ASSESSMENT PART 1

1. General Understanding:

What is the primary purpose of the Customer Labs JavaScript API documented at the given link?

The primary purpose of the Customer Labs API is used to gather and send information from their website to CustomerLabs CDP. My understanding of Customer Data Platform is it keeps stored of what users see on the website, like when they click a button, or what is their choices and so on.For example, If I am owing a dress shop ,for my shop people come in person and in online also to buy dresses this CDP takes all the information about every single customer and sends that to Customer Labs and CDP is mainly designed for marketing purpose. So, the Customer Labs API makes it easy to keep the record of all the user actions and send that as a record to CustomerLabs CDP using the JavaScript.

Summarize the key features and functionalities provided by the Customer Labs JavaScript API.

Event Tracking: The API allows tracking of user actions, including pageviews, clicks, and form submissions.

Custom Event Tracking: Users can define and track custom events such as category viewed, product clicked, and form submissions.

Automatic Destination Sending: Tracked events are automatically sent to all enabled destinations, simplifying data distribution.

Explain the importance of website event tracking in the context of Customer Labs.

The Customer Labs tracks the pageview,click and form submission tracking like to which all pages the user have redirected have been tracked and when the user click on any button or any links that will be tracked and when the user submits a form like when he sign up the information of the user will be tracked this is in order to understand the interest of the user and how they engaged with the website.And still three event tracking are there, they are custom properties and product properties the major difference between these two is the custom properties tracks the events about the customer information and product properties tracks the events about the products information and the last one is default ecommerce events which means it tracks the product that added to cart and wishlist and tracks what are the products user searched and what he purchased and so on.The importance of this is, it helps to know the real choice of the customer and it makes easy to develop or rise the business in the market.

2. Initialization and Setup:

Describe the steps involved in initializing the Customer Labs JavaScript API on a website.

Include the Customer Labs JavaScript API on the website.

Enable the CustomerLabs JS.

Initialize the API using relevant parameters.

Required Parameters and Significance.

What parameters are required when initializing the Customer Labs JavaScript API, and what do they signify?

Parameters such as API keys, enabling CustomerLabs JS, and specific settings are required for initialization.

These parameters signify identification and configuration details, establishing a connection between the website and CustomerLabs.

Properties:

eventName- represent Action Name

properties - represent Action details

For Page View - _cl.pageview(eventName, properties)

For Click Tracking - _cl.trackClick(eventName, properties)

For Submission - _cl.trackSubmit(eventName, properties)

3. Event Tracking:

How does the Customer Labs JavaScript API facilitate event tracking on a website?

Customer Labs JavaScript API facilitates event tracking on websites by pageview,click and form submission and also for these events it is providing a special code or function to make it easier to work on and track user information to build their business.

Provide an example of tracking a custom event using the Customer Labs JavaScript API.

The below example is for the contact form submission it will track the user's name,phone and email after the form is submitted with the location.The Customer Labs tool tracks the user details by this way.

Example

```
var cl_form_submission = setInterval(function() {
    if (((window.CLabsgbVar || {}).generalProps || {}).uid) {
        var eventName = "contact form submission";
        var properties = {
            "customProperties": {
                "first_name": {
                    "t": "string",
                    "v": "arjun"
                },
                "phone": {
                    "t": "string",
                    "v": "+9198394343"
                },
```

```
            "email": {
                "t": "string",
                "v": "arjun@clabs.co"
            },
            "form_submitted_from": {
                "t": "string",
                "v": "customerlabs.co/contact_us"
            }
        }
    }
    _cl.trackClick(eventName, properties)
    clearInterval(cl_form_submission)
  }
}, 1000);
```

4. Custom Properties:

Explain the concept of custom properties in the context of event tracking with the Customer Labs JavaScript API.

Example:

```
{
  "customProperties": { /* reserved keyword */
    "page_url": { // property name
      "t":"string", // property type
      "v": window.location.href  // property value
    },
    "clicked_from": {
      "t":"string",
      "v": "header section"
    },
    ...
    ...
    // more properties
    ...
    ...
  }
}
```

Custom properties in the context of event tracking with the Customer Labs JavaScript API is ,the custom properties that tracks the user related information.It includes various properties related to the events.The customProperties is a reserved keyword.The property name describes the type of a property like "page_url" and the property types describes the type whether it is a string,boolean or a number and the property value represent the value of the property by these way the user details are tracked and use these properties to track the users choices.For example the pageview event is tracked with the help of page url.

How can you include custom properties when tracking events?

To include custom properties we need to follow some steps that are given by the Customer Labs Javascript API such as the property name,property type and the property value.Then when a call is tracked “ _cl.pageview(eventName, properties)” an custom object will be created and we can add some properties like

```
 "clicked_from": {
     "t": "string",
     "v": "header section"
   }
```

By following these steps we can track the user information.

5. User Identification:

Describe the methods available for identifying users with the Customer Labs JavaScript API.

Identify Call:

The identify call is used to select how users are identified within CustomerLabs CDP.

It triggers the "Create user" event inside CustomerLabs for identification purposes.

Attributes:

An object containing user data, including custom properties and traits.

identify_by: An attribute specifying a unique identifier (e.g., email, phone) to search for and assign user traits. If not assigned, a new user will be created.

Example:

```
_cl.identify(properties);
```

Update User Event:

The identify call can also be used to trigger the "Update user" event for updating user details during a session.

properties: An object containing user data and traits.

eventName: Specifies the event name as "Update user." The identify_by attribute is not mandatory for this event.

Example:

```
_cl.identify(properties, "Update user");
```

External IDs:

External IDs like facebook_fbp, google_analytics_client_ID, etc., can be appended to a user for identification.

external_ids: An optional attribute for specifying external user IDs.

Example:

```
"external_ids": {
  "t": "Object",
  "v": {
    "facebook_fbp": {
      "t": "number",
      "v": "58273"
    }
  }
}
```

Group Call:

The group call is used to track the account/company information of a user.

Triggers the "Create group" event inside CustomerLabs for identification purposes.

Attributes:

properties: An object containing group (company/account) data, including group traits and custom properties.

identify_group_by: An attribute specifying a unique identifier (e.g., company name) to search for and assign group traits. If not assigned, a new group will be created.

Example:

_cl.group(properties);

What is the purpose of user identification, and how does it contribute to analytics?

User identification is crucial for associating actions and data with specific individuals or entities.

It helps in creating a unified and comprehensive user profile.

Contribution to Analytics:

* Enables personalized user experiences based on individual preferences and behaviors.
* Facilitates targeted marketing campaigns by understanding user segments.
* Allows for in-depth analysis of user behavior across sessions.
* Enables accurate attribution of actions and conversions to specific users or groups.
* Supports the unification of data across multiple platforms.
* It helps to contribute to better decision-making and improved user satisfaction.