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| **NAME** | **Mohamed Abdullah.M** |
| **TEAM ID** | PNT2022TMID37442 |
| **PROJECT** | **IoT Based Safety Gadget for Child Safety Monitoring & Notification** |

**Cloudant:**

**Cloudant is a non-relational, distributed database service of the same name**. Cloudant is based on the Apache-backed CouchDB project and the open source BigCouch project. Cloudant's service provides integrated data management, search, and analytics engine designed for web applications.

**How do I access Cloudant database?**

You can click the link in the Cloudant Dashboard to view the generated REST API for the page. From your application, you can access the document through REST APIs. To access a document with the Cloudant RESTful API, **append the document ID to the URL of the database**. This URL is accessed with a GET HTTP REST request.

**Database**

API module that maps to a Cloudant database instance.

Encapsulates a Cloudant database. A CloudantDatabase object is instantiated with a reference to a client/session. It supports accessing the documents, and various database features such as the document indexes, changes feed, design documents, etc.

Parameters

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| **Parameters:** | * **client** (*[Cloudant](https://python-cloudant.readthedocs.io/en/stable/client.html" \l "cloudant.client.Cloudant" \o "cloudant.client.Cloudant)*) – Client instance used by the database. * **database\_name** (*[str](https://docs.python.org/3/library/stdtypes.html" \l "str" \o "(in Python v3.9))*) – Database name used to reference the database. * **fetch\_limit** (*[int](https://docs.python.org/3/library/functions.html" \l "int" \o "(in Python v3.9))*) – Optional fetch limit used to set the max number of documents to fetch per query during iteration cycles. Defaults to 100. * **partitioned** (*[bool](https://docs.python.org/3/library/functions.html" \l "bool" \o "(in Python v3.9))*) – Create as a partitioned database. Defaults to **False**. |
| **Parameters:** | * **ddoc\_id ([str](https://docs.python.org/3/library/stdtypes.html" \l "str" \o "(in Python v3.9))) – Design document id used to get the search result.** * **index\_name ([str](https://docs.python.org/3/library/stdtypes.html" \l "str" \o "(in Python v3.9))) – Name used in part to identify the index.** * **bookmark ([str](https://docs.python.org/3/library/stdtypes.html" \l "str" \o "(in Python v3.9))) – Optional string that enables you to specify which page of results you require. Only valid for queries that do not specify the group\_field query parameter.** * **counts (**[**list**](https://docs.python.org/3/library/stdtypes.html#list)**) – Optional JSON array of field names for which counts should be produced. The response will contain counts for each unique value of this field name among the documents matching the search query. Requires the index to have faceting enabled.** * **drilldown (**[**list**](https://docs.python.org/3/library/stdtypes.html#list)**) – Optional list of fields that each define a pair of a field name and a value. This field can be used several times. The search will only match documents that have the given value in the field name. It differs from using query=fieldname:value only in that the values are not analyzed.** * **group\_field ([str](https://docs.python.org/3/library/stdtypes.html" \l "str" \o "(in Python v3.9))) – Optional string field by which to group search matches. Fields containing other data (numbers, objects, arrays) can not be used.** * **group\_limit ([int](https://docs.python.org/3/library/functions.html" \l "int" \o "(in Python v3.9))) – Optional number with the maximum group count. This field can only be used if group\_field query parameter is specified.** * **group\_sort – Optional JSON field that defines the order of the groups in a search using group\_field. The default sort order is relevance. This field can have the same values as the sort field, so single fields as well as arrays of fields are supported.** * **limit ([int](https://docs.python.org/3/library/functions.html" \l "int" \o "(in Python v3.9))) – Optional number to limit the maximum count of the returned documents. In case of a grouped search, this parameter limits the number of documents per group.** * **query/q – A Lucene query in the form of name:value. If name is omitted, the special value default is used. The query parameter can be abbreviated as q.** * **ranges – Optional JSON facet syntax that reuses the standard Lucene syntax to return counts of results which fit into each specified category. Inclusive range queries are denoted by brackets. Exclusive range queries are denoted by curly brackets. For example ranges={"price":{"cheap":"[0 TO 100]"}} has an inclusive range of 0 to 100. Requires the index to have faceting enabled.** * **sort – Optional JSON string of the form fieldname<type> for ascending or -fieldname<type> for descending sort order. Fieldname is the name of a string or number field and type is either number or string or a JSON array of such strings. The type part is optional and defaults to number.** * **stale ([str](https://docs.python.org/3/library/stdtypes.html" \l "str" \o "(in Python v3.9))) – Optional string to allow the results from a stale index to be used. This makes the request return immediately, even if the index has not been completely built yet.** * **highlight\_fields (**[**list**](https://docs.python.org/3/library/stdtypes.html#list)**) – Optional list of fields which should be highlighted.** * **highlight\_pre\_tag ([str](https://docs.python.org/3/library/stdtypes.html" \l "str" \o "(in Python v3.9))) – Optional string inserted before the highlighted word in the highlights output. Defaults to <em>.** * **highlight\_post\_tag ([str](https://docs.python.org/3/library/stdtypes.html" \l "str" \o "(in Python v3.9))) – Optional string inserted after the highlighted word in the highlights output. Defaults to </em>.** * **highlight\_number ([int](https://docs.python.org/3/library/functions.html" \l "int" \o "(in Python v3.9))) – Optional number of fragments returned in highlights. If the search term occurs less often than the number of fragments specified, longer fragments are returned. Default is 1.** * **highlight\_size ([int](https://docs.python.org/3/library/functions.html" \l "int" \o "(in Python v3.9))) – Optional number of characters in each fragment for highlights. Defaults to 100 characters.** * **include\_fields (**[**list**](https://docs.python.org/3/library/stdtypes.html#list)**) – Optional list of field names to include in search results. Any fields included must have been indexed with the store:true option.** |
| **Returns:** | **Search query result data in JSON format** |

**We created the database in cloudant DB using these paramaters.**