

# SNS COLLEGE OF TECHNOLOGY, COIMBATORE –35 (An Autonomous Institution)



#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

#### Data Presentation, Seven stages of Data visualization

## Acquire

Obtain the data, whether from a file on a disk or a source over a network.

In DashingD3js.com you will start by manually generating data for the beginning.

Later you will turn to existing data sets. Much later you will scrape websites to get interesting unstructured data sets.

#### Parse

Provide some structure for the data's meaning, and order it into categories.

The amount of Data one can collect and analyze is immense.

It is necessary to put the data you collect it into a structure.

This structure will make it easier to know convey to others what data you have by format, tags, names, and indices.

#### Filter

Remove all but the data of interest.

After putting the data into a structure.

You will have to filter out the data that is not necessary for your Data Visualization.



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If you are doing a specific gender visualization, you would have to remove the genders you did not want in your data set.

#### Mine

Apply methods from statistics or data mining as a way to discern patterns or place the data in mathematical context.

The focus will be on basic statistics in the beginning.

More emphasis in discovering patterns will occur in later sections.

This step helps get basic understanding of the data before doing the representational step.

### Represent

Choose a basic visual model, such as a bar graph, list, or tree.

The crux of this website will focus on how to choose the basic visual model as well as how to represent it.

#### Refine

Improve the basic representation to make it clearer and more visually engaging.

The focus here will be on CSS3, HTML5, and SVG. Some basic color theory will be covered.

Some basic graphic design theory will also be covered.

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## Interact

Add methods for manipulating the data or controlling what features are visible.

This is where D3.js will really make its mark.