RFC 248 WIP: Align on main navigation goals

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Status: WIP

Requested reviewers (please review by EOD YYYY-MM-DD):

Approvals:

Team: (follow these conventions so we can search by team)

Background

Our initially relatively simple edits to the main navigation has grown in scope considerably. The solution may be much more complex and requires more study and more development time.

This RFC will re-examine the problem we are trying to solve and open up the core problem to additional users.

Problem

A new navigation system should be studied carefully. The first step should be to define our goals in addressing the navigation design and align on them as a company.

Several problems exist:

- Defining goals of the project
- Determining how much query input length should be a factor in the navigation design
- Determining which type of navigation best solves these objectives
- Collecting input from the team on direction

Defining Goals

Sourcegraph navigation should:

- 1. Align to user goals
 - 1. To align to goals we should define goals by persona
- 2. Align to Sourcegraph business objectives (discoverability)
 - 1. Promote campaigns growth
 - 2. Promote code insights as a major feature
 - 3. Promote code monitoring as a major feature
 - 4. Promote extensions
- 3. Support a search bar length that works for the median size query
 - 1. Larger queries will require a multi-line query editor
- 4. Usability
 - Discoverability
 - 2. Speed of access

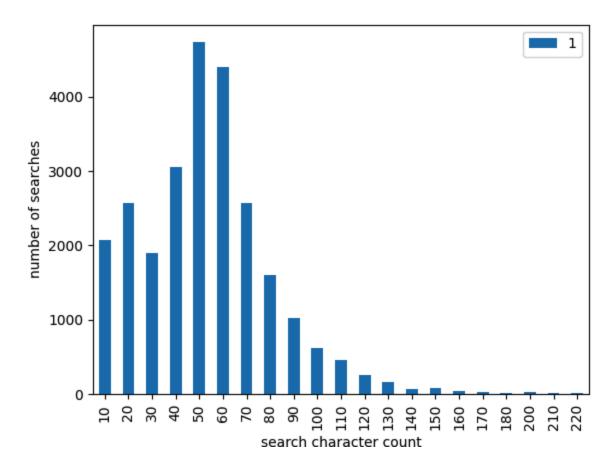
- 3. Keyboard driven navigation
- 4. Signpost (convey current location)

5. Contradicting goals

- 1. Search bar width
- 2. Expose high-level information architecture

Determining horizontal navigation's affect on query input.

Seach character count from 35k cloud searches shows the median queries all below 90 characters. Note, cloud data is not fully representative of sever customer data.



Considerations:

- On small instances repo: or repogroup: may not be utilized, making queries shorter.
- Server instances users are more aware of search language
- Large instances, scoping may be more important

Half with browsers can be assumed to be a large portion of our userbase. A quick analysis of character counts supported by browser widths. Pink background text in the chart below are where media query lengths become clipped.

	Search characters			
Browser width	Current nav	App style	Full width search	
1440 pixels wide	120	145	160	
1100 pixels wide	75	99	114	
900 pixels wide	70 (collapses to icons)	71	86	

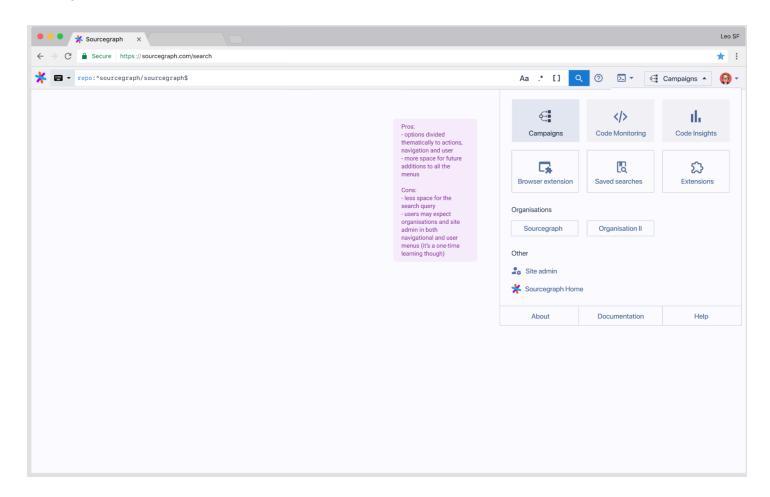
Note, there are other solutions to the query bar length problem such as collapsing paths and repository names.

Four types of navigation

- Full horizontal menu (current navigation)
- Resizing horizontal top menu
- App style menu
- Left navigation

Examples:

App style menu:



Left navigation:

```
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a
                                                                               import { schemas } from '@0x/json-schemas';
import { BigNumber } from '@0x/utils';
import * as chai from 'chai';
import * as dirtyChai from 'dirty-chai';
import 'mocha';
*

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                 autolabeler.yml
Ť
                                                                                chai.config.includeStack = true;
chai.use(dirtyChai);
const expect = chai.expect;
             > contracts

→ packages

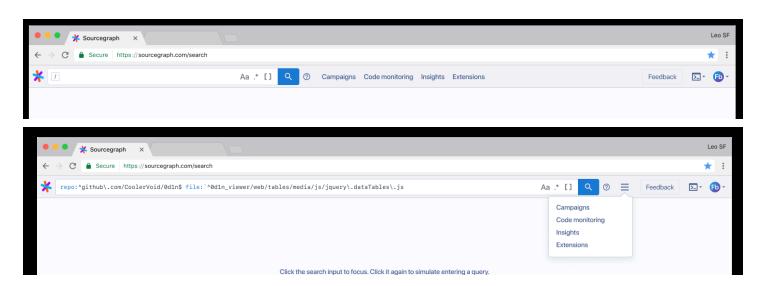
                                                                                // tslint:disable:custom-no-magic-numbers
describe('Assertions', () => {
    const variableName = 'variable';
    describe('#i8BigNumber', () => {
        it('should not throw for valid input', () => {
            const validInputs = [new BigNumber(23), new BigNumber('45')];
            validInputs.forEach(input => expect(assert.isBigNumber.bind(assert, variableName, input)).to.not.throw());
}

               > 0x.js
                > abi-gen
                   > coverage
                                                                                               it('should throw for invalid input', () => {
    const invalidInputs = ['test', 42, false, { random: 'test' }, undefined];
    invalidInputs.forEach(input => expect(assert.isBigNumber.bind(assert, variableName, input)).to.throw());
}
                   > src

✓ test

                                                                                        });
describe('#isNumberLike', () => {
    it('should not throw for valid input', () => {
      const validInputs = [new BigNumber(23), 23];
    validInputs.forEach(input => expect(assert.isNumberLike.bind(assert, variableName, input)).to.not.throw());
}
                     .npmianore
                                                                                              });
it('should throw for invalid input', () => {
  const invalidInputs = ['test', false, { random: 'test' }, undefined];
  invalidInputs.forEach(input => expect(assert.isNumberLike.bind(assert, variableName, input)).to.throw());
                    CHANGELOG.ison
                    README.md
                    package.ison
                                                                                        it('should not throw for valid input', () => {
  it('should not throw for valid input', () => {
    const validInputs = [new BigNumber(23), new BigNumber('45000000')];
    validInputs.forEach(input =>
                    tsconfig.json
                                                                                                             expect(assert.isValidBaseUnitAmount.bind(assert, variableName, input)).to.not.throw(),
                > asset-swapper
                                                                                              ));
it('should throw for invalid input', () => {
  const invalidinputs = [0, undefined, new BigNumber(3.145), 3.145, new BigNumber(-400)];
                > base-contract
```

Resizing horizontal top menu:



Prototype animation:

https://drive.google.com/file/d/1FXLc6QqoTaNeoicMbK_LICxihJsAzcQ8/view?usp=sharing

Analysis of four navigation types ranked for support of goals 1 to 5, 5 is best

Goal	App style menu	Full Top menu	Resizing horizontal top menu	Left nav menu
Discoverability	1	5	5	5
Query input length	4		4	5
Future scalability	5	1	3	5
Ease of use	2	5	5	5
1 click to item.	1	5	5	5
Keyboard nav ux *	5	3	3	3
Highlight Current page	5	5	5	5
Horizontal browser space	5	5	5	3/4
Vertical browser space	No change	No change	No change	No change
Affect on 'UI Brand'	High, but is it positive or neg?	neutral	Medium **	neutral
Cognitive Load	1	3	3	3

^{*} Central navigation structure (CMD + K), plus room to display keyboard commands.
** Begins to be "assertive" in terms of UI behaviour, rather than "default"

Prototype

Team User testing

External user testing

Proposal

TBD

Definition of success

The company aligns on the problems to be solved when addressing our navigation.