



JavaScript Test

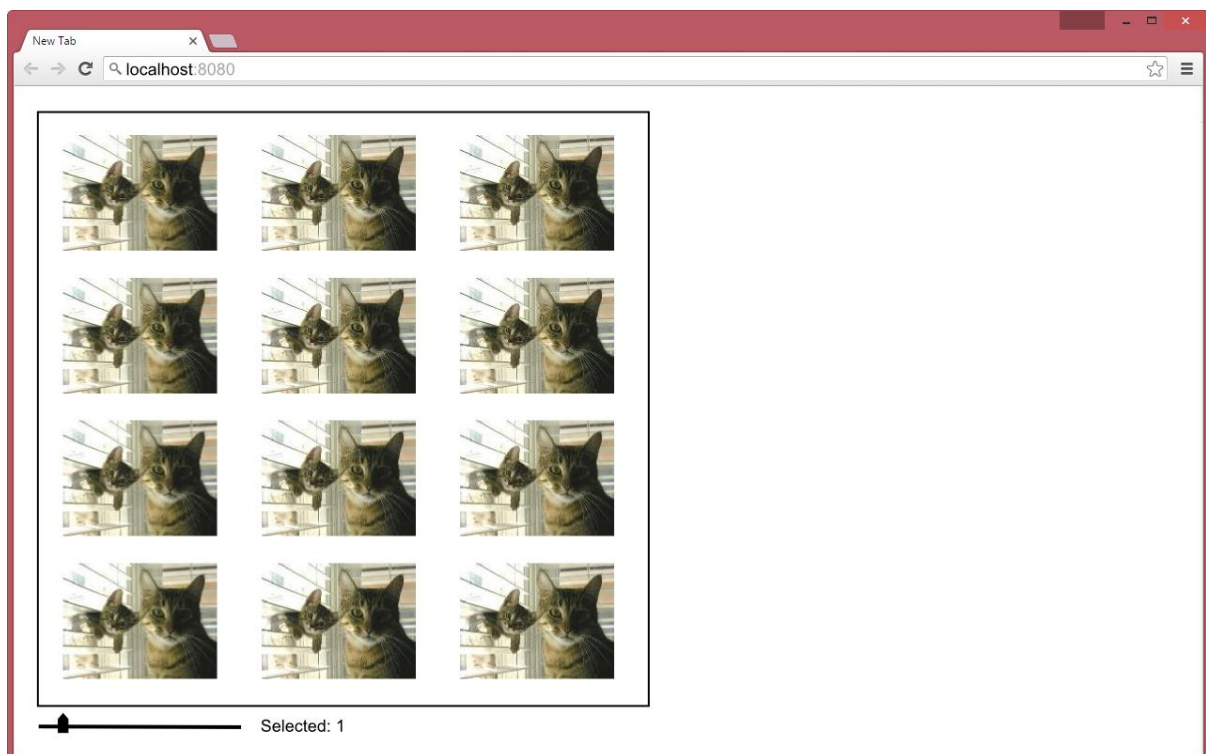
Zegami is a visual data exploration tool for viewing large collections of images and other visual data. By presenting vast quantities of images within a single field of view, Zegami allows users to quickly see correlations, outliers and relationships by leveraging the innate pattern recognition capabilities of the human brain.

Zegami is a high performance JavaScript application built with React, Pixijs (for WebGL) and an in memory column store called Datavore. Our continuing mission is to push the bounds of the technology to increase performance, usability and scale for our customers.

The following project has been designed to cover the basic skills required for all our Front End developers. While the test has no practical value, it does attempt to mimic some of the basic functionality of Zegmai. The aim being to demonstrate your understanding on a broad range of technical topics – from architecture to deployment and testing. The resulting source code will be reviewed and evaluated in conjunction with a follow up in-person interview.

Requirements

Produce a simple JavaScript application that displays a grid of images.



It should need to include:

- Specify a tile image and set the rows and columns
- A slider control that allows the user to zoom in and out.
- Display the id (or index) of an image if selected.
- Use WebGL, either via a 2D/3D library or from scratch.
- All required DOM elements are children of the base DIV (#test-container) and are added dynamically.
- Unit tests.
- Build script to produce minified source code.
- Appropriate documentation – including code comments, deployment and user guides.

An index.html file should have been supplied with this document. This html page is to form the basis of the application. While the html can be modified, the completed application needs to be initialised and configured in the following way:

```
<script type="text/javascript">
  Zegami
    .attachTo('test-container')
    .size(3, 3)
    .start('cat.jpg');
</script>
```

Where 'test-container' is a reference to the element `<div id="test-container"/>` which forms the root element of the application.

While Zegami does use React and Pixijs, for this exercise use whatever tools and libraries you are most comfortable with. What is important is that the application is to spec and is well structured.

Please don't hesitate to ask any questions.