Non-annual queries and events

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ABSTRACT

This disclosure describes techniques that provide a user with information relating to non-annual events. For example, such events include a 10,000-day birthday, billionth second since wedding, etc. With user permission, a platform such as a social media service, a virtual assistant, etc. accesses information such as personal profile, contact information, online calendars, etc. to determine non-annual events likely of interest to a user, and to formulate answers to time-seeking queries requested by the user in non-annual units. An option is provided to the user to share milestones expressed in non-annual time units.

KEYWORDS

- Virtual assistant
- Event notification
- Non-annual events
- Unit conversion
- Online calendar
- Social networking

BACKGROUND

Platforms such as virtual assistants, profile-based social media sites, online calendars, etc. notify users about annual events such as birthdays, anniversaries, etc. However, there are other time-based events that occur without users realizing it. For example, a person becomes ten thousand days old at age roughly twenty-seven years, one billion seconds old at age roughly thirty-one, ten Martian years old roughly at age eighteen, etc. These are interesting and special moments that most users miss.
Fig. 1: Supporting non-annual queries and events

Fig. 1 illustrates an example in which a virtual assistant (or other application) responds to a query seeking age in non-annual units. The user provides permission to platforms such as virtual assistants, social networking services, calendar applications, etc. to access user information such as personal profile, contact information, online calendars, etc. Responses to time-related queries in non-annual units are formulated based on the information that the user has permitted access to.

For example, the user can make a time or date-related query in a specified unit of time (104a, 104b), e.g., days, seconds, Martian years, etc. Examples of time-related queries include dates (or moments) of work/life milestones, anniversaries, birthdays, age, etc. With user permission, the virtual assistant (102) accesses user information, computes the requested time
interval, and provides a response to the user’s query. Unit conversion and time-interval computing techniques are combined to provide a response in the units specified by the user (106).

For example, a user who happens to be twenty-seven years, four months, and twenty-three days old requests her age in days. The virtual assistant accesses the user’s date of birth, compares it to the current date, converts units of time to days as necessary and reports to the user that the user is 10,000 days old. Alternatively, if the user permits, the virtual assistant can automatically notify the user of upcoming events of interest, e.g., that the user is going to turn 10,000 days old tomorrow. Time or date-related notifications can be generated for other users (110), e.g., friends and family members, with their permission. Time or date-related notifications or responses to queries can also be generated for events of a public nature, e.g., how many days since the independence of a particular nation, number of days between the last two solar eclipses, etc. Such notifications can be based on user preferences (e.g., history, astronomy, etc.) and can be turned on or off by the user.

A platform can suggest that the user share the response to non-annual queries with other users, e.g., via a social networking or messaging service. The platform can also suggest alternate units of time to query (108). In addition, for better discoverability, the birthday field of a user profile can provide suggestions of examples of interesting non-annual time units, e.g., by adding “how many days old am I” as a query suggestion. In this manner, the techniques of this disclosure aid the self-discovery of special moments for the user that the user likely didn’t know about themselves.

Further to the descriptions above, a user may be provided with controls allowing the user to make an election as to both if and when systems, programs or features described herein may
enable collection of user information (e.g., information about a user’s social network, social actions or activities, profession, a user’s preferences, or a user’s current location), and if the user is sent content or communications from a server. In addition, certain data may be treated in one or more ways before it is stored or used, so that personally identifiable information is removed. For example, a user’s identity may be treated so that no personally identifiable information can be determined for the user, or a user’s geographic location may be generalized where location information is obtained (such as to a city, ZIP code, or state level), so that a particular location of a user cannot be determined. Thus, the user may have control over what information is collected about the user, how that information is used, and what information is provided to the user.

CONCLUSION

This disclosure describes techniques that provide a user with information relating to non-annual events. For example, such events include a 10,000-day birthday, billionth second since wedding, etc. With user permission, a platform such as a social media service, a virtual assistant, etc. accesses information such as personal profile, contact information, online calendars, etc. to determine non-annual events likely of interest to a user, and to formulate answers to time-seeking queries requested by the user in non-annual units. An option is provided to the user to share milestones expressed in non-annual time units.