CS498 Data Visualization 7-3-3 Create a Narrative Visualization

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The topic of my webpage is Exploratory Data analysis on Stack Overflow Developer Survey 2018. The purpose of the project is to explore a dataset which is about the Stack Overflow Developer Survey in 2018. Stack Overflow is a privately held website, the flagship site of the Stack Exchange Network created in 2008 by Jeff Atwood and Joel Spolsky. Each year, Stack Overflow asked the developer community about everything from their favorite technologies to their job preferences. There are 98,855 responses in this public data release. Those responses are considered "qualified" for analytical purposes based on completion and time spent on the survey and included at least one non-PII question. This project focuses on three topics based on this dataset:

- Q1: What are the most popular Developer jobs?
- Q2: What are major field of study of Developers?
- Q3: Are those tech jobs satisfying?

I chose martini glass, as the narrative visualization structure for this project. Since the purpose of the project is to explore the data according to the three questions above, martini glass will be best option which can provide very clear presentation for the audience. The home page is designed to introduce the source of the dataset and provide a little background about how the data was collected. Meanwhile, the 3 questions based on the dataset were brought out. This is the author-driven content. Then audience can click the navigation bar to jump to further details of each single question. Charts and summaries are provided in every sub-page. Audience will get the conclusion based on the charts and parameter as reviewing the details. Audience also can use mouse move to the bar charts which will high light the bar that the mouse stays with. It will help audience to get the value of specific ordinal data.

I used navigation bar to help audience make transitions to different question web pages and home page to recall any information needed. Also there's always a summary attached to the bar chart to help audience review the information. I used function of mouse-move to highlight the bar to help audience distinguish the specific information in the chart. The parameter of the project is the question number. The current question number of the page (active page is always in brown color which is different with other links. which can help audience to remember which question page they are in. For annotation, I used enter-transition-exist to implement the layout to the narrative visualization. Because of the layout, audience will be prevented from distracting by unnecessary information and being lost in the pages. The scenes are home page with a simple introduction of the project, and other three detail page to explore the questions mentioned in the home page. Audience can always go back to home page to recall information and jump to other question page to see the relation between the questions through navigation bar.