

4/15/2024

608-238-6001 [TEL]

greg@infinityturbine.com [Email]



structured-data-and-why-you-need-it-in-your-web-pages-by-infinity-turbine

Infinity Turbine
LLC

Structured Data and Why You Need it in your
Web Pages



This webpage QR code

Structured Data

```

<script type= "application/ld+json">
  {
    "@context": "http://schema.org",
    "@graph": [
      {
        "@type": "Organization",
        "@id": "https://infinityturbine.com/#organization",
        "name": "Infinity Turbine LLC",
        "url": "https://infinityturbine.com",
        "sameAs": [
          "https://www.youtube.com/channel/UCsobpv0xqc13uvhA71Cv4w",
          "https://x.com/InfinityTurbine",
          "https://www.instagram.com/infinityturbine/"
        ],
        "telephone": "608-238-6001",
        "email": "greg@infinityturbine.com",
        "logo": "https://infinityturbine.com/logo.png"
      },
      {
        "@type": "WebSite",
        "@id": "https://infinityturbine.com",
        "url": "https://infinityturbine.com",
        "name": "Structured Data and Why You Need it in your Web Pages",
        "description": "Structured data is a very necessary SEO item which needs to be in your web pages so that the search engines can correctly index, categorize, page rank, and display your information. If you do a search, look at the structured data in the top pages. This is a Schema Markup Generator JSON LD using Filemaker."
      },
      {
        "@type": "NewsArticle",
        "mainEntityOfPage": {
          "@type": "WebPage",
          "@id": "https://infinityturbine.com/structured-data-and-why-you-need-it-in-your-web-pages-by-infinity-turbine.html"
        },
        "headline": "Structured Data and Why You Need it in your Web Pages",
        "image": "https://infinityturbine.com/images/web-engine-fm-web-page-generator-look.png",
        "datePublished": "2024-04-15T08:00:00+08:00",
        "dateModified": "2024-04-15T09:20:00+08:00",
        "author": {
          "@type": "Organization",
          "name": "Infinity Turbine LLC",
          "url": "https://infinityturbine.com"
        },
        "publisher": {
          "@type": "Organization",
          "name": "Infinity Turbine LLC",
          "logo": {
            "@type": "ImageObject",
            "url": "https://infinityturbine.com/logo.png"
          }
        }
      }
    ]
  }
</script>

```

Structured data is a very necessary SEO item which needs to be in your web pages so that the search engines can correctly index, categorize, page rank, and display your information. If you do a search, look at the structured data in the top pages. This is a Schema Markup Generator JSON LD using Filemaker.

PDF Version of the webpage (first pages)

<https://infinityturbine.com/structured-data-and-why-you-need-it-in-your-web-pages-by-infinity-turbine.html>

Structured Data

Why do I need Structured Data ?

Google definition: Structured data is a standardized format for providing information about a page and classifying the page content. It is imperative for SEO. If you analyze top ranking pages in a search, you'll see that they all have one thing in common, Structured Data.

4/15/2024

Schema

Founded by Google, Microsoft, Yahoo and Yandex, Schema.org vocabularies are developed by an open community process, using the public-schemaorg@w3.org mailing list and through GitHub. A shared vocabulary makes it easier for webmasters and developers to decide on a schema and get the maximum benefit for their efforts. It is in this spirit that the founders, together with the larger community have come together - to provide a shared collection of schemas.

Putting Structured Data in your Web Pages

After trying to get my 8 websites working properly in WordPress, I finally got so frustrated with the crappy WordPress organization and how poorly developed it has become, that I started to code my own web page builder using FileMaker. Try validating a WordPress page, and you'll find it's littered with errors and warnings. Looks great, but poor function.

I realized that much of the information in my web pages is standardized, and duplicated. What better way than a database to build a website ?

What Needs to be in a Web Page

My Strategy: First and foremost, I wanted to use First Principles (used by Elon Musk). Function over form. Convey information in the most simple of methods with ease in links and mobility.

Basic Format: A web page is built from blocks. Each block may have an image and links. This allows compartmentalized information, which can easily be duplicated, changed, and updated.

A web page will have the mobile AMP version.

A web page will have meta data and any Google tracking versions in the head.

A web page will have structured data, to improve page ranking, SEO, and other items. The basic structured data for each page includes organization, website, and article, product, or other sub schema which identify the page and its contents. Each home or index page will have breadcrumbs. List information (like multiple items for a recipe, how-to, and lists will have a carousel as desired by Google. The actual structure of these is generated automatically by the Web Engine.

Each block within the web page will have anchor IDs, which are valuable for recipe, how-to, and other structured data, and which allow quick and efficient navigation when needed.

Each web page will have menu and drop down navigation options, which Google indexers like.

At the footer of each web page, contact information will be provided, including external links to related sites, like Twitter, InstaGram, YouTube, and others.

Each website will have a automatically generated sitemap and RSS feed.

There are lots more ingredients to the web page, but those are the top items.

The web pages should have no pop-ups (which Google calls door-slamers), or annoying ads.

Summary: These items give you greatest visibility, navigation, and search engine optimization for great page ranking, and experience for your visitors. Best of all, these are all built-in to the Web Engine. You just populate the content, and the application does the rest automatically.

Multiple Businesses and Websites

If you run multiple businesses and websites, you need a one-stop application that easily and efficiently handles them all. I run at least three businesses and eight websites related to them.

4/15/2024

How Many Websites Use Structured Data

While just over 30 percent of websites may use some form of JSON structured data, less than one percent use it to its full advantage.

Google supports three types of Structured Data:

1. JSON-LD: A JavaScript notation embedded in a script tag in the page head or body. The markup is not interleaved with the user-visible text, which makes nested data items easier to express, such as the Country of a PostalAddress of a MusicVenue of an Event. Also, Google can read JSON-LD data when it is dynamically injected into the page's contents, such as by JavaScript code or embedded widgets in your content management system. Updated and most used by Google.

2. Microdata: An open-community HTML specification used to nest structured data within HTML content. Like RDFa, it uses HTML tag attributes to name the properties you want to expose as structured data. It is typically used in the page body, but can be used in the head.

3. RDFa: An HTML5 extension that supports linked data by introducing HTML tag attributes that correspond to the user-visible content that you want to describe for search engines. RDFa is commonly used in both the head and body sections of the HTML page. Note: RDFa is really clunky. See link below. It's from 2015.

Summary: Use JSON-LD. It's the latest and greatest, and what Google uses for indexing. This is what I'm using for my application that uses the Filemaker database. The Web Engine and related Structured Data to enhance each web page uses JSON-LD.

Basic FileMaker Module to Generate Structured Data for your Web Pages

The first module application which we'll provide that requires Filemaker to run (as the database application) will be for the basic Structured Data, including:

Organization: Business name, website url, YouTube, InstaGram, and Twitter, telephone, email, and logo.

Website: Website url, name of page, description.

News Article: Select off if you have a product page, recipe, howto, etc., otherwise it's on for all records.

Enter information once. You enter all your business info, then populate with each webpage you have. A text script is generated which you copy and paste into the head section of each page.

Note: with our Web Engine App, this is done automatically.

Price: \$99.00 USD.

Tested and Works: On Mac OS. Can run on Windows, but have not tested, nor supported. Filemaker is cross platform.

Note: This website and webpage were generated using Web Engine FM.

BreadCrumbs Structured Data

The next module application which we'll provide that requires Filemaker to run (as the database application) will be for the Structured Data and developing a list of breadcrumbs for your home or index page.

Note: with our Web Engine App, this is done automatically.

Price: \$99.00 USD.

Tested and Works: On Mac OS. Can run on Windows, but have not tested, nor supported. Filemaker is cross platform.

Note: This website and webpage were generated using Web Engine FM.

Recipe and HowTo Structured Data

The next module application which we'll provide that requires Filemaker to run (as the database application) will be for the Structured Data and making a Recipe, HowTo list, including carousel.

Note: with our Web Engine App, this is done as part of the block section with some additional information entry.

Price: \$199.00 USD.

Tested and Works: On Mac OS. Can run on Windows, but have not tested, nor supported. Filemaker is cross platform.

Note: This website and webpage were generated using Web Engine FM.

FAQ Structured Data

The next module application which we'll provide that requires Filemaker to run (as the database application) will be for the Structured Data and developing a FAQ for your products or services.

Note: with our Web Engine App, this is done as part of the block section with some additional information entry.

Price: \$99.00 USD.

Tested and Works: On Mac OS. Can run on Windows, but have not tested, nor supported. Filemaker is cross platform.

Note: This website and webpage were generated using Web Engine FM.

Custom Coded Advanced Structured Data

The schemas are a set of types, each associated with a set of properties. The types are arranged in a hierarchy. The vocabulary currently consists of 792 Types, 1447 Properties 15 Datatypes, 83 Enumerations and 445 Enumeration members.

Here are some common types...

Creative works:

CreativeWork, Book, Movie, MusicRecording, Recipe, HowTo

TVSeries ...

Embedded non-text objects: AudioObject, ImageObject, VideoObject

Event

Health and medical types: notes on the health and medical types under MedicalEntity.

Organization

Person

Place, LocalBusiness, Restaurant ...

Product, Offer, AggregateOffer

Review, AggregateRating

Action

Note: We can put the entire schema into a FileMaker database, including 792 Types, 1447 Properties 15 Datatypes, 83 Enumerations and 445 Enumeration members.

Price: Email for pricing on type of Structured Data which needs to be coded.

Tested and Works: On Mac OS. Can run on Windows, but have not tested, nor supported. Filemaker is cross platform.

Note: This website and webpage were generated using Web Engine FM.

Web Engine FM that builds your web pages

The ultimate web page generator is the Web Engine, which was developed using FileMaker as the database application. This gives you all the modules described above, and is a one-stop application for you to generate your web pages.

How to build web pages:

1. Meta Data: For each website, develop a record of the business, contact, associated social media links, and other information.
2. Web Page: Each web page will allow you to customize a web page name, Structured Data types, and even allow you to paste in code. We suggest starting with the clean sheet design theory, and building new. You can always copy and paste content.
3. Blocks: Each Web Page will have blocks of information, that include text, graphics, and links. You have the option of pasting in raw data if you wish.
4. Validate: When you build each page, you can validate the Structured Data, HTML, AMP, and other code structure.
5. SiteMap and RSS: Automatically generated.
6. Overall Navigation Menu: You must input how you want your Web Page navigation hover button display, with customization.
7. Google Scripts: Automatically inserts Google (or other) tag manager and ad tracking scripts (as desired).
8. Buy Links: Generate buy now links from url or raw data script.
9. Email Link: Automatically generate a contact email link, or outside domain email link.
10. Links: Up to four drop-down menu links, or unlimited links using raw data input.

Price: \$9,999 (huge time savings if you have multiple businesses and websites, and don't need to hire a IT person).

Tested and Works: On Mac OS. Can run on Windows, but have not tested, nor supported. Filemaker is cross platform.

Note: This website and webpage were generated using Web Engine FM.

Step 1: Does your webpage have structured data

Does your webpage have structured data ?

Step one of the checklist is to determine if you have structured data. Please see the link below, and put in your web page URL to see any structured data.

At a minimum, you should have:

1. Organization
2. Web page
3. Article, Recipe, HowTo, Product, or other page schema
4. For index or home page, breadcrumbs

Step 2: Does your webpage have any errors or warnings

Does your webpage have problems ?

Step two of the checklist is to determine if your web pages have any errors or warnings. This is done by validating the HTML in the web page. Please see the link below, and put in your webpage URL to validate your HTML.

At a minimum, expect:

1. Low errors and warnings
2. You may have a few errors in relation to Amazon buy links, and Google scripts.

If your page has more than 10 errors, it's really worth taking a look at what is wrong. When I was with WordPress, a page would typically have more than 100 errors (one of the reasons why I left).

Step 3: Does your webpage have AMP for mobile

Does your webpage have AMP (accelerated mobile pages) ?

More than half of website visitors are viewing your pages using a iPhone IOS or Google Android platform. AMP is a web component framework that you can use to easily create user-first websites, stories, emails, and ads.

Step three of the checklist is to determine if your web pages have correctly structured AMP versions. This is done by validating the HTML in the web page. Please see the link below, and put in your web page AMP URL to validate your AMP.

At a minimum, expect:

1. No errors or warnings
2. If you don't have AMP, you should try to incorporated it into your website strategy.

Step 4: Develop Strategy and good Coding Discipline

Build your web pages with structure that is easily crawled and indexed by Google or other search engines and provides the best user experience.

1. Have validated Structured Data on each web page.

2. Have a sitemap for your website.

3. Have validated HTML and AMP web pages.

4. Page Format:

(a) Title less than 60 characters (descriptive and to the point).

(b) Image best practices including providing ALT descriptions.

(c) Correct Meta tags.

(d) Look at the results of a Google search, they only display a certain amount of information. If you tailor your information to fit that template, then you will have a better presentation. For example, if you have a web page title more than 60 characters, it will not display the entire title. See how Google presents its web crawling, so you can be at the top for page ranking.

(e) Keep meta description less than 160 characters.

(f) Keep web page focus on a specific item, event, or issue. If you need to expand, link to a new or related page.

Note: This is a very short list of the most important items.

Summary: Web Engine FM incorporates all this and more into a web page format and generator which you control.

Examples of Structured Data Generator by the App

All these sites use Structured Data for great page ranking and user experience.

<P>Infinity Turbine Renewable Energy ... More Info</P>

<P>SwissMixIt Organic DIY Cosmetics ... More Info</P>

<P>SeaMerlin Rocket Fuel from CO2 ... More Info</P>

<P>Cruising Review Travel Industry ... More Info</P>

<P>Global Energy Capstone Turbine and Lumber Kilns ... More Info</P>

<P>Electric Ship Solar Powered AirBNB Yacht ... More Info</P>

<P>Infinity Supercritical Botanical Extraction ... More Info</P>

<P>TriboJet Rocket Fuel from CO2 ... More Info</P>

