

Week1 –Javascript

Note: After completing each task, save your changes in **scripts.js** and refresh your web page in your browser to see the updates. The changes might not be immediately reflected, so try to finish other tasks and check back later to see the differences.

1. Open **scripts.js** file in an IDE.
2. Locate the **task1** comment and complete it.

This initializes the variable 'transactions' as an empty array.

```
// task1: Complete the below statement to initialize the variable 'transactions' as an empty array.  
let transactions = [];
```

3. Locate the **task2** comment and complete it.

This retrieves 'payee', 'amount', and 'reason' values from form inputs using `document.getElementById()`.

```
// task2: Retrieve 'payee', 'amount', and 'reason' values from form inputs using document.getElementById().  
  
// Replace '' with code to access 'payee' input value from HTML document  
const payee = document.getElementById('payee').value;  
  
// Replace '' with code to access 'amount' input value from HTML document and convert it to float  
const amount = parseFloat(document.getElementById('amount').value);  
  
// Replace '' with code to access 'reason' input value from HTML document  
const reason = document.getElementById('reason').value;
```

4. Locate the **task3** comment and complete it.

This completes the 'newTransaction' object with 'id', 'payee', 'amount', and 'reason' properties.

```
// task3: Complete the 'newTransaction' object by replacing the placeholder values with appropriate data.  
const newTransaction = {  
  id: id,  
  payee: payee,  
  amount: amount,  
  reason: reason  
};
```

5. Locate the **task4** comment and complete it.

This adds the 'newTransaction' object into the 'transactions' array using the 'push' method.

```
// task4: Complete the below statement to add the 'newTransaction' object into the 'transactions' array using the 'push' method.  
transactions.push(newTransaction);
```

6. Locate the task5 comment and complete it.

This finds the transaction object in the 'transactions' array that matches the provided 'id' parameter.

```
function updateTransaction(id, payee, amount, reason) {  
  // task5: Complete the below statement to find the transaction object in the 'transactions' array that matches the provided 'id'  
  const transaction = transactions.find(tran => tran.id === id);  
  
  if (transaction) {  
    transaction.payee = payee;  
    transaction.amount = amount;  
    transaction.reason = reason;  
  }  
}
```

7. Locate the task6 comment and complete it.

This removes a transaction from the 'transactions' array by the index value.

```
async function deleteTransaction(id) {  
  
  const index = transactions.findIndex(t => t.id === id);  
  
  if (index !== -1) {  
    // task6: Complete the below statement to remove a transaction from the 'transactions' array by the index value  
    transactions.splice(index, 1);  
  
    updateTransactionTable();  
    await updateTotalTransactionAmount();  
  }  
}
```

Enhanced Task

8. Convert 'updateTotalTransactionAmount' to use async/await

- Locate the **updateTotalTransactionAmount** function and convert it into an **async** function.
- Look through all the script code and see where **updateTotalTransactionAmount** is called. Convert those calls to use **await** and ensure the calling function is marked as **async**.

```
// task7: Convert below function 'updateTotalTransactionAmount' to use async/await.
/*
a. Convert the 'updateTotalTransactionAmount' function to an async function.
b. Update all occurrences of 'updateTotalTransactionAmount' across the script to use await and ensure their calling functions are marked as async.
*/
async function updateTotalTransactionAmount() {
    let totalAmount = 0;
    transactionList.forEach(transaction => {
        totalAmount += transaction.amount;
    });
    document.getElementById('totalTransactionAmount').textContent = totalAmount.toFixed(2);
}
```

Transaction Management System

Transaction ID:

Payee:

Amount:

Reason:

Add Transaction

ID	Payee	Amount	Reason	Edit	Delete
1	Aditya	500.00	Milk	<button>Edit</button>	<button>Delete</button>
2	Ram	2000.00	Credit Card	<button>Edit</button>	<button>Delete</button>

Total Transaction Amount:
2500.00