Assessment Part-1

1 - General understanding

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

- Event Tracking: The API provides methods to track various events on a website. Events includes page views, button clicks, form submissions, or other user interactions.
- User and Session Tracking: It might offer functionality to track user behavior and gather insights into user sessions, helping businesses understand how users navigate and engage with their website

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

- 1. User Identification.
- 2. Event tracking.
- 3. Custom events.
- 4. Data storage.
- 5. User profile management.
- 6. Real-time data.
- 7. Security and compliance.
- 8. Analytics and Reporting
- 9. Automation and triggers
- 10. Cross-Device tracking.
- 11. Documentation and support, and
- 12. Integration with other tools.

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

Website event tracking with Customer Labs is crucial as it allows businesses to capture and analyze user interactions, enabling personalized experiences and informed decision-making based on real-time data insights, ultimately enhancing customer engagement and satisfaction.

2 - Initialization and Setup:

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

Setup Account:

I have to create an account in Customer Labs and I have to obtain the API key or any required credentials.

Add SDK script to My website:

■ I have to Embed the Customer Labs SDK script in the HTML of My website, typically by adding a <script> tag with the provided SDK URL, ensuring it's loaded before other scripts.

Initialize API

■ I have to use the provided initialization code to configure the API, including setting up the API key, specifying tracking options, and initializing the SDK with the necessary parameters.

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

- API key: To get access from the Customer Labs Javascript API to implement the code.
- Environment: Which is "Production" or "Development" for testing and live deployment.
- User Id: To set the unique Id for identification.

• Tracking options: It is to mention which are the tracking API code we are going to use, like Event tracking and click tracking.

3 - Event Tracking:

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

- Unique user IDs are associated with events, allowing the API to track the actions of the specific users.
- We can use the API to track custom events, such as clicks, form submissions, or other user interactions.
- The API transmits event data in real-time to the Customer Labs platform, ensuring up-to-date analytics and enabling timely decision-making.

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

 I take the example of button clicking event that it is a buying button which is in the product details page, It will get the user who is buying and store it wisely.

4. Custom Properties:

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

 In a event called clicking button which redirects to the next page, In that Adding additional properties like button id,page location and etc,... to the button clicking event

How can you include custom properties when tracking events?

 As I mentioned before In button clicking event I can add custom properties like this in that function.

```
CustomerLabs.track('button_click', { button_id: 'submit_button', page_location: 'home_page' });
```

5. User Identification:

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

- We can use the UserId parameter during initialization to set a unique identifier for the user.
- We can set an anonymous ID for users who haven't been identified yet. This allows tracking actions before a user logs in or registers.
- We can use the identify method to find the user. It is also useful when the user logs in or when we get additional data about the user.
- When the user logs out or the session ends we should rewrite the API to perform this as a new user.

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

 User identification in analytics, facilitated by methods like setting a user ID with the Customer Labs JavaScript API, serves the purpose of associating specific actions with each user. This contributes more analysis of user behavior, allowing businesses to personalize experiences, understand user journeys, and make informed decisions based on individual interactions with the website or application.