# **Visualization for Clematis**

After capturing a story, and while jetty is running, open a file named "capturedStories.html" located in "clematis/src/main/webapp/fish-eye-zoom". This file will present a list of captured stories. The names of these stories will be the date and time they were captured at. Please note that because the stories are saved to disk based on alphabetical order, the list of stories shown might not be ordered chronologically. Figure 1 below is a screen shoot of how capturedStories.html looks like when opened.



Figure 1

After selecting the desired story, the browser will open a new file called "view.html" that displays the selected story. Figure 2 below is a screenshot of how view.html looks like.



As labeled above in figure 2, this view contains a menu bar that helps the user navigate the visualization and below that is the list of captured episodes. This view is also referred to as zoom level 0 as it shows basic information about the episodes.

### Menu Bar:

The menu bar is shown at all times and enables the user to navigate through the visualization. It contains 4 buttons on the far left to navigate through the episodes. Beside those are 3 buttons that enable the user to select what type of episodes they would like to see. Beside those is a drop down menu that allows the user to filter the episodes based on event types. The search box beside it performs similarly. Finally at the very end there is an overview map of all the episodes that is shown at all times. This map enables the user to know where they are with respect to other episodes when they choose to zoom into a specific episode.

### Zoom Level 0:

This level of zoom displays the list of captured episodes in chronological order. Additionally, each episode will be colored based on its type. Dom events will be colored in the green color shown above. Timeout Events will be colored blue and XHR events will be colored purple. Also by hovering over any of the episodes, the timestamp at which it was captured is shown.

#### Zoom Level 1:

By clicking on one of the episodes, more detail is shown about the episode. Figure 3 below shows how zoom Level 1 looks like. The source section shows the source of an episode. The trace section shows the trace of execution for the functions and finally the DOM Mutations section shows whether elements were added or removed from the DOM.



Figure 3

## Zoom Level 2:

Clicking on the expand button located beside the home button in the menu bar will zoom the current episode into zoom level 2. As shown below in figure 4, this zoom level provides full details about the selected episode. Clicking on the Event Type tab will reveal information about what type of event triggered the episode. The DOM mutations tab provides a list of elements that were either added or removed from the DOM tree. Finally, the trace tab shows the complete trace of function calls in the form of a sequence diagram. Clicking on any of the function names will reveal the actual code of the function.

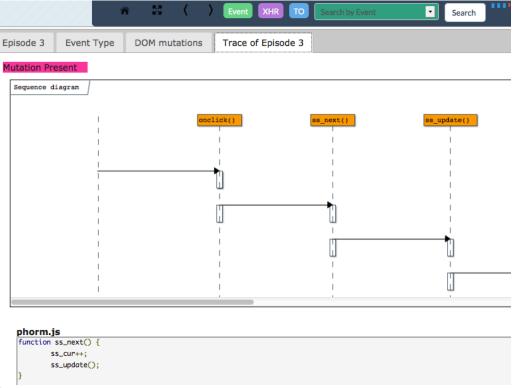


Figure 4