

# **Microsoft summer internship 2026**

Cairo university – Faculty of computers and artificial intelligence.

## General Instructions:

- 1- Deadline is on 24<sup>th</sup> Feb 2026, at 11:59PM GMT+2.
- 2- No Late submissions will be allowed.
- 3- The usage of AI agents or LLM's is not allowed.
- 4- Your GitHub repo must be public to be evaluated.
- 5- Your repo should contain a readme.md file that explains how to run the application.
- 6- App should be delivered in **C#**.
- 7- Storage system should be Json.

## Problem description:

Microsoft collaborates with numerous external vendors and enterprise partners worldwide. Many of these partnerships rely on rapid communication with client representatives for deployments, incident responses, compliance checks, and project coordination.

However, an internal audit revealed a critical bottleneck:

The current contact lookup system still relies on a legacy phone-book–style indexing approach.

This outdated system has several issues:

- Searching for contacts is slow and inefficient.
- Data storage is rigid and difficult to extend.
- The system blocks operations while loading data.

With multiple high-priority client engagements approaching, delays in retrieving contact information could affect business operations and service reliability.

You have been contracted as a software engineer to design and implement a **modern contact indexing system** that:

- retrieves contacts efficiently
- complies with their environment that relies on C#

# Application Requirements:

## Contact Manager CLI (C#)

Design and implement a command-line Contact Management System that applies:

- Object-Oriented Programming
- SOLID principles

### 1. Contact Management

Users must be able to:

- Add contact
- Edit contact
- Delete contact
- View contact
- List all contacts

Each contact must include:

- Id (auto generated)
- Name
- Phone
- Email
- Creation Date (auto generated and real)

### 2. App flow

Load Data and display if there is any contacts



Main Menu

### 3. Main menu components

1. Add Contact
2. Edit Contact
3. Delete Contact
4. View Contact
5. List Contacts
6. Search
7. Filter
8. Save
9. Exit