**2. Fast Track Training Project**

After completing the Fast Training period successfully we made up groups of three to do our fast track training project. Me, Fawsan, and Fasna made up a group and selected a project from the “WSO2-Redmine”. We arranged a meeting with Mr. Srinath to discuss about the details. He inspired us with the project idea and gave the approval for us to continue working on the project.

**Project Description**

WSO2-Products, despite of having very powerful and efficient functionalities, does not consist of a killer mechanism to visualize data. This could result in potential customers to underestimate the ultimate productivity of some of their products. Therefore a generic web tool(a *widget* as we may address) for visualizing data, without expertise knowledge on the subject, is a vital requirement. Our task, therefore, was to create a generic JavaScript library which can be used by open-source developers to draw charts.

**Getting Started – Inception Phase**

The library will be a simple JavaScript library from a high level point of view. However doing this without the aid of external libraries is discouraged due to 3 *mundane* facts,

* Limited time frame
* Having to *reinvent the wheel*
* Neglecting the best open-source practices.

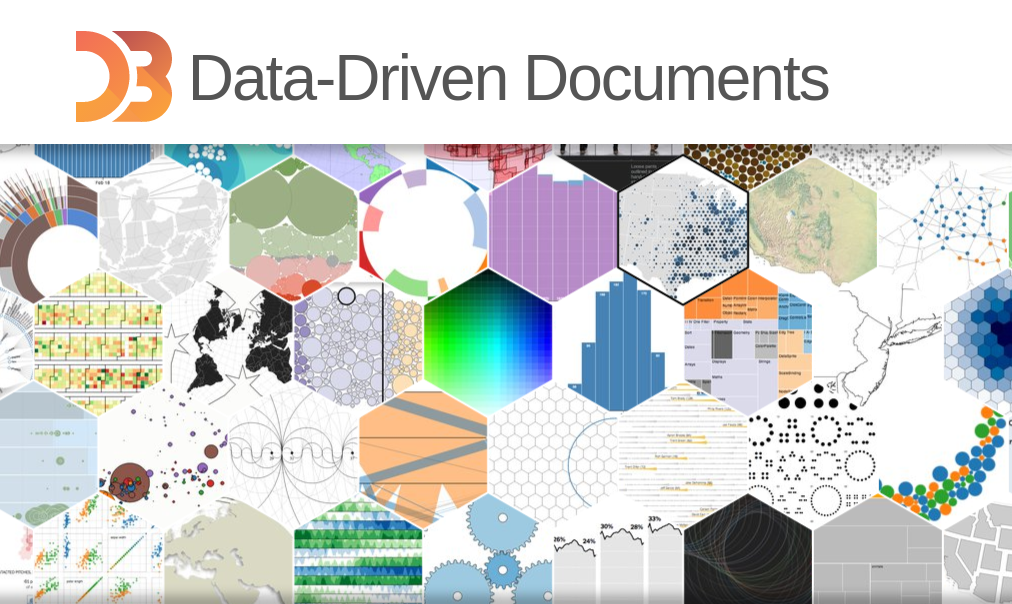
Nevertheless we have to be extra careful when selecting external libraries for a software project. We must ensure that the resource is trustworthy and able to perform the expected task. Considering all above mentioned facts, we agreed upon using **d3js** to lay the foundation for our tool.

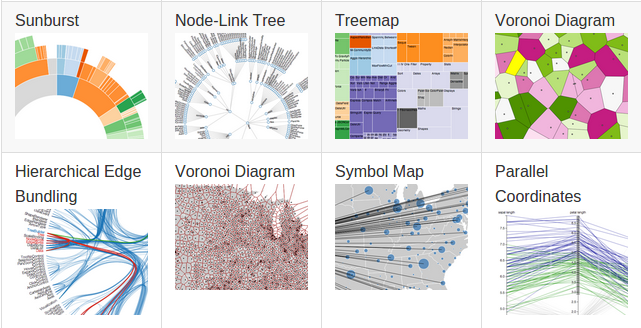
**Why *we* chose d3js over other similar libraries?**

The term 'd3' stands for *data driven documents*. It is a kind of low level JavaScript library for manipulating documents based on data. So to answer the question, 'why d3?',

* It provides many reusable and advanced functionalities, which would have consumed a lot of time, if attempted to write from scratch.
* It has gained a good reputation over time, even from experts, for its strongly written code base.
* A lot of samples are available for new developers to grasp the d3 environment.
* Neatly written documentations are also available.

Shown below are few samples from their official website, d3js.org





During this time period, I mainly focused on learning the core technologies that will be used for this project. *The-NewBoston'*s free video tutorial series(www.thenewboston.com) on JavaScript was pretty helpful. Additionally I followed few more videos to learn the d3 basics for svg manipulation.

Adopting to the JavaScript development environment was not much of a challenge as it is a scripting language used for web development which does not require any additional configurations to be installed. The only requirements were, a *text editor* and a *web browser*.

The plan we made during the **Inception phase** of the fast track project can be summarized as follows,

* Project Idea : Build a generic tool for chart visualization
* Proposed Core Technologies : JavaScript, d3js, WebStorm IDE, Sublime Text IDE.
* Expected Delivery Date : 23/01/2015
* Proposed Core Deliverable(s) : A generic JavaScript library
* Version Controlling : git via github

**Diving Deep - Elaboration Phase**

After the initial stage, we started

**Milestone Plan for the project**

We prepared an on-line milestone plan for the project according to design considerations and sent it via email to Mr. Samissa for getting the approval. Shown below is the accepted milestone plan according t which we continued the project.

Terms used : javascript , d3js, svg, version controlling, git, github, webstorm, sublime text, WSo2, IDE, text editor, web browser