‘Ceres’ Plant Health Database

P2: Usability Test - August 2020

Code for Canada + OMAFRA

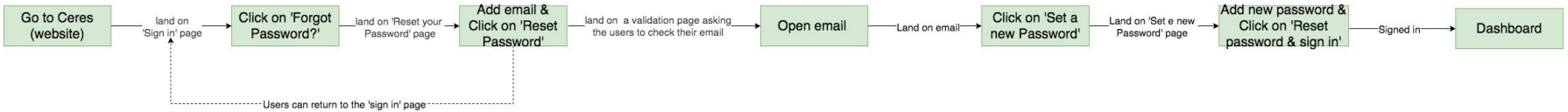
Background

We heard from crop protection Specialists that collecting, processing and analysing data takes too long. Mainly, because data is unstandardised and scattered across lots of data sources. This causes data errors that require Specialists to manually enter, clean, and reformat the data before analysing it. As a result, this makes it hard on Specialists to deliver timely insights to growers to save their crop from any damage or loss.

We started developing a flexible and extensible data management system called Ceres. It allows specialists to choose how data is structured in a centralised database. Ceres's vision is to also allow Specialists to enter data, import bulk data, generate forms, and connect to other applications via APIs.

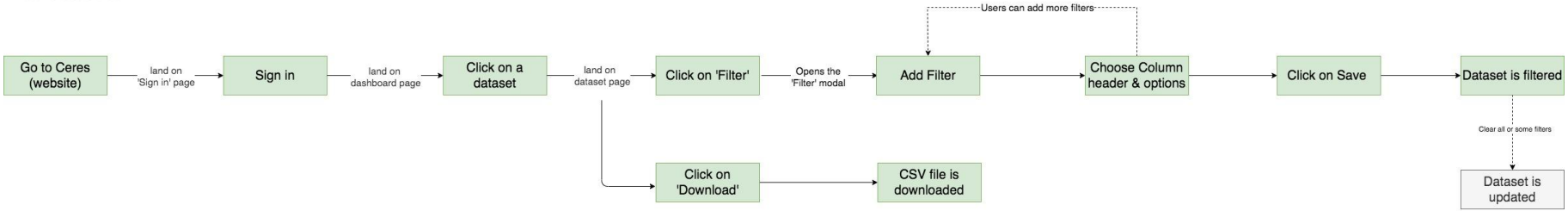
Tasks

1- Forgot Password



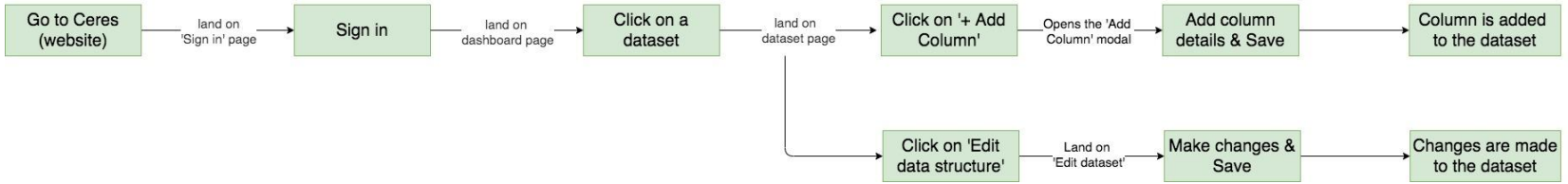
Tasks

2- Filter & Download a dataset



Tasks

3- Edit a dataset



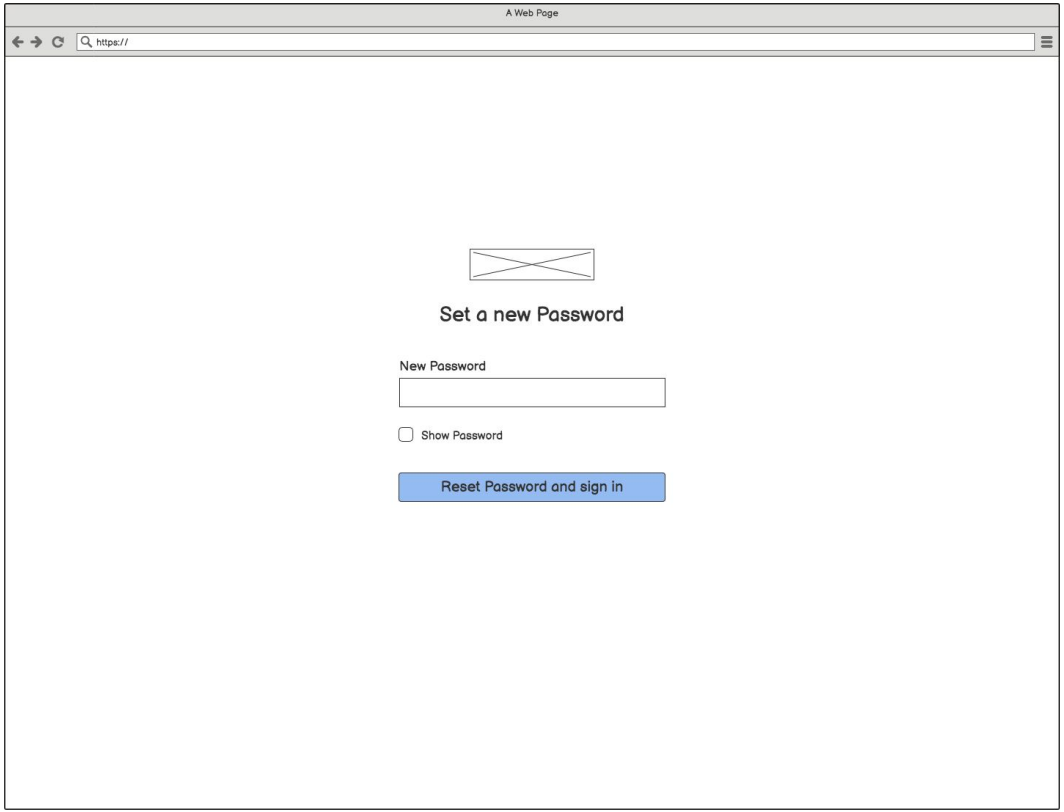
Approach

Tasks were shared with OMAFRA Specialists via 1:1 remote interviews.

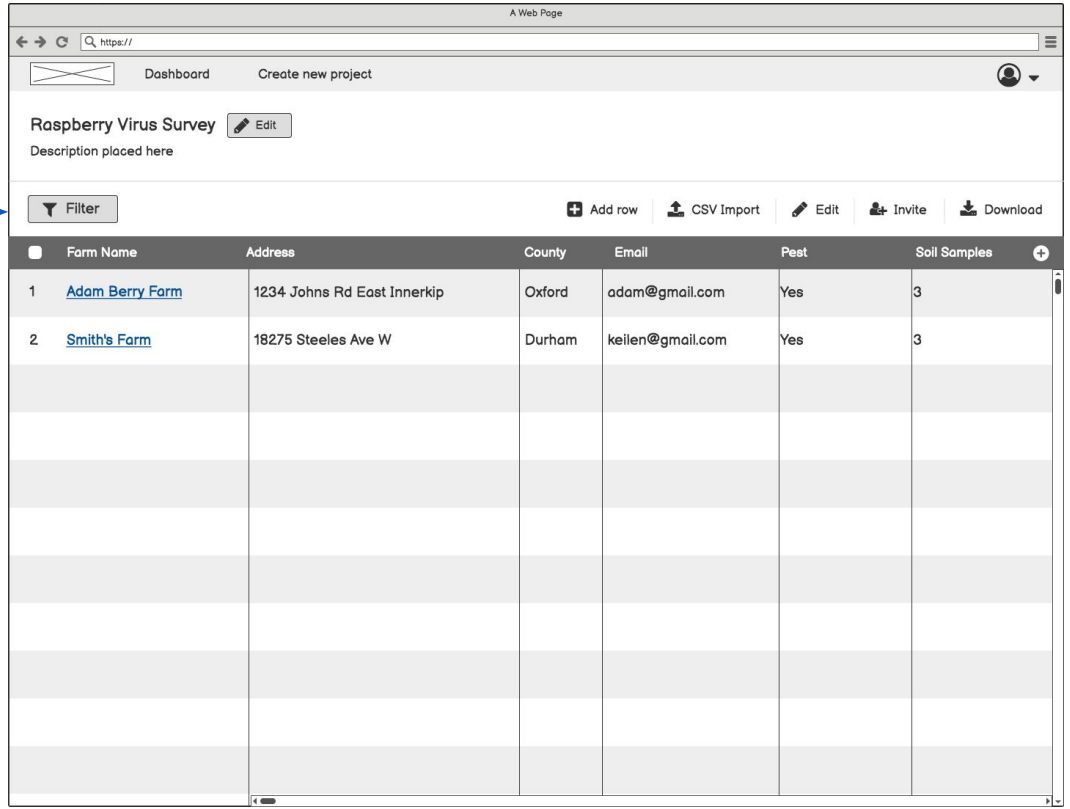
For Alpha, we focused on testing for Desktop since all specialists confirmed that they prefer to structure their datasets using desktops or laptops. Specialists also like to use mobile or tablet to enter data in the field. However, using screens could be challenging on rainy or sunny days. Also, lots of rural areas have slow to no internet connection.

Note: Currently, Specialists carry Blackberries or iPhones, but they are not provided with Tablets.

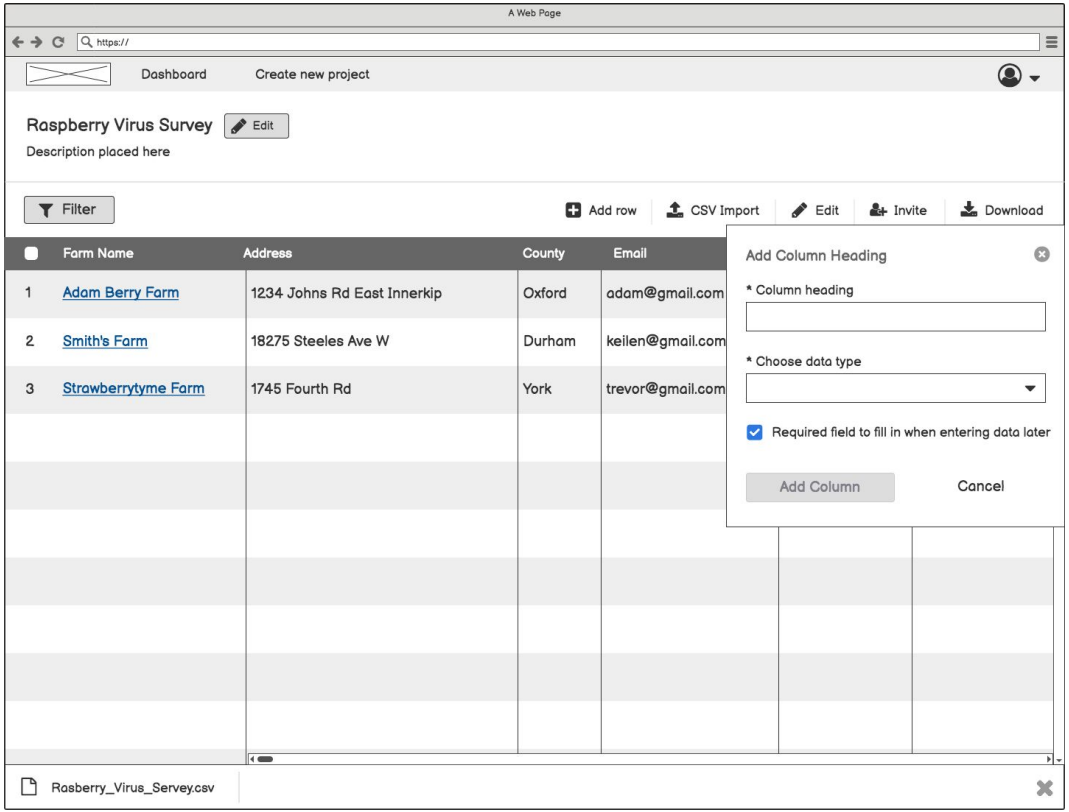
Set a new Password



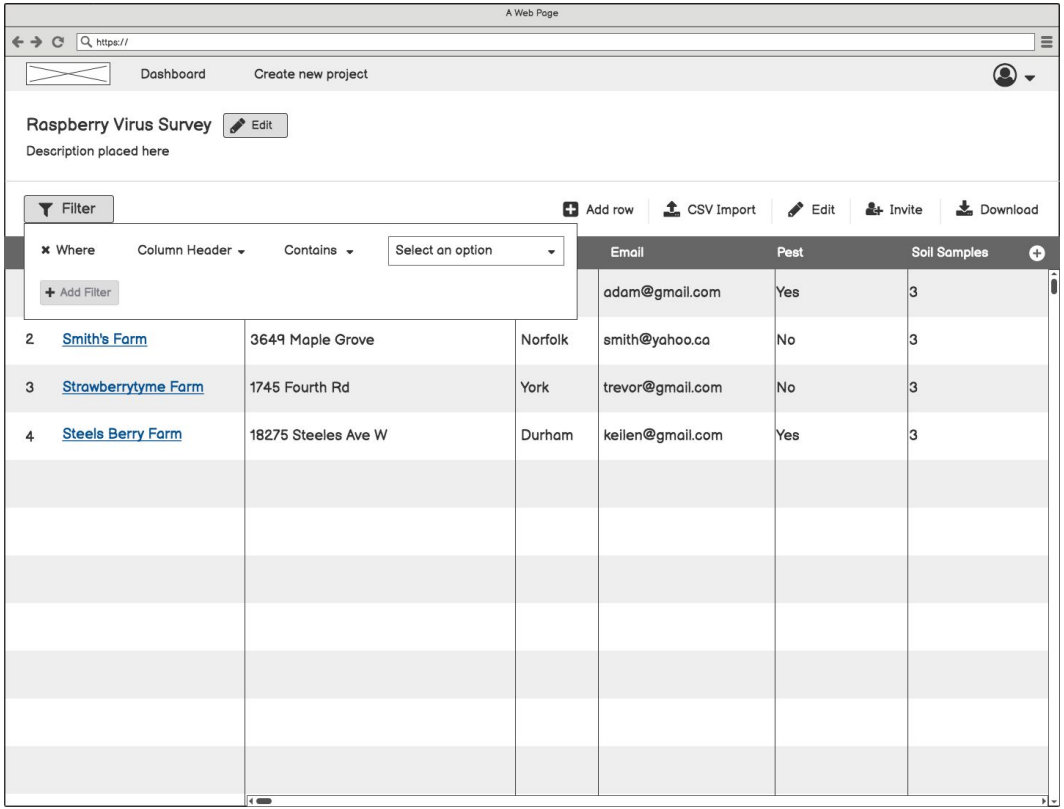
Dataset


A Web Page
https://
Dashboard
Create new project
Raspberry Virus Survey
Edit
Description placed here
Filter
Add row
CSV Import
Edit
Invite
Download
Farm Name
Address
County
Email
Pest
Soil Samples
1
Adam Berry Farm
1234 Johns Rd East Innerkip
Oxford
adam@gmail.com
Yes
3
2
Smith's Farm
18275 Steeles Ave W
Durham
keilen@gmail.com
Yes
3
Filter
Download
Add Column

Add Column


A Web Page
https://
Dashboard
Create new project
Raspberry Virus Survey
Edit
Description placed here
Filter
Add row
CSV Import
Edit
Invite
Download
Farm Name
Address
County
Email
1
Adam Berry Farm
1234 Johns Rd East Innerkip
Oxford
adam@gmail.com
2
Smith's Farm
18275 Steeles Ave W
Durham
keilen@gmail.com
3
Strawberrytyme Farm
1745 Fourth Rd
York
trevor@gmail.com
Add Column Heading
* Column heading
* Choose data type
Required field to fill in when entering data later
Add Column
Cancel
Rasberry_Virus_Servey.csv

Filter


A Web Page
https://
Dashboard
Create new project
Raspberry Virus Survey
Edit
Description placed here
Filter
Add row
CSV Import
Edit
Invite
Download
Where
Column Header
Contains
Select an option
Add Filter
Email
Pest
Soil Samples
adam@gmail.com
Yes
3
2
Smith's Farm
3649 Maple Grove
Norfolk
smith@yahoo.ca
No
3
3
Strawberrytyme Farm
1745 Fourth Rd
York
trevor@gmail.com
No
3
4
Steels Berry Farm
18275 Steeles Ave W
Durham
keilen@gmail.com
Yes
3

User Feedback

One of our main findings stated that adding columns vertically while creating a new dataset wasn't working for a specific use case. A user structuring a dataset with 50+ columns prefers to use a table view to see where columns are being placed in a dataset. Therefore, we made adjustments to our designs as you can see in 'P3: Usability Test - Sept'. Other findings are also quoted below.

"I probably wouldn't bother **showing that password**. You never know who's looking over your shoulder. I'm surprised you don't have a redundant entry."

"What's the difference between a **CSV file** and an Excel file?"

"I can have **over 50 columns.** I probably add one or two columns [in the create new dataset page]. Then, I would go into a format that's easier for me to see which is the grid and add and move columns there."

" '**Add new record**' [button copy] is a bit fuzzy. I would expect to see **'Save'** and 'Close'.

"Normally when I **filter**, I would expect if I selected 'pest' [a column heading] to have the options that are there and then to select those options [no contains field]"

Moving Forward

- Changed the add columns section in the ‘create new dataset’ to fit all use cases (datastes with 50+ columns)
- Inform users that a CSV file opens in Excel
- Remove the contains field from filter
- Change buttons language when adding a column to ‘Save’ and ‘Close’

Future Opportunities to consider

Ability to

- Compare multi-year datasets
- Hide Columns in a dataset
- Track changes done by collaborators
- Add a dataset end date
- View a dataset’s description from the dashboard