1. What is remote data?

- a. At its most basic definition, remote data is anything piece of data not stored locally. Local data might include data on a RAM disk, information stored on a hard drive, or information any storage device that has been permanently mounted with physical connections. As the definition is, remote data is anything not stored using those methods. Remote solutions might include network drives on host, cloud based resources, and databases. Categorizing a piece of information is contingent upon that piece of data's physical location. Another indicator that data is remote is that most often than not if a user is trying to access remote data some sort of authentication is required. Additionally, remote data can be defined by any data populated from outside sources.
- 2. Ten locations to find one can find remote data / what could be used as remote data.
 - a. Databases
 - Pulling in information from other databases could be a valuable tool.
 Data bases could be populated with general information such as stores or gas stations in a certain area.
 - b. Remote servers/ BaaS
 - i. Remote hard disk servers can be utilized by companies to store collected data. Benefits to remote servers include cost efficiency, more real estate space, and easy transition. Along the same side of remote servers, BaaS could also be a provider of remote data. As a customer to a BaaS, you pay for the privilege to access their data and implement it into your own.
 - c. APIs
 - i. Similar to the BaaS process, when your device request permissions to perform a particular service from another application. That data must be requested and accessed through an API. This allows the user to update data outside of the application without having to leave the app.
 - d. GPS location from a device
 - i. GPS data from devices are remote as its data can be used by various clients to predict things such as traffic patterns, busy hours, field boundaries, roads and problem areas. This data could be used in a map app, or by businesses to figure out what time of day has the most foot traffic.
 - e. Users
 - i. Users are the ultimate way to collect remote data. Users are usually willing to provide names, ages, genders, addresses and countless other information in which could be used to improve a service or application.
 - f. Websites
 - Websites provide users with an array of different information. None of this information was crated nor belongs to the users, which makes websites a form of remote data.
 - g. Mobile Applications

 Much along the same lines as websites, if an application provides information on a subject then that data is remote. While on the reverse side, if a user provides their information to an application, that data becomes remote for the developers.

h. Environmental Sensors

 Things such as weather and geological sensors can be placed in harsh conditions not suitable for human inhabitation. These sensors can relay data to various databases that can be used by agencies to study and report.

i. Wearable devices

i. Devices such as fit bits track and log a user's vitals as well as supplementary information. This data is stored in a database. If this was a hospital specific app, then this data might be used from the user by the hospital to improve care, study or learn more about a patients habits.

i. Mobile hot spots

i. Hot spot data could track who, and how often a hot spot gets used. This data could be used in an app that lets users find local hotspots and which ones are the most reliable. This data could also be used by providers to improve overall coverage.

3. The Weather Channel App - input

a. The weather channel app is just as it sounds. It allows the user to have the app geo locate them and provide weather in their area, as well as put in different locations and see weather in other places. The application also has a storm tracking feature, which could be important as the united states is in hurricane season. Obviously the most basic feature is the ability to locate the user and provide them with weather updates. In this instance the application is taking in GPS data from the users device and then cross referencing other data sources and collection methods to return a forecast for their area.

4. The weather Channel App – gather / use

a. Another feature of the application is the radar. Of course the application starts with the users location, but they are easily able to zoom out and scope out any other part of the world. In this case, the application is again pulling from various data sources to project real time information to the user. This can be used to check on family members in dangerous areas or to make sure driving conditions are viable on a long trip.

Resources

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