

WOAQ Product Requirements

Last updated: July 4, 2020

Contents

- [Product principles](#)
- [Reference documentation](#)
- [Target audience](#)
- [Project phases](#)
- [Phase 0 \(MVP\) requirements](#)
- [Phase 1 \(Engineering improvements and initial use case exploration\) requirements](#)
- Phase 2 (Design research) requirements
- Phase 3 (Public dataviz design and implementation) requirements

Product principles

Status: **In progress**

- Equity
- Lean

Reference documentation

Status: **Enough for P0**

The following material may be helpful for context around the decisions reflected in this Product Requirements doc:

- [Design & Research](#)
- [Accessibility Guidelines](#)

Target audience

Status: **Enough for P0**

Audience prioritization will change over time, as the tool continues to expand and learnings increase.

- **Primary:** WOEIP leadership and staff

WOAQ Product Requirements

Last updated: July 4, 2020

- **Secondary:** WOEIP volunteer scientists
- **Tertiary:** West Oakland residents

Primary audience's goals

Status: **Enough for P0**

As WOEIP leadership, I want...

1. A single, secure, persistent repository for the air quality data WOEIP collects through its volunteer programs.
2. To be able to easily manage the data we collect.
3. To be able to visually understand what the air quality is along the recorded routes.
4. To be able to visually explore the data to derive meaning from it applicable to WOEIP's work.
 - a. What observed environmental factors along the route might be impacting the AQ?
 - b. How does an AQ measurement compare to other neighborhoods/other blocks/etc?
 - c. What does the AQ look like over time/during specific time periods?

Secondary and tertiary audience's goals

Status: **Not started**

TBD

Phase 0 (MVP) requirements

- **Phase 0: MVP**
- Phase 1: Engineering improvements and initial use case exploration
- Phase 2: Design research
- Phase 3: Public dataviz design and implementation

P0 (MVP) use cases

Status: **In progress**

WOAQ Product Requirements

Last updated: July 4, 2020

User-specific use cases

Upload Flow

- ☐ Transfer data from recording devices to repository [Issue drafted]
- ☐ Confirm data accuracy on upload [Issue drafted]
- ☐ View geo-located data on a map [Issue drafted]

View Data Flow

- ☐ View raw data for a specific session [Issue drafted]
- ☐ View information about a specific session: [Issue drafted]
 - ☐ Date
 - ☐ Start time
 - ☐ Route name
 - ☐ Collector's name
 - ☐ Device used
 - ☐ Raw data set
- ☐ View information about a specific data point: [Issue draft in progress]
 - ☐ Location on map
 - ☐ PPM count
 - ☐ Timestamp
- ☐ Navigate between sessions [Issue draft in progress]
- ☐ View available maps [Issue draft in progress]

Account Management Flow

- ☐ Create an account tied to my email address [Issue drafted]
- ☐ Change my password [Issue drafted]
- ☐ Reset my password if I forgot [Issue drafted]

Primary functional requirements

These requirements address the minimum viable needs of our primary user group's use cases.

- ☐ Aggregate data files in a single repository

WOAQ Product Requirements

Last updated: July 4, 2020

- ❑ Access and manage data from a single user interface
 - ❑ Initial file formats to support: csv, log
 - ❑ Initial repository requirements:
 - ❑ Free
 - ❑ Accessible to WOEIP in a way that requires very little technical training
 - ❑ Allows ownership of data to remain with WOEIP
 - ❑ Allows WOEIP to export/download all data sets should they wish to change repositories in the future

Potential additional functional requirements pending user research

1. Ability to print a data set
2. Ability to email a data set to someone or multiple people, either as an attachment or as a direct URL
3. TBD

Phase 1 requirements

- Phase 0: MVP
- **Phase 1: Engineering improvements and initial use case exploration**
- Phase 2: Design research
- Phase 3: Public dataviz design and implementation

P1 (Improvements) use cases

Status: **In progress**

User-specific use cases

- ❑ View air quality scores for specific periods of time.
- ❑ Filter maps by: AQ score, pollutant, device/route, collector.
- ❑ Share a map via social media.

WOAQ Product Requirements

Last updated: July 4, 2020

- ☐ Print a map.
- ☐ Save a map to local device.
- ☐ View information about a specific session:
 - ☐ Average air quality score for session
 - ☐ Average air quality score for a full day (i.e group of sessions)
 - ☐ Other sessions from same day
 - ☐
- ☐ View information about a specific data point:
 - ☐ Relative air quality score
 - ☐ Total no. of data points recorded at a specific geolocation
- ☐ Edit session info:
 - ☐ Route name
 - ☐ Collector's name
 - ☐ Device used
 - ☐ Date
 - ☐ Start time (?)
- ☐ Delete data outliers.
- ☐ Delete a session.
- ☐

Account Management Flow

- ☐ View the maps associated with my account [P1 or later?]

System-specific use cases

- ☐ Automatic data backup on a set schedule.

WOAQ Product Requirements

Last updated: July 4, 2020

Requirements (out of date)

This section has been preserved for the record.

Features

1. Intuitive upload interface that supports:
 - a. file attachment
 - b. minimal data entry
 - c. automatic file pairing and data extraction
2. Data visualization interface that affords both macro and micro view of data set and associated metadata
3. Onboarding flow that orients the user to the project while supporting account creation (and related) flows

WOAQ Product Requirements

Last updated: July 4, 2020

Content

1. Plain English interface language, voice that considers core audiences
2. Structured content management on back-end within an intuitive authoring experience
3. Front-end content
 - a. Ability to learn about the project
 - b. Ability to get involved in the project

Technical

1. User authentication w/ roles & permissions
2. Roadmap for achieving WCAG 2.1 AA level compliance
3. Database that supports a variety of data formats
4. String management plan that considers: string externalization/ingestion; potential translation issues e.g. concatenation etc.

Release criteria

1. Features P0-P3
2. Maximum acceptable fail rate for core features (eg upload, query, export, backup)
3. Response time minimums
4. UX criteria (aesthetics, copy, flow)

Prioritized roadmap (out of date)

1. Intuitive upload interface that supports csv and log file attachment, and minimal data entry.

Phase 0 (MVP)	Phase 1	Phase 2	Notes
File drop zone that accepts one csv and one log file	Visual activation of drop zone on hover		

WOAQ Product Requirements

Last updated: July 4, 2020

Error and success messaging (generic)	Error and success messaging (specific)		
Alternative file upload path (browse drive)			
Auto-extraction of: • Session date • Session start time • Device make & model			
Post-upload data confirmation interface incl: • Session date • Session start time • Device	Add to post-upload data confirmation interface: • Collector's name based on active user		