

# Process Book

## *Naruto Shippuden Anime Data Visualization*

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### *Overview and Motivation*

We wanted to create a visualization on something we all enjoyed, so we chose anime. Our visualization shows the number of filler-episodes<sup>1</sup> in each arc of Naruto Shippuden. The motivation for this was that when researching visualization inspiration most sites only had raw data. When sites did have visualizations, it was mostly comparing one anime to another or visualizations of different genres of tv shows. We saw no site that showed a visualization for the number of filler episodes in each arc of a show, so we created one.

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<sup>1</sup> Content in these episodes are not a part of the manga (see footnote 3)

## *Questions*

- The question we solved
  - How many filler and canon<sup>3</sup> episodes are in each arc of Naruto Shippuden?
  - Which individual arc contained the most filler or canon episodes?
  - How many filler episodes were aired throughout the air time for Naruto Shippuden?
  - How many filler or canon episodes were aired in one arc compared to another?
- New questions that came along the way
  - How will the visualization look?
  - How do we create the dataset for the csv file?
  - Did one year have more filler episodes air than the others?

## *Data Source*

- Episodes of each arc<sup>2</sup>

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<sup>2</sup> An Arc is the equivalent to a season in American Television Shows

- <https://www.cbr.com/every-naruto-story-arc-chronological-order/>
- Filler episodes
  - <https://fictionhorizon.com/naruto-naruto-shippuden-filler-list-the-completeguide/#:~:text=Naruto%20and%20Naruto%3A%20Shippuden%20have%20a%20total%20of%20720%20episodes,the%20topic%20of%20this%20article> ○ <https://www.otquest.com/naruto-story-arcs/>

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<sup>3</sup>Canon-Episode type based off the manga and the original creator's vision

## *Design Evaluation*

We initially gain inspiration from a site that compared filler episodes of [Game of Thrones](#). The visualizations below are some initial visualization ideas. The first chart broke the show down by arc on the y- axis. X-axis was to display the number of episodes and the percentage at the beginning of the bar, was for the percentage of episodes that were filler episodes. We realized this was overly complicated and decided a stacked bar chart would be best. After doing assignment 6 we thought it'd be best to go with that design for several reasons: One, the dataset was too large for one stacked bar chart, two, it would be a cleaner look and three, it would be easier to read.

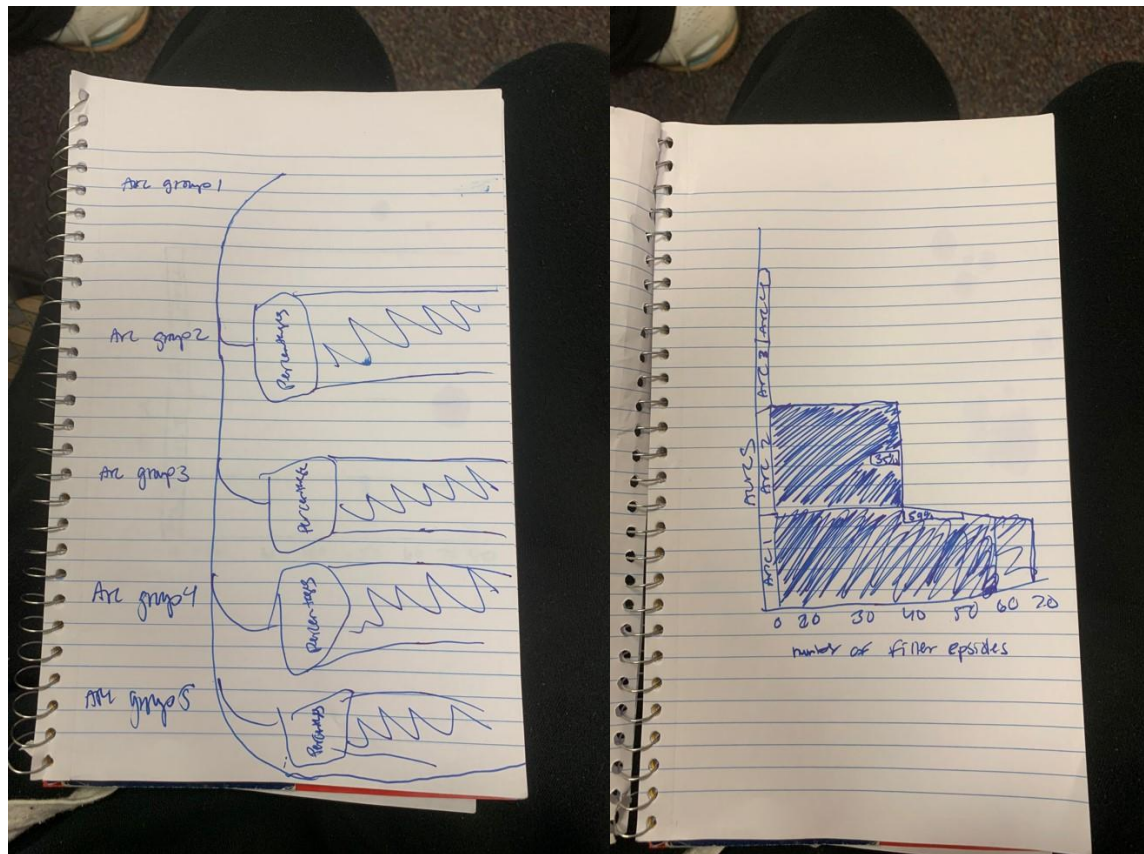
Another visualization that we had created was a grouped bar chart. This chart was going to be created so that when the initial stacked bar chart was clicked (a specific arc column to be specific), the entire visualization would transition into a smaller bar chart that would compare that particular set of data by filler and canon episodes. We decided against this as the switching

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between two different chart types caused issues on the website (which we did not have enough time to fix entirely). We thought about leaving it to the side but still on the website, but the entire idea was eventually scrapped because we realized that it would not make much sense to have two bar charts sitting right next to each other that essentially looked and behaved the same.

For our final design we decided to go back and create a visualization of bar charts that would switch between different sizes to show on a more localized level the data that we represented in the stacked bar chart (which was more on the broad side of showing our data).

Our third visualization came about as we wanted to have something else represented on our website that really tied the data all together and also looked aesthetically pleasing to anyone that viewed it. We decided that representing the percentage of filler episodes aired on a year by year basis throughout the runtime of the show was the best way to go as it was also something that we had not come across in our research. We often found that filler percentages were represented for the series as a whole, but never on such a specific scale as a year by year



## *Implementation and Evaluation*

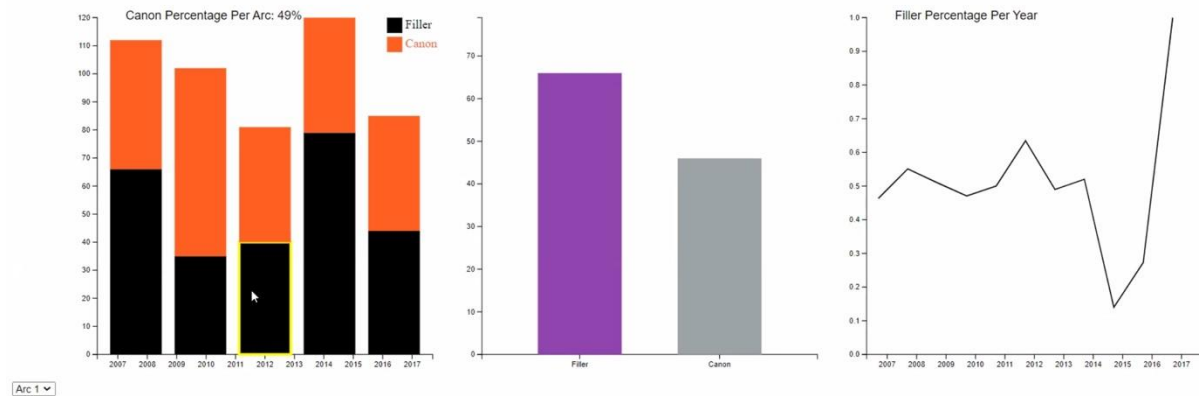
We have three visuals; each broke the show down by each arc. The first visual is a stacked bar chart. When you highlight over the respective bars it will give you a percentage in the top left-hand corner of how many episodes are filler episodes versus cannons. The Y-axis will show the number of episodes and X-axis will show the years the show was on air.

The Second chart is a standard bar chart that compares the number of filler episodes next to the number of cannon episodes. The Y-axis will show the number of episodes in that given arc and the X-axis will show which cannon or filler, respective to the bar its under. Whenever you click the drop button in the bottom left-hand corner it will show you which arc you are currently

on. When the arc is changed, the color of the bar charts will change colors, the colors representing the different characters of the show.

The last visualization is a line chart. This one shows the percentage of filler and cannon episodes in each arc. This one goes more in detail than highlighting over the bar in the stacked bar chart. It shows the number of filler and cannon in the year those shows were on air. Thus, giving the opportunity for the viewer to see which year of the arc did the producers decide to derail for the original manga<sup>3</sup> content.

### Naruto Shippuden Canon and Filler Episodes



**Canon:** This represents the type of episode that is a one-to-one recreation of the manga, which therefore represents the original creator's ideas.

**Filler:** This represents the type of episode that is not a product of the original manga author, it is the creation of the animation studio and is predominantly irrelevant to the story and treated as such by the canon material and fans.

**Side note:** Some episodes were a mixture of filler and canon material, but were counted as filler both to reduce confusion and make sure that the canon material was the original work of the author only

<sup>3</sup> Manga is the equivalent to comic books for the Superhero genre