

UCI Hackathon Data Dictionary

Tables:

1) app_usage_events

- a. **entry_date** – Date data was ingested into back-end servers.
- b. **device_id** – Internal ID for the device that transmitted the data. Originated from **devices** table.
- c. **application_version_id** – This field contains the id, from applications table, for the application that is being used. Linking application details from the applications table to this record.
- d. **type** – Type of application use (5 = foreground or 4 = background)
- e. **start_date** – Date and time marking the start of the application use.
- f. **run_time** – Total runtime of the application in milliseconds.
- g. **end_date** – Date and time marking the end of application use.
- h. **continuation** – For a continually running system app the start and end times are entered into the database in 24-hour periods. This field is used to mark the record as a continuation of a currently running application.

2) application_versions

- a. **application_version_id** – Automatically generated numeric id for the application version. This id is used throughout the database to identify the specific application version.
- b. **package name** – package name for application.
- c. **name** – Name of application as reported by the device.
- d. **version** – Application version name assigned by developer.
- e. **developer** – Name of developer as reported on Google Play.
- f. **app_type** – Type of application (-1 = not yet calculated, 0 = system app, 1 = pre-load or manufacturer, 2 = 3rd party app, 3 = excluded app)
- g. **category** – Category as assigned by Google Play.
- h. **m2_category** – Simplified category assigned by M2Catalyst.
- i. **permissions** – A list of permissions used by the application.
- j. **permission_weight** – A numeric weighting representing the intrusiveness of the required permissions. Deprecated.
- k. **notification_score** – A numeric weighting representing the ability of the application to send notifications to the user or alter the users device. Deprecated.
- l. **analytic_providers** – A list of analytics providers used by the application.
- m. **apk size** – Size of the application apk.
- n. **ignore_category** – Internal tracking field to notify if category of application is required.
- o. **icon_link** – Link to the icon for the application, typically on Google Play.

- p. **not_on_play** – Internal tracking field used to track if the application exists on Google Play.
- q. **create_device_id** – Device_id of the device that created the table entry.
- r. **create_date** – date when the record was created.
- s. **update_date** – last date the data was updated.

3) carriers

- a. **mcc** – Mobile Country Code for the carrier.
- b. **mnc** – Mobile Network Code for the carrier.
- c. **carrier_name** – Carrier Name.

4) device_battery_stats

- a. **entry date** – Date data was ingested into back-end servers.
- b. **timestamp** – Timestamp of when data was collected on the device.
- c. **device_id** – Internal ID for the device that transmitted the data. Originated from **device**
- d. **charge_rate** – Rate of device battery charge.
- e. **drain_rate** – Rate of device battery drain.
- f. **delta_time** – Duration of current collection period in seconds.
- g. **charging_or_draining** – Flag indicating if device is charging or draining.
- h. **battery percentage** – Percentage of battery remaining at time of collection.
- i. **battery temperature** – Temperature of battery at time of reading.
- j. **battery_voltage** – battery voltage at time of reading.

5) devices

- a. **device_id** – Unique ID generated for each device.
- b. **parent_device_id** – A new entry for a device is created upon upgrading Android OS. This is the previous ID for device with earlier OS version.
- c. **m2_id** – Unused at this time.
- d. **user_id** – Unused at this time.
- e. **company_id** – Internal tracking number indicating application that is transmitting the data.
- f. **device_uuid** – Unique identifier generated in the application to identify each device.
- g. **device_type_id** - ID for the device type from the device_types table.
- h. **device_type** – Manufacturer and model number as reported by the device.
- i. **device_os** – Android OS API level as reported by device.
- j. **home_timezone** – Timezone of device, rarely collected.
- k. **device_name** – Internal name of device, used by particular applications.
- l. **carrier name** – Carrier name as reported by Android.
- m. **carrier id** – Not used at this time.
- n. **mcc** – Mobile Country Code for the connected network, if attainable. Mobile Country Code for the sim card operator if network not attainable.

- o. **mnc** – Mobile Network for the connected network, if attainable. Mobile Country Code for the sim card operator if network not attainable.
- p. **n_mcc** – Mobile Country Code for the connected network.
- q. **n_mnc** – Mobile Network Code for the connected network.
- r. **s_mcc** Mobile Country Code for the sim card operator.
- s. **s_mnc** – Mobile Network Code for the sim card operator.
- t. **r_mcc** – Mobile Country Code registered on the device.
- u. **r_mnc** – Mobile Network Code registered on the device.
- v. **language** – Current language set on the device.
- w. **latest_post** – Date of latest data transmission.
- x. **device_secret** – Used by specific applications.
- y. **application_hash** – Data assurance checking for device applications.
- z. **api_key** – API key for app transmitting information.
- aa. **create_date** – Date device record was created.
- bb. **cpu_info** – CPU Processor information specific to the device as reported by Android.
- cc. **cpu_max_speed** – Maximum CPU speed for the device as reported by Android.
- dd. **cpu_core_labels** – Labels for CPU cores, when attainable, as reported by Android.
- ee. **blocked** – Indicates device blocked from transmitting data into the database.
- ff. **blocked_reason** – Reason for blocking device.
- gg. **unlock_date** – Date device is unblocked.

6) log_data

- a. **entry date** – Date data was ingested into back-end servers.
- b. **device id** – Internal ID for the device that transmitted the data. Originated from **devices** table.
- c. **device_os** – Android OS API level as reported by device.
- d. **company_id** – Internal tracking number indicating application that is transmitting the data.
- e. **device_entry_id** – Database record ID from the host device local database.
- f. **log_timestamp** – Timestamp of when data was collected on the device.
- g. **package name** – Package Name of application. Assigned by the developer.
- h. **application_version** – Application version name assigned by developer.
- i. **application_version_id** – Internal ID for the application transmitting the data. Related to the application_version_id in the application_versions table.
- j. **version** – Version of SDK transmitting the data.
- k. **battery** – Average battery consumption rate, in milliwatts, for the application during the current collection period.
- l. **back_battery** – Average back battery consumption rate, in milliwatts, for the application during the current collection period.
- m. **cpu** – Average CPU usage, in percent, for the application during the current collection period

- n. **back_cpu**– Average back CPU usage, in percent, for the application during the current collection period.
- o. **memory**– Average memory usage, in kilobytes, for the application during the current collection period.
- p. **data_all**– Total data usage, in bytes, by the application during the current collection period.
- q. **back_data**– Total background data usage, in bytes, by the application during the current collection period.
- r. **data_wifi** – Total Wi-Fi data usage, in bytes, by the application during the current collection period.
- s. **data_mobile** – Total mobile data usage, in bytes, by the application during the current collection period.
- t. **crash_count** – Number of crashes experienced for the app during the current collection period.
- u. **run_time** – Total milliseconds the app was used during the current collection period.
- v. **front_run_time** – Total milliseconds the app was used in the foreground during the
- w. **code_size** – Total code size for the application, in bytes.
- x. **data_size** – Total size of data for the application, in bytes.
- y. **cache_size** – Total cache size for the application, in bytes.
- z. **other_size** – Total size of additional files and resources used by the application, in bytes.

7) mobile_info

- a. **entry_date** – Date data was ingested into back-end servers.
- b. **timestamp** – Timestamp of when data was collected on the device.
- c. **device_id** – Internal ID for the device that transmitted the data. Originated from the **devices** table.
- d. **base_station_id** – Base Station ID for cell tower
- e. **base_station_long** – Longitude of cell tower, if attainable.
- f. **base_station_lat** – Latitude of cell tower, if attainable.
- g. **cid** – Network Cell ID.
- h. **lac** – Location Area Code. Location areas are comprised of one or several radio cells. Each location area is given an unique number within the network.
- i. **network_id** – ID of the current network in use.
- j. **system_id** – CDMA equivalent to MNC.
- k. **phone_type** – Type of phone connection. Eg. CDMA
- l. **network_type** – Type of network connection Eg. LTE

8) mobile_signal_info

- a. **entry_date** – Date data was ingested into back-end servers.
- b. **timestamp** – Timestamp of when data was collected on the device.
- c. **device_id** – Internal ID for the device that transmitted the data. Originated from the **device** table.

- d. **cdma_dbm** – Signal strength/quality reading from device.
- e. **cdma_asu_level** – Signal strength/quality reading from device.
- f. **cdma_ecio** – Signal strength/quality reading from device.
- g. **evdo_dbm** – Signal strength/quality reading from device.
- h. **evdo_asu_level** – Signal strength/quality reading from device.
- i. **evdo_ecio** – Signal strength/quality reading from device.
- j. **gsm_dbm** – Signal strength/quality reading from device.
- k. **gsm_asu_level** – Signal strength/quality reading from device.
- l. **lte_dbm** – Signal strength/quality reading from device.
- m. **lte_asu_level** – Signal strength/quality reading from device.
- n. **lte_rsrp** – Signal strength/quality reading from device.
- o. **lte_rsrq** – Signal strength/quality reading from device.
- p. **wcdma_dbm** – Signal strength/quality reading from device.
- q. **wcdma_asu_level** – Signal strength/quality reading from device.
- r. **longitude** – Longitude of device as reported by Google Play Services.
- s. **latitude** – Latitude of device as reported by Google Play Services.

9) **wifi_info**

- a. **entry_date** – Date data was ingested into back-end servers.
- b. **timestamp** – Timestamp of when data was collected on the device.
- c. **device_id** – Internal ID for the device that transmitted the data. Originated from the **device** table.
- d. **ssid** – SSID of current Wi-Fi connection.
- e. **ip_address** – IP address of current Wi-Fi connection.
- f. **connection_speed** – Speed of current Wi-Fi connection.
- g. **connected_wifi_band_frequency** – Frequency of current Wi-Fi connection.
- h. **signal_strength_dbm** – Strength of current Wi-Fi connection.