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Project: New gTLD Program for domain names

Background:

Top Level Domains (TLDs) are the letters to the right of the “dot” in an internet domain address (e.g., .com, .net, .org). There are also country code domains (e.g., .us, .ca, .br). Any TLD that does not represent a country is a generic TLD (gTLD).

In 2012, the governing body, Internet Corporation for Assigned Names and Numbers (ICANN), opened up an application process for New gTLDs. The first delegations of new gTLDs occurred in October 2013. Discussions are underway for a second round of applications.

Information on the success (or lack thereof) of launched New gTLDs would be of interest to a number of entities (including, but not limited to, those that wish to apply in the second application round). The website nTLDStats.com contains information on the new gTLDs that can be mined and displayed.

Registry, Registrar, Registrant:

There are three different roles that participate in the domain name registration process: The registry, registrar, and registrant. The following information breaks down each role and how they work with one another:

Registry: A domain name registry is an organization that manages top-level domain names. They create domain name extensions, set the rules for that domain name, and work with registrars to sell domain names to the public. For example, VeriSign manages the registration of .com domain names and their domain name system (DNS).

Registrar: The registrar is an accredited organization, like GoDaddy, that sells domain names to the public. Some have the ability to sell top-level domain names (TLDs) like .com, .net, and .org or country-code top-level domain names (ccTLDs) such as .us, .ca, and .eu.

Registrant: A registrant is the person or company who registers a domain name. Registrants can manage their domain name’s settings through their registrar. When changes are made to the domain, their registrar will send the information to the registry to be updated and saved in the registry’s database. When you register a domain name, you become a registrant!

Project:

We will acquire information from the nTLDStats.com website API, load into a Mongo DB database, and manipulate and visually present the data in a number of user-interactive pages. Our current vision is shown in the attached sketches but is subject to change as we discover more information from the dataset. Each image shows the landing page on the top and a detail page when a search entry is entered, on the bottom. A javascript library (likely dygraphs) will be utilized to add “sliders” on the graphs to change the date range. We will have three sets of pages (TLD, Registrar, Registry). If time allows, we will add an additional page to show geographic distribution of the TLD registrations.

Dataset: https://ntldstats.com/api

Github Repository: https://github.com/efigge91/gTLD\_project

Each page has a common layout:

* Graph showing registrations over time
* Pie Chart with Top 10
* Search box to select a specific entry
* “Hamburger” navigation 