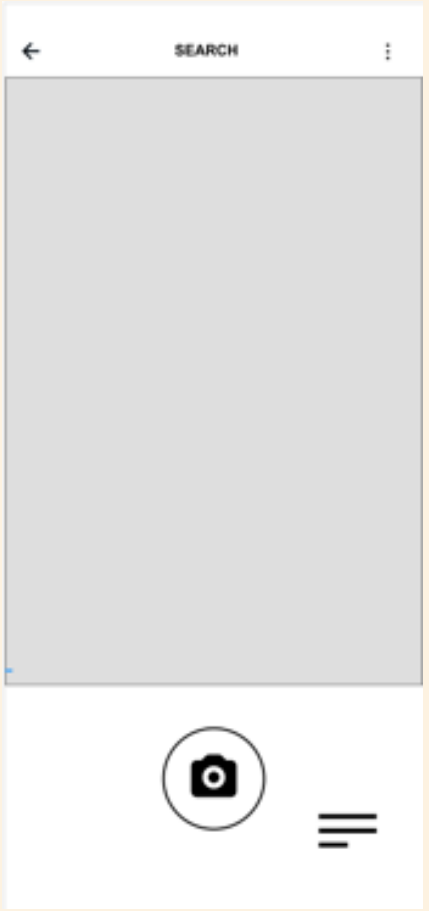


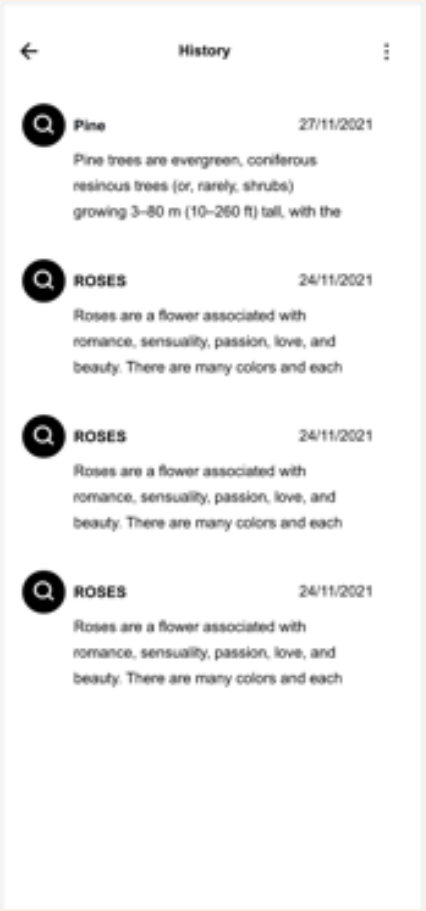


Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

QR Code and Image Recognition Search

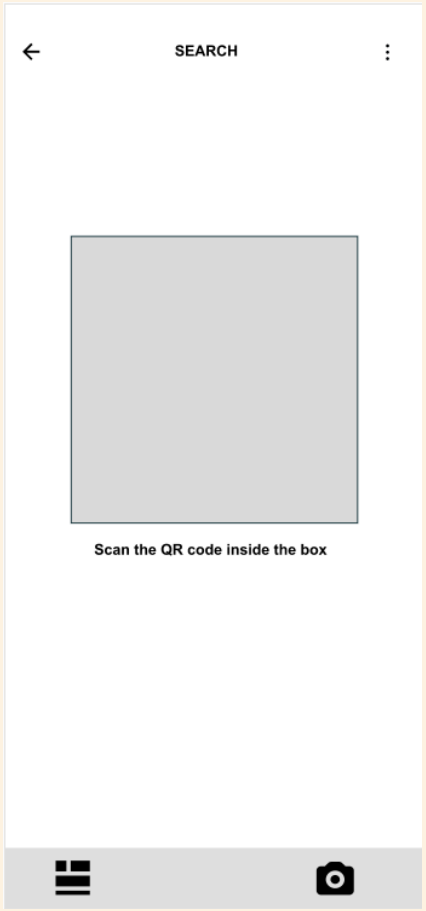


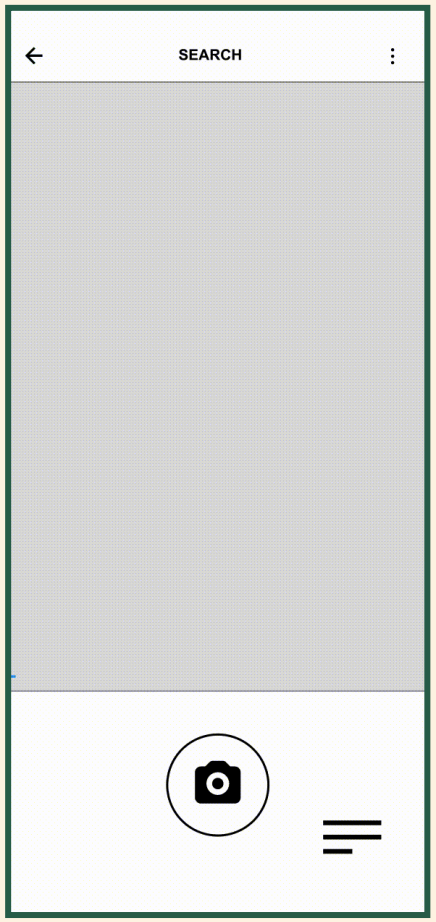


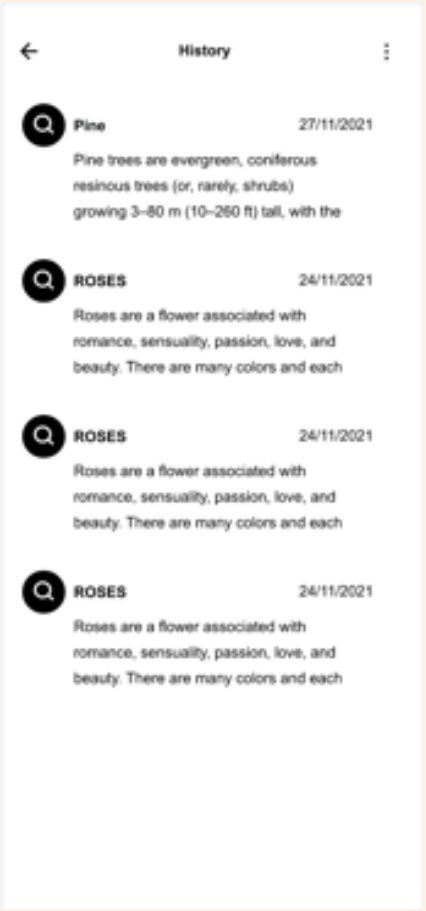


Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

QR Code and Image Recognition Search

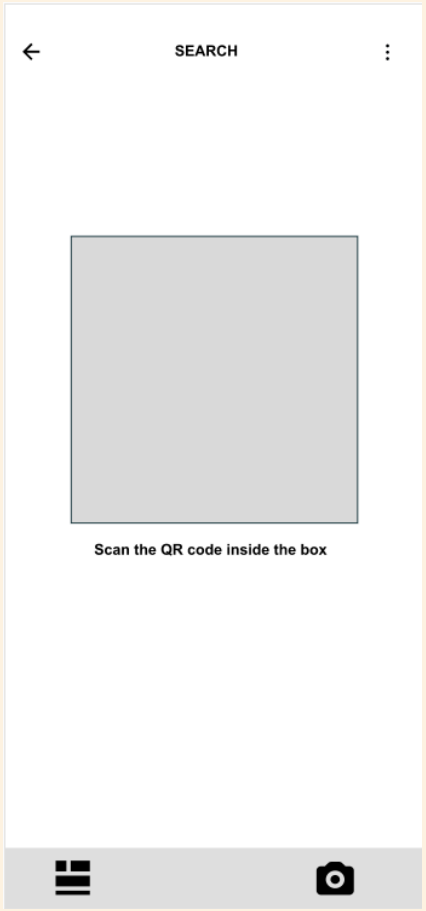


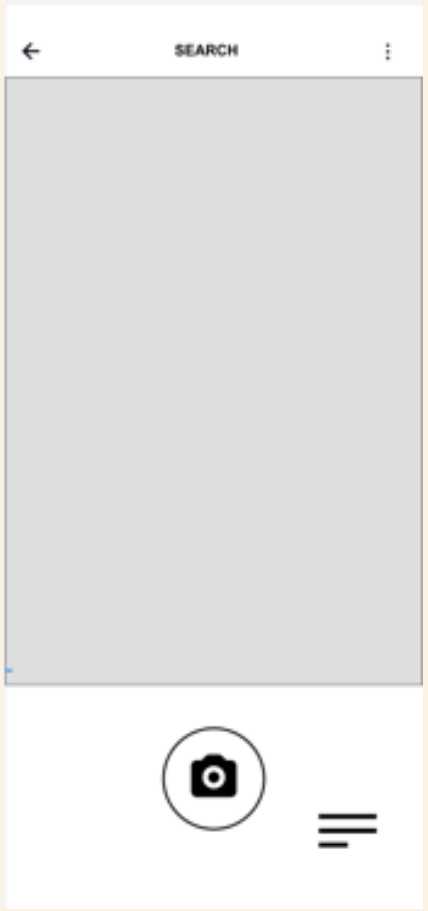


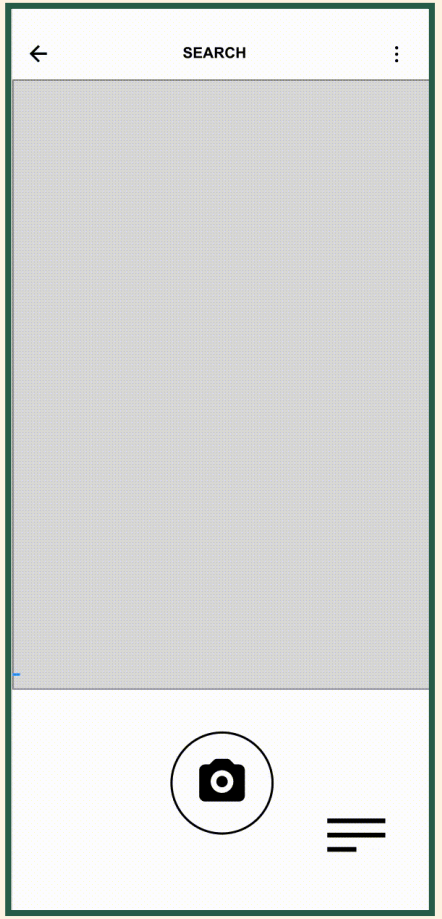


Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

QR Code and Image Recognition Search

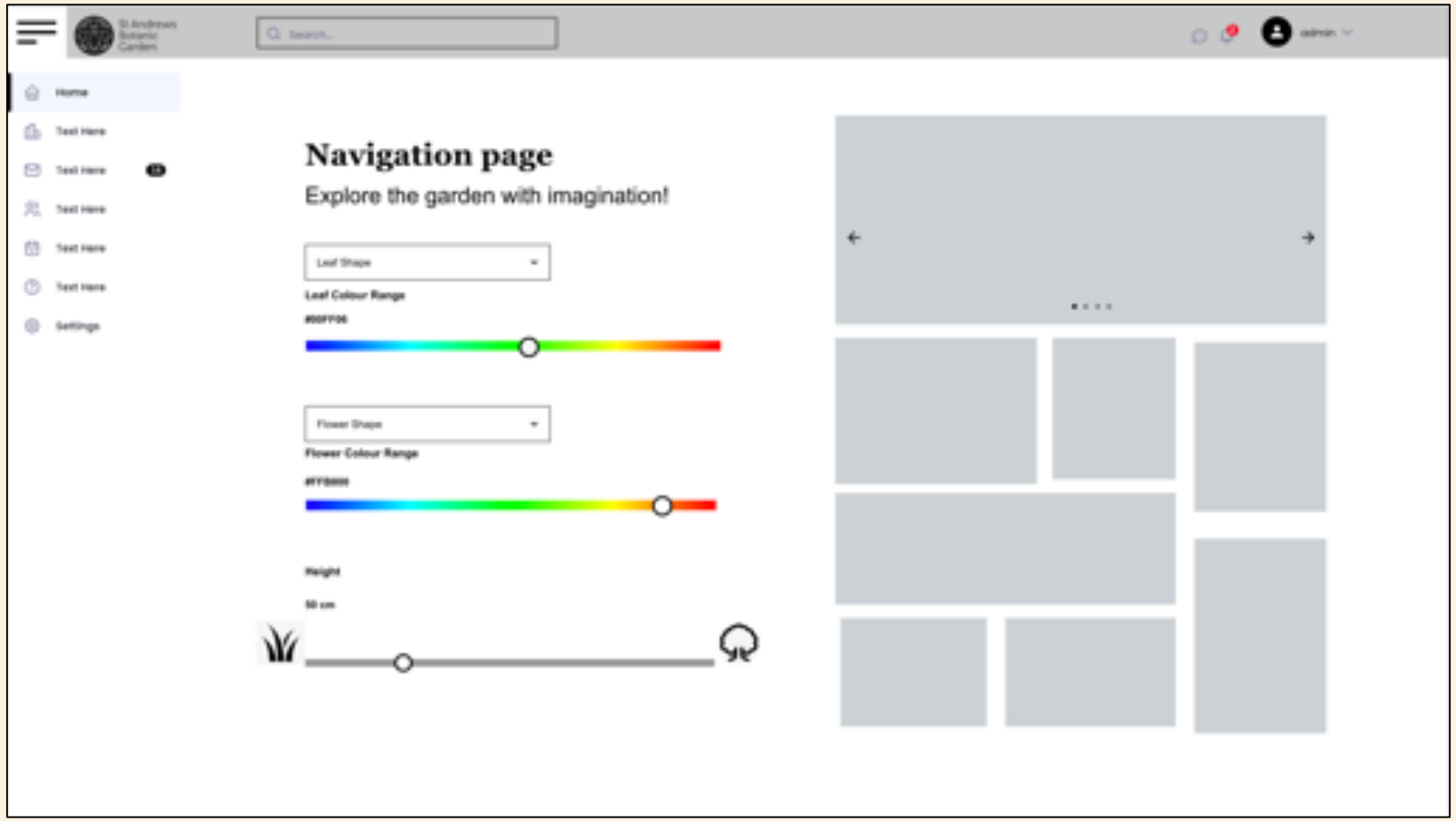






Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

Feature Search



Client's Briefing → Data Elicitation and Analysis → Scenario and Concept Sketches → Designing and Prototyping

Thank you

We hope you enjoyed this presentation of our web portal design. We would now love to answer any questions you have at this point.

The Botanic Garden Trust has full consent from the entire team to use all the material shown here, together with everything sent to you earlier today, in any way you see fit. We are also all available to answer any questions after the module has concluded.