Code Panorama
A non-reductionist, visual review-tool for large code-bases.

Objective: CodePanorama is a tool for software developers, reviewers, and consultants. Its goal is to assist in identifying points of interest within a code-base to review. A software developer might join a new project and want to quickly find the most interesting parts of the code to get started. A supervisor must review the results of a project but does not have the time to look at the entire code-base. Instead, they look to CodePanorama to make an educated guess as to where their efforts should be focused.

Approach: In contrast to other code metric tools, CodePanorama is designed to provide the user with a non-reductionist, “zoomed-out” overview of the entire code-base. It is up to the reviewer to find interesting patterns and curious anomalies based on indentation, spacing, line lengths, and color overlays, instead of the usual metrics.

Result: After entering the URL to any git repository, CodePanorama will clone the repository in the background, and generate the panorama view. The result is basically a collage of all files in the repository, glued together.

Often, this new perspective on a code-base can find patterns such as duplicated code, excessive indentation, or any other feature the human eye might recognize. With the addition of color overlays, a reviewer might find intriguing correlations between git statistics, such as change frequency, and code layout.

Once such a feature has been identified, CodePanorama offers the functionality to simply click on a section of the panorama image. This allows the user to directly dive into the actual code at that location. From there, they can review the code in place, or just take a peek before switching to their tool of choice.