# Test Plan

## Versioning

| | |
|---|---|
| **Potree** | v1.8 |
| **node.js** | v16.17.0 |
| **npm** | v8.19.2 |

## Ideal Test Plan

- unit testing
  - Checking that the aspects of Potree HTML that we changed are behaving as expected
    - starting coordinates are the same
    - annotations camera pov are accurate
  - Verify correctness of annotations
    - make sure that we can load them without errors
    - prevents wrongly-formatted annotations
- integration and system testing (with UI)
  - Ensuring Potree is reflected on web version
  - Ensure the elements of the model end up on the final web version
  - Each annotation works as expected
  - Able to map onto new LIDAR scans with registration markers
- descriptions of tools used
  - Potree
  - Cloud web host

- descriptions of types of end users

  - Web Users:

    - Mozilla, Chrome, Edge, Brave

    - Different screen sizes

  - Mobile users

    - IOS

    - Android

- performance, reliability, etc. testing

  - Ensuring that users cannot walk in certain areas

    - off the map

    - into buildings/trees/underground

- acceptance testing

  - Ensuring a pleasant user experience

  - The instructions make sense so the user doesn't need any other information

## Realistic Test Plan

- different test environments, error conditions and data-specific test cases.

  - realistically, test for web users only, with different screen sizes

- unit testing

  - Checking that the aspects of Potree HTML that we changed are behaving as expected

    - Starting coordinates are the same

    - annotations camera pov are accurate

  - Verify correctness of annotations

    - make sure that we can load them without errors

    - prevents wrongly-formatted annotations

- integration and system testing (with UI)

- Ensuring Potree is reflected on web version

- Ensure the elements of the model end up on the final web version

- Each annotation works as expected (audio plays, video runs, etc)

- descriptions of tools used

  - Potree

  - Cloud web host

- descriptions of types of end users

  - Web Users:

    - Mozilla, Chrome, Edge, Brave

    - different laptop screen sizes (not applicable to mobile yet)

- performance, reliability, etc. testing

  - Ensuring that users cannot walk in certain areas

    - into the ground

- acceptance testing

  - Ensuring a pleasant user experience

  - The instructions make sense so the user doesn't need any other information