This document contains a list of suggested projects with their description for the course. You will find information about project title, deliverables, add-ons, teams, in addition to some important dates. Please read the entire document (especially the introduction) before you register.

Structured Programming Projects

2015/2016

Important Notes

Group Members

- The maximum number of students working on the same project is specified for each project. It is **NOT** allowed to register with a fewer number of members.
- Students from different sections are allowed to work together, but notice that the delivery dates may be different (TAs are not responsible for project delivery dates inconsistencies).

You can propose your own idea

Other project ideas not listed in this file are welcome, but they have to be discussed with the teaching assistants first. Send us a short project proposal, containing student names and classes, project name, a brief description of your project, and any notes you think necessary. Please limit yourself to half a page. A template is provided. ***This proposal is to be given to your lab Teaching Assistant before March 23rd 2016.***

Help and Support

Check the support times here if you need any help or support.

Program and Coding

- It should be a high level language program, written almost entirely from scratch by you, satisfying the requirements specified for each application.
- It is very important that you write easily readable, well-designed, and fully commented code.
- We would like you to demonstrate everything you have learned during this course in your project, so the program has to include different concepts, including: arrays, strings, structures, functions, and pointers.

Registration

- There are 14 proposed projects to choose from.
- Register your team online in the registration form through the following link:
- https://docs.google.com/forms/d/1gSfN7_qm4nA-9gi0NHOBdaR0CHeZG5z1zJ8RVthjXMs/viewform?usp=send_form
- The form will be open **Friday March 25th 2016, 00:00am**.
- The form will be closed **Sunday March 27th 2016, 11:59pm.**
- Unregistered students will not be credited for project marks.
- Violation of registration rules will not be credited for project marks.

Deliverables

The final project

- The final project will be delivered in the labs during the last week of the term (**this deadline is subject to change and will be announced if so**).
- Each team must hand it:
    - A hard copy of the top-down design of their project (one printed page).
        - Project title
        - Team members and the **role of each**.
        - The project design.
    - A softcopy of the project in a folder containing:
        - The design.
        - The project code.

Projects List

You can work in ONLY ONE of the following:

1. FCIS Library
2. Address Book
3. Tic-Tac-Toe
4. Supermarket Billing Project
5. HR Management System
6. Bank Management System
7. My Calculator
8. I-Organize
9. Shopping List
10. Connect Four
11. Students Management System
12. Hangman
13. Encryption/Decryption
14. Pac Man game

Below is a description of each.

Project Description

Project #1	**FCIS Library**
Description	FCIS library is a small system which manages FCIS books in/out management, you will read a list of books, Data will be stored in a text file and you have to read, update or delete a book record from such a file.
Team	4 – 5 Member
Deliverables	1. List all books in library 2. List available books to borrow 3. Borrow a Book 4. Search For a Book 5. Add New Books 6. Delete a Book 7. Exit
Bonus	1. Graphical User Interface (GUI). 2. Any Extra Modules that enhance the functionality of the system.
Mentor	**TA. Nora Youssef**
Notes	• Status Available or Not Available will be based on the available copies of the book, if there is no available copies the status will be Not Available otherwise the status will be Available. • Borrow a book will reduce the available copies of the book and store the new record in the file • Publisher and author info are optional, so the user would skip them, thus you shall store it as empty string. • Sample Input File https://www.dropbox.com/s/ugt92iuqj7m2z9y/Library.txt?dl=0 • Sample Run https://www.dropbox.com/s/kzyalgwb7o03fgb/FCIS%20Library.docx?dl=0 • Using Structures, Pointers, Arrays and of course functions are all required