

1. Counter Application Using Closure

javascript

CopyEdit

```
function createCounter() {  
    let count = 0;  
    return function() {  
        count++;  
        console.log(`Button clicked ${count} times`);  
    };  
}  
  
const counter = createCounter();  
counter();  
counter();  
counter();
```

2. Destructuring Customer Order

javascript

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```
const customerOrder = {  
    orderId: 101,  
    productName: "Laptop",  
    quantity: 2  
};  
  
const { orderId, productName, quantity } = customerOrder;  
  
console.log(`Order ID: ${orderId}, Product: ${productName}, Quantity:  
${quantity}`);
```

3. Implementing Cart Feature Using Closure

javascript

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```
function createCart() {
```

```
    let cartItems = [];  
  
    return function getCartItems() {  
        return cartItems;  
    };  
}  
  
const getCartItems = createCart();  
console.log(getCartItems());
```

4. Adding Items to Cart Using Closure

javascript

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```
function createCart() {  
    let cartItems = [];  
  
    return {  
        addToCart: function(productId, name, quantity, price) {  
            let existingItem = cartItems.find(item => item.productId  
=== productId);  
  
            if (existingItem) {  
                existingItem.quantity += quantity;  
            } else {  
                cartItems.push({ productId, name, quantity, price });  
            }  
        },  
        getCartItems: function() {  
            return cartItems;  
        }  
    };  
}  
  
const cart = createCart();  
cart.addToCart(1, "Phone", 2, 500);  
cart.addToCart(2, "Laptop", 1, 1200);  
cart.addToCart(1, "Phone", 1, 500);
```

```
console.log(cart.getCartItems());
```

5. Removing Item from Cart Using Closure

javascript

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```
function createCart() {
  let cartItems = [];

  return {
    addToCart: function(productId, name, quantity, price) {
      let existingItem = cartItems.find(item => item.productId
=== productId);
      if (existingItem) {
        existingItem.quantity += quantity;
      } else {
        cartItems.push({ productId, name, quantity, price });
      }
    },
    removeFromCart: function(productId) {
      cartItems = cartItems.filter(item => item.productId !==
productId);
    },
    getCartItems: function() {
      return cartItems;
    }
  };
}

const cart = createCart();
cart.addToCart(1, "Phone", 2, 500);
cart.addToCart(2, "Laptop", 1, 1200);
cart.removeFromCart(1);

console.log(cart.getCartItems());
```

6. Music Playlist Management Using Closure

javascript

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```
function createPlaylist(playlistName) {
    let songs = [];

    return {
        addSong: function(songName, artist) {
            songs.push({ songName, artist });
        },
        listSongs: function() {
            console.log(`Playlist: ${playlistName}`);
            songs.forEach(song => {
                console.log(`Song: ${song.songName}, Artist:
${song.artist}`);
            });
        }
    };
}

const myPlaylist = createPlaylist("Chill Vibes");
myPlaylist.addSong("Let It Be", "The Beatles");
myPlaylist.addSong("Bohemian Rhapsody", "Queen");
myPlaylist.listSongs();
```