

Geotagging

Tagging is one of the defining characteristics of Web 2.0 services and platforms. Tagging techniques allow users to collectively annotate, classify and categorize content. Social tagging systems are a mix of two standards: one based on user actions and other based in the system architecture that defines the rules and the relationship between users and resource tags. Geotagging is a feature that is presented individually to users. The users can share locations and add geo-located data to content. Adding geographical identification metadata to an information resource attach value to the content by making it more searchable.

Geotagging is the process of adding meta-data with geographical identification to content. It is also defined as a form of geospatial metadata. Geotagging process derived from the global position system (GPS), which is based on a latitude/longitude-coordinates model. Thus the positions assumed by geotagging-enabled information services stemming from this pattern.

Geotagging enables the spatial indexing of the content. Therefore, is a process of recognized geographic locations that enhances the development of geographical databases, geo-referenced Web resources and geo-referenced multimedia content. Consequently, geotagging is a practice that completely modifies how the user interacts with content and with other users in digital space. Systems with geotagging features usually add to media content latitude and longitude coordinates, distance, and place names. The data added consists of textual and visual features.

Geotagging standards in electronic file formats embedded the information in meta-data. However, for each type of media there are different protocols to attach geospatial information because geo-tag information can be read by several media systems. The main options of geotagging systems are the capture of GPS information at the time of the publication or local position added by the user. Location-based services have different approaches to privacy but most present default settings.

There are no industry standards. However, there are a variety of techniques implemented by diverse services with different purposes: i). Propagate to friends a specific location; ii). Suggest commercial and cultural information based on local position; iii). Locates discount coupons for stores in the user's geographical area; iv). Aggregate data for location; Provide real-time location-based search. There are also several others applications of geotagging in different contexts and business such as event/objects recognition, geolocation, media visualization, services and products recommendations, social networking and mapping.

The adoption of geospatial features allows tracking content or users by associating it with the global position system. The presence of geographically relevant metadata can help users to find a variety of location-specific information, which generated geo-awareness across the Web repository and within computer-mediated communication. Geotagging-enable information services can be used to find location-based resources on news, websites, content, multimedia content and other platforms. Social media platforms often present content relevant to a given location.

Geotagging systems have complex dynamics to present content-derived location information. Proximity and *sibling* features are the most common and are used to present places based on geographic distance and similar places and points of interest that share a parent in a geographic hierarchy.

There are several social media platforms with tag-based system, e.g., Flickr and Facebook, which enables content to be found through a location search. These platforms allow users to add meta-data to an information resource in an automatic or manual procedure.

Content indexation through geographic components emphasizes the location argument. The variety of geo-enable features allows location-based personalized information services targeting regional publics. Mobile applications and social platforms can benefit from the use of geographical information, which is based on a GPS and WIFI triangulation. Several online services collect, provide and analyze geo-information as a business. Geo-information is an important value for corporations and itself can be a market opportunity for business, e.g., the social platform Foursquare. The business model of various mobile applications and Internet services is based on geotagging. Such features have also been on the basis of the evolution of communication and interaction in the context of the social Web.

The practice of geotagging is a technique of managing information on the social Web and an example of collective intelligence that provides insight into human social structures. Technological innovation of recent years and the proliferation of the Internet, GPS devices, smart phones and tablets suggest that the availability of geotagged content will continue to expand.