

## Practical #3: Development Software- DSW03A1

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### Question #1: C# Console Application Development.

C# concepts covered by the following task include console Input/Output, variable declaration and initialization, control flow (loops and conditions), classes and objects, encapsulation, LINQ, file handling, string manipulation, error handling & validation and code organization (separate methods for each functionality (e.g., AddContact(), ViewContacts()).

**Task:** MJ store sells electronic gadgets such as laptops, keyboards, desktop computers, smartphones and tablets. The store has different outlets in different locations in Johannesburg. As a C# developer, you have been asked to develop an address book console application for MJ store with the following functionalities (see Figure 1):

1. Add customer contact details such as name, phone number and email address.
2. View customer details
3. Search customer's contact details
4. Update customer's contact details
5. Delete customer's contact details
6. Exit the program

```
==== MJ Store: Auckland Park Branch====  
***Customer Address Book***  
1. Add Contact  
2. View Contacts  
3. Search Contacts  
4. Update Contact  
5. Delete Contact  
6. Exit  
Choose an option:
```

Figure 1: MJ's Address Book Console Application

## Question #2 GUI Application Development (Windows Form)

**Task #2:** Upgrade and modify MJ's Console Address Book to a Windows Forms Address Book Application. The MJ's Windows Forms Address Book Application should also have the same functionalities as MJ's Console Address Book. The functionalities are as follows:

1. Add customer contact details such as name, phone number and email address.
2. View customer details
3. Search customer's contact details
4. Update customer's contact details
5. Delete customer's contact details
6. Exit the program

**Note** use the DataGridView to display the contact list.

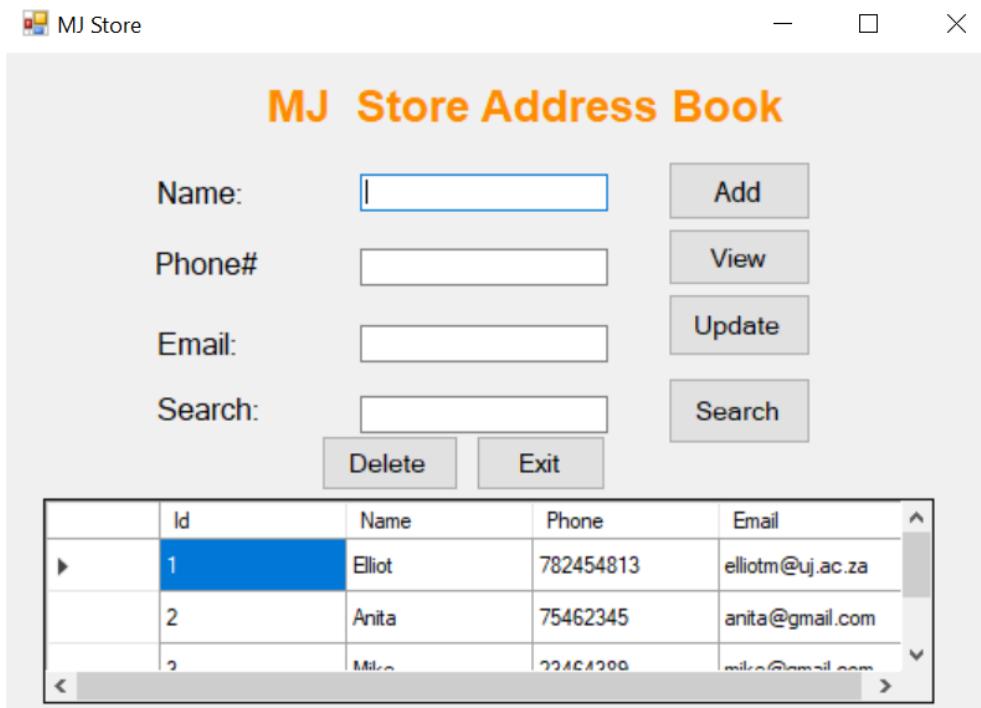


Figure 2: MJ's GUI Address Book