

Change Plan of Open Data Syracuse

Change Objectives

1. API Connection Feature
2. Search Bar Auto-Fill Feature
3. Website Graphic Design Improvement

All the functional objectives should be tested in web pages independently. The implementation and integration stage of the web app will happen after a successful testing resting.

API Connection Feature

Method

1. Connection with RESTful API using JavaScript, and data will come from those two sites:
 - a. <http://data.syr.gov/datasets/code-violations/geoservice>
 - b. <http://data.syr.gov.net/>
2. Extract information from the JSON type dictionary file using key and value;
3. Represent data in text format

Change Impact

1. Without updating data file repeatedly and extracting information from the file, the site will load faster. The server will have less pressure.
2. Web developers can focus on the algorithm rather than manage files.

Search Bar

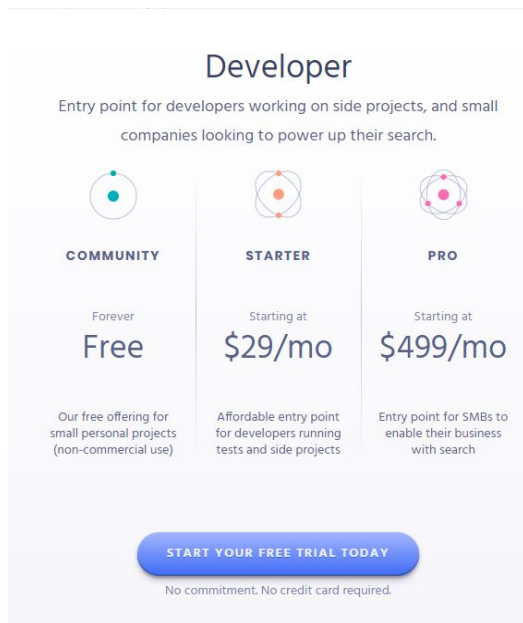
Currently we are looking at implementing Algolia's service — InstantSearch.js.
Demo Page (Shortened Link): <https://goo.gl/7Wj3iq>

Method

1. Algolia Guide Document (Shortened Link):
<https://goo.gl/EFwHN8>
2. Algolia > Community > InstantSearch.js Guide (Shortened Link):
<https://goo.gl/14XT4c>

Change Impact

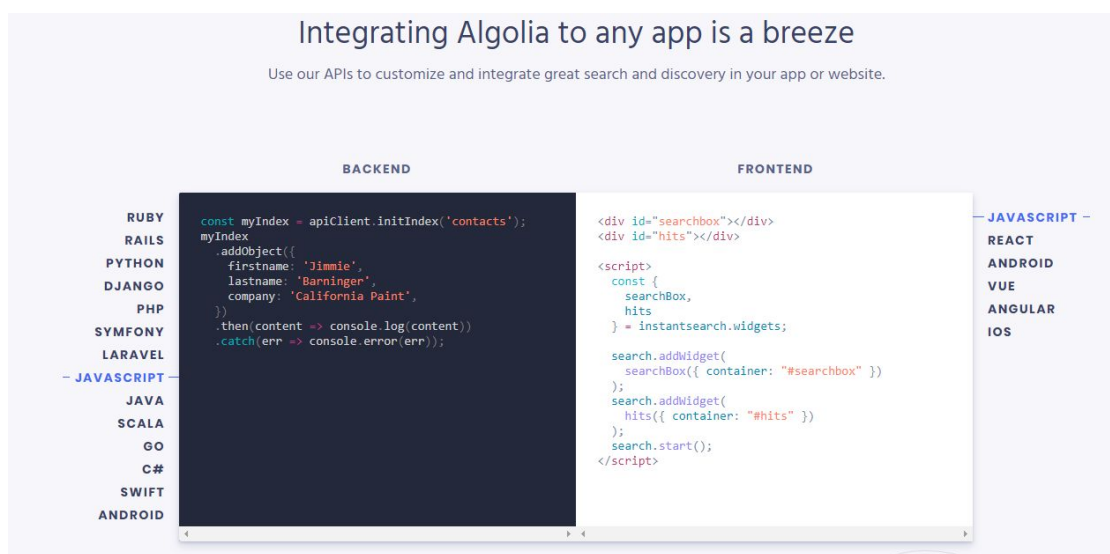
1. The service is free. It will have no impact on the budget. The graph shows the price plan of Algolia.



The graphic displays the 'Developer' pricing tier for Algolia. It features three columns: 'COMMUNITY' (Forever Free), 'STARTER' (Starting at \$29/mo), and 'PRO' (Starting at \$499/mo). Each column includes a description of the plan's target audience and a 'START YOUR FREE TRIAL TODAY' button. A note at the bottom states 'No commitment. No credit card required.'

Plan	Price	Description
COMMUNITY	Forever Free	Our free offering for small personal projects (non-commercial use)
STARTER	Starting at \$29/mo	Affordable entry point for developers running tests and side projects
PRO	Starting at \$499/mo	Entry point for SMBs to enable their business with search

2. Quick search will increase the web accessibility, and users can find information quickly, with unfinished input or typo. The following shows the coding demo of the websitee.



The graphic illustrates the ease of integrating Algolia into any application. It features a central code editor with two tabs: 'BACKEND' and 'FRONTEND'. The 'BACKEND' tab shows code for initializing the Algolia client and adding a contact object. The 'FRONTEND' tab shows code for creating a search box and hits container. The code is written in JavaScript. The background is a light purple gradient with a subtle grid pattern.

```
const myIndex = apiClient.initIndex('contacts');
myIndex
  .addObject({
    firstname: 'Jimmie',
    lastname: 'Barninger',
    company: 'California Paint',
  })
  .then(content => console.log(content))
  .catch(err => console.error(err));
```

```
<div id="searchbox"></div>
<div id="hits"></div>

<script>
  const {
    searchBox,
    hits
  } = instantsearch.widgets;

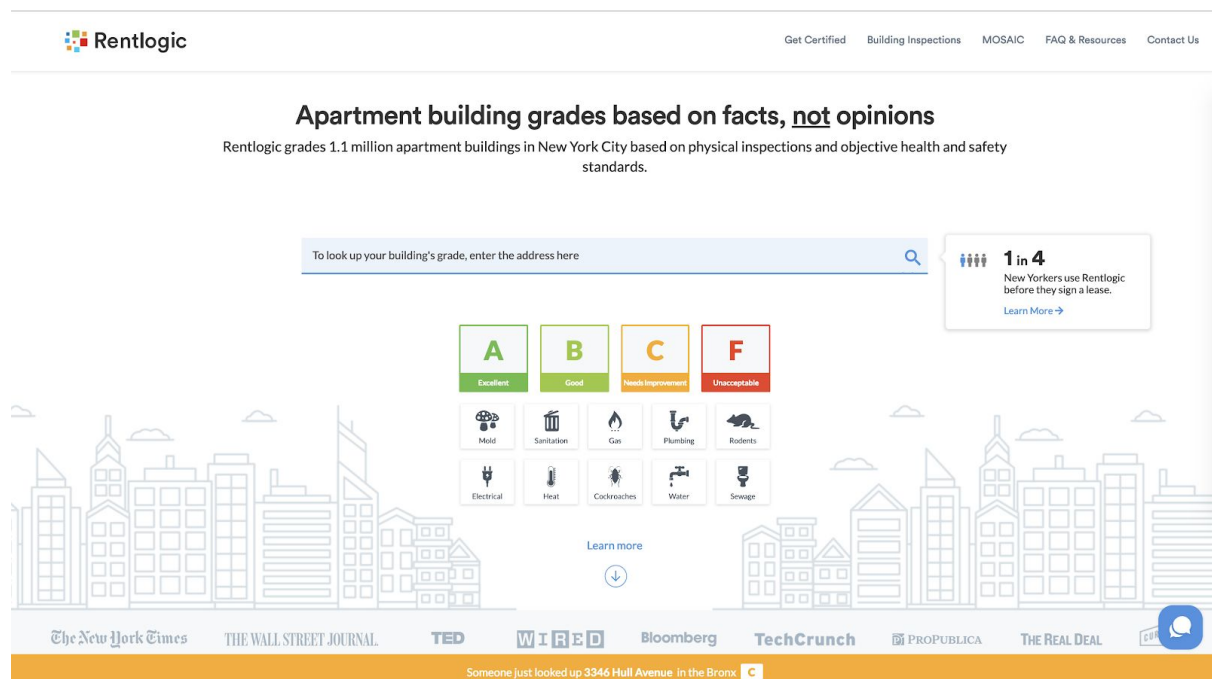
  search.addWidget(
    searchBox({ container: "#searchbox" })
  );
  search.addWidget(
    hits({ container: "#hits" })
  );
  search.start();
</script>
```

Design

It is the last part of the project, after the positive testing result of functions of API connection and auto-fill search bar. The interface of the web should be user-friendly, neat and comfortable. The design styles will follow the example of Rentlogic.com.

Method

1. For the early stage of the web development, the page design will be simple as we need to focus on the functions. For instance, on one page, we will have a design of search bar. On another page, there will be only an input prompt or box that user can input full address to return information.
2. For the later stage, we will redesign the website according to RentLogic, after adapting contents and color schemes.
 - a. <https://rentlogic.com/>



Change Impact

1. The new web design increases web accessibility.
2. The user will be more comfortable to navigate in the website.