Drupal Module Requirements

Analysis Map v1.08.21

Overview

The purpose of this document is to explicitly define the requirements for Version 1.08.22 “Analysis Map”, a drupal module.

The purpose of the drupal module is to allow an administrator user to save their changes to a map so that a second, non-admin user can view the map and post notes. The map currently has all functionality needed to edit the map on from within the browser. This is done with use of Google Maps JavaScript API, CSS and jQuery.

To help aid in the development process, the requirements are defined as three different types within this document. The requirements are explicitly defined but their is room for interpretation in how to best implement a specific requirement. For example, if a requirement states that a data type must be stored within it’s own database table, it is expected that proper usage of Drupal hooks within the module will allow for the creation of the database on installation of the module and data that is saved will be done with a secondary script within the module.

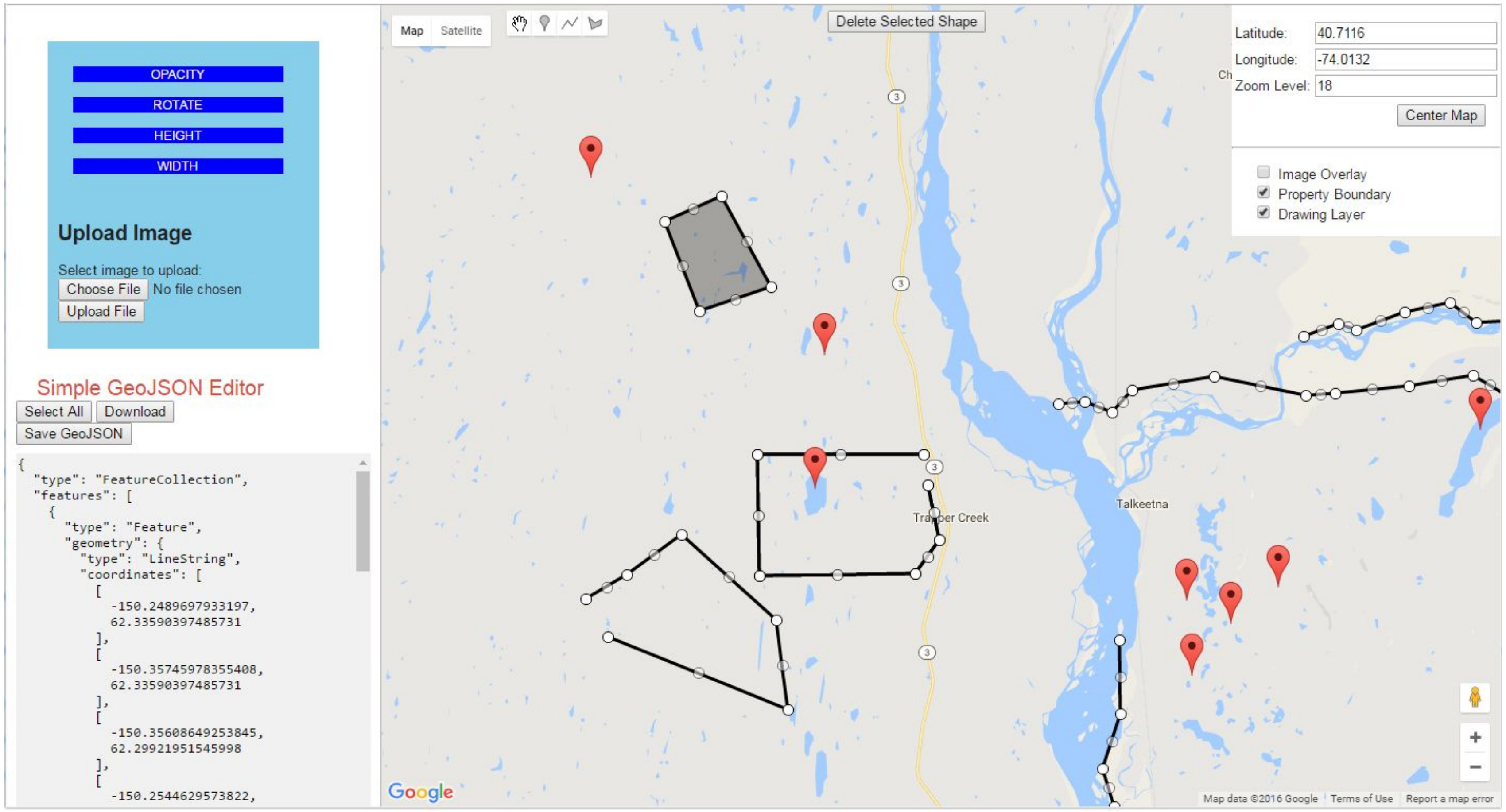
The requirements will be defined as three different types.

1. User Interface
2. Drupal Module
3. Development Testing

The next pages explicitly define the requirements.

Requirements: User Interface

The map seen below is the browser-side, Javascript/HTML version of the module. The final version of the browser side functionality is located in the directory: simplemap/v1.08/v0.21/v0.21.php.



Latitude: 40.7116
Longitude: -74.0132
Zoom Level: 18

□ Image Overlay
☑ Property Boundary
☑ Drawing Layer

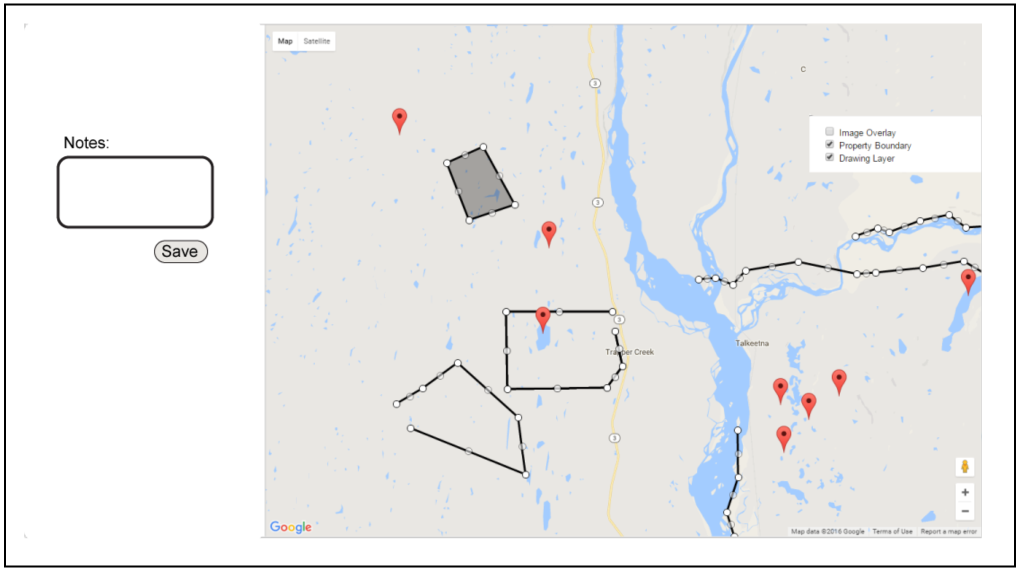
```
{
  "type": "FeatureCollection",
  "features": [
    {
      "type": "Feature",
      "geometry": {
        "type": "LineString",
        "coordinates": [
          [
            -150.2489697933197,
            62.33590397485731
          ],
          [
            -150.35745978355408,
            62.33590397485731
          ],
          [
            -150.35608649253845,
            62.29921951545998
          ],
          [
            -150.2544629573822,
```

Requirements: User Interface: Two Maps

Map I: Administrative User
Has full functionality to edit, update and save map.
Saving map populates database tables.

Map II: Non-admin user:
Limited editing abilities. Views map that admin has saved
Editing Abilities:
Can view Map, Terrain or Satellite (top left corner)
Can check radio boxes to view overlays (Image Overlay, Property Boundary or Drawing Layer)
Can hit plus or minus to zoom in and zoom out (Bottom right corner)
Can click-drag map to scroll map view (north, east, south, west)

Non Admin User view of map:



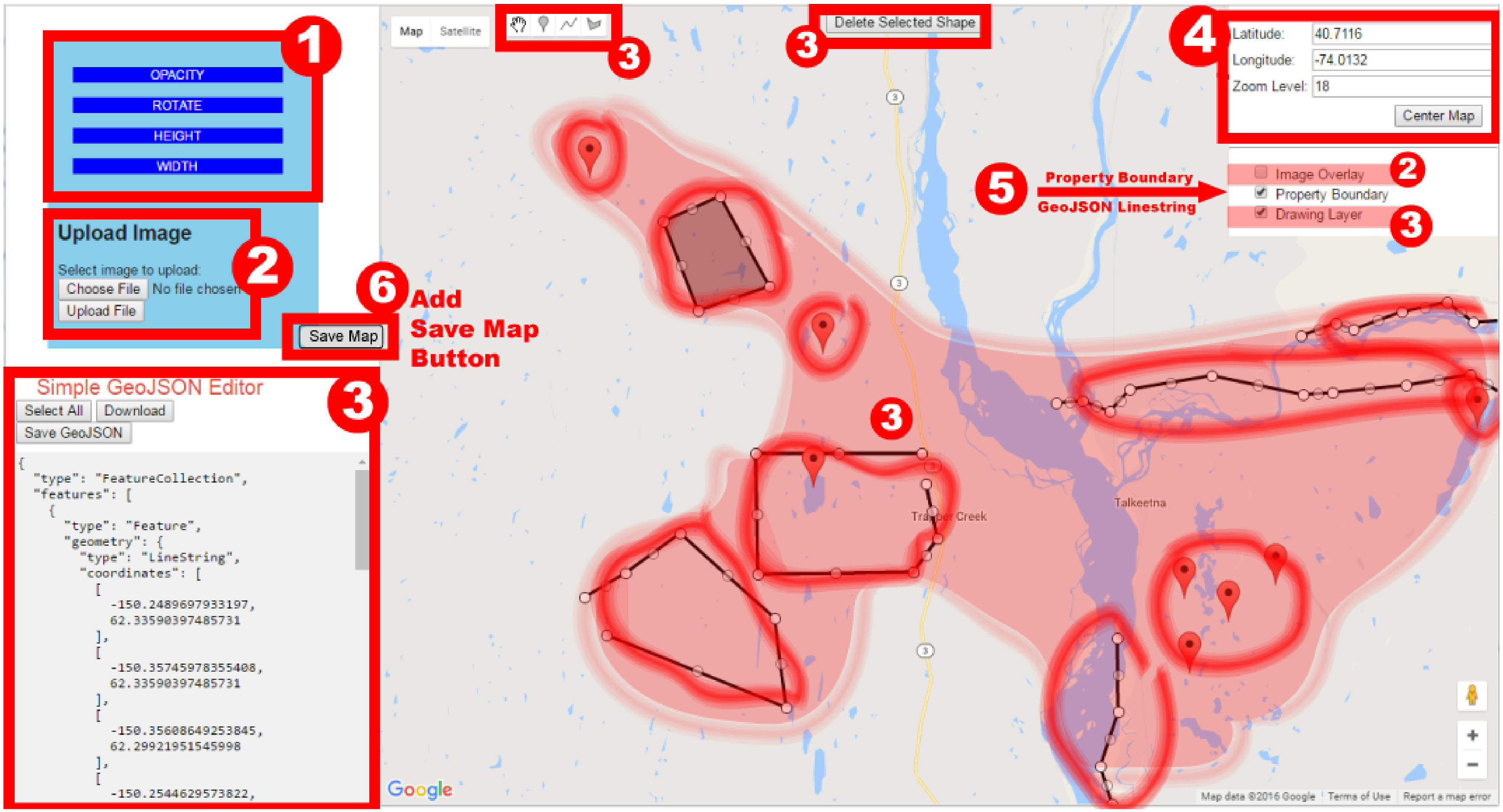
Requirements: Drupal Module: Database Tables

When user clicks the “Save Map” button, database tables are populated:

A. Auto-Generated: Table ID (Primary Key) (Required)
B. Auto-Generated: Date/Time Stamp formatted yyyy-mm-dd-hh-mm (Required)
C. Auto-Generated: Map ID (Required)
D. Data from browser (refer to map on next page):

Number 1: if images is uploaded and changes are made to uploaded image (opacity, rotate, height and width)
Number 2: link to uploaded image
Number 3: as user draws on map using drawing tools, data is passed into from on left as GeoJSON data. Save GeoJSON data
Number 4: latitude, longitude and zoom level and map center must be saved
Number 5: This data is drawn from previously created GeoJSON linestrings. Sample data will be provided.

Map View: Data Sources to Save to Database



Add Save Map Button

Property Boundary GeoJSON Linestring

Latitude: 40.7116
Longitude: -74.0132
Zoom Level: 18

□ Image Overlay
☑ Property Boundary
☑ Drawing Layer

```
{
  "type": "FeatureCollection",
  "features": [
    {
      "type": "Feature",
      "geometry": {
        "type": "LineString",
        "coordinates": [
          [
            -150.2489697933197,
            62.33590397485731
          ],
          [
            -150.35745978355408,
            62.33590397485731
          ],
          [
            -150.35608649253845,
            62.29921951545998
          ],
          [
            -150.2544629573822,
```

Requirements: Development Testing

1. Completed module should meet all previously defined requirements without error.
2. PHP.ini errors will be turned on to look for errors.
3. Module should be compatible with Drupal Version 7.x
4. Module should be “stand alone” and easily installed on any Drupal Version 7.x system.
5. Module should be compatible with installation database tables in MySql or PostgreSQL
6. Drupal Coding standards, as defined here: https://www.drupal.org/docs/develop/standards must be adheared to.