

Week-2 Day-1 : Problem Statement- Type Script

You are tasked with building a basic Contact Manager application using TypeScript. This application will help users manage their contacts efficiently by providing functionalities to add, view, modify, and delete contacts.

User Stories

1. As a user, I should be able to add new contacts to the application.
2. As a user, I should be able to view the list of all my contacts.
3. As a user, I should be able to modify existing contacts.
4. As a user, I should be able to delete a contact.
5. As a user, I should receive an appropriate error message if the contact does not exist when I attempt to modify or delete it.
6. As a user, I should receive a confirmation message when a contact is successfully added, modified, or deleted.

Instructions:

1. **Define Interfaces:** Create an interface for `Contact` that includes properties for the contact's `id`, `name`, `email`, and `phone`.
2. **Implement Classes:** Create a class `ContactManager` that manages a list of contacts and implements the following methods:
 - `addContact(contact: Contact): void`
 - `viewContacts(): Contact[]`
 - `modifyContact(id: number, updatedContact: Partial<Contact>): void`
 - `deleteContact(id: number): void`
3. **Handle Errors and Messages:** Ensure the `ContactManager` class methods provide appropriate error handling and success messages.
4. **Testing:** Write a simple script to test the functionality of the `ContactManager` class by adding, viewing, modifying, and deleting contacts.
5. **Estimated completion time:** 2 hours.