IENG372/MANE372 INFORMATION SYSTEMS AND TECHNOLOGY PROJECT OUTLINE

Term Project Specifications

The project team rules:
- The term project is to be prepared by teams.
- The students are expected to work in the teams that they signed up for, and with no one else on this project. You cannot change teams once the project work starts and you notify your lecturer of your teams.
- Once the teams are formed, the composition of the teams may not be changed. That is, if a team member wants to leave his/her study team for any reason then he/she is not eligible to join into another team, and is not allowed to work alone and will get an NG grade from the course.
- There will be one project per team, to be carried out in steps. Each step of the project may be considered as a part of the big project.

Team project reports:

- Each team will submit two progress reports (23th March and 27th April) and a final report for the project.
- **DO NOT LEAVE YOUR PROJECT REPORTS OR PROJECT DEVELOPMENT TO THE LAST MINUTE SINCE THEY CANNOT BE DONE OVERNIGHT!**
- The reports are to be submitted to the lecturer or to the department secretary.
- The team progress reports will be graded and returned to teams within one week.
- Teams may use the returned progress reports for reference only and return them back, unchanged, on the day they submit their final reports.
- The underline deadline for submitting the **final project report is due to 11th May 2019, Monday before 17:00** to the secretary's office.
- The project report and the computer application (the information system that your team develops) should be copied into one CD and attached to the report. The CD must be labeled correctly, with your team members' names and IDs, put in an envelope and glued to the inner back cover of the report.
- For report guidelines, follow the instructions under: http://grad.emu.edu.tr/newgrad/Graduate/ThesisFormat.aspx
- Every team will also give an oral presentation of their project study. The presentation day and the schedule will be announced later**.** Each team will have exactly 15 minutes for presentation and 10 minutes for answering the questions. Every team should submit and test their data-show material which will be used during the oral presentation, one day prior to their presentation to the TA according to the schedule to be announced. If this deadline is missed, then students will not be allowed to use data-show during their presentation. Students may be allowed to bring their own laptop computers to the presentation.
- Any sort of information exchange between term project teams is strictly prohibited. If such exchanges are detected, or teams copy from each other, all teams involved in the exchange will receive zero grade from the project.
- It is expected that each term project team will submit original reports, which reflect only the work of its team members. If two or more teams submit similar reports, all involved teams will fail the project. Additionally, all the students involved will be reported to EMU Student's Disciplinary Committee.
- **REFER TO YOUR COURSE OUTLINE FOR OTHER DEADLINES, RESTRICTIONS AND OTHER RULES OF SUBMISSION.**

Technical Details:
- MS Access is to be used for developing the system.
- All input data should be entered into the system using the graphic user interface (the screen forms); similarly, all modifications to the data should be done using the screen forms.
- **Make sure your demo system and the system you present as part of your report has underline realistic data and working system. This will influence your grade tremendously.**
- Ergonomic and user friendly features of the application should be paid attention to.

- The **final report** should include the following:
  - Project description and scope (following the sections of Baseline Project Plan will help)
    - Objectives of the system, feasibilities, etc. are to be included
  - All the of functional requirements
  - All of the technical requirements
  - Results of the systems analysis
  - Complete database design and flow diagrams (DFDs)
  - Conceptual data model (Entity Relationship Diagrams)
  - Implementation critique
  - Phases of development
  - List of required hardware and software
  - Conclusion and the new steps

- If the report has appendices the text should refer to them; otherwise, appendices will **not** be graded.
- Do not write textbook descriptions in your report. Relate issues and concepts to you project!
- Remember that this is an interim report, and progress between this one and the final report will be taken into account when grading the final project. So it is advised that you understand the feedback provided on the interim project and correct your final project report accordingly.

General Scope of the project:

- Your team is required to develop an information system for a certain business. The system to be developed is to keep track of **sales, inventory**, and **customers**. Production is **not** one of the business functions of this store.
- The information system must be straightforward and simple, but comprehensive enough to allow for data storage and report printing. Furthermore, it must be able to supply the manager and other users of the store with detailed information about the stock/inventory, customer lists, and sales figures, including accounts receivable, at the least.
- This document is intended as a guideline for your project. Please take note that it does not include all the details of the project. You are expected to **do additional research**, **conceptual thinking and development to prepare a full-fledged information system for this project work.**
- As you develop the system, try to imagine what kind of information a customer needs to provide when he/she is buying from a store; how the business activities are within a store that receives inventory, stores it, and then sells it. How customer information should be kept, for new or returning customers. Also, keep in mind how the inventory for the different items must be kept.
- The following user requirements and technical requirements list **only** minimum requirements. You are expected to go above and beyond what is recommended below; the ultimate abilities of the system, in terms of the technical design and the range of reports it produces, will affect your team's grade on this project and can potentially earn you additional points. So, **be creative!**

General User Requirements (at the minimum- you are expected to expand on these):

- Functional requirements:
  - Keep records of all customers; including at least the following details: Name, middle name, last name, address, e-mail, phone, cell phone, date of birth, financial details
  - Keep full and accurate record of inventory of all items, delivery dates, number of pieces, and other characteristics for each piece.
  - Keep record of all sales, including to whom it was sold, amount, discount, actual payment, balance etc.

- The following reports, at the least, should be prepared and printed:
  - A list of all inventory items at one point in time.
  - A list of all customer and their total purchases.
  - A list of one customer and all the details of his/her different purchases.
  - An invoice, a receipt, for each sale made- including all details on it (customer, discount, amount paid, balance).
  - A customer balance sheet- purchases, payments, outstanding balances.
  - An accounts receivable list, including customer name and outstanding balance.

Technical Requirements:

- List of system requirements
- A detailed description of the business process flow- data flow diagrams.
- A relational database design, including detailed entity relationship diagrams to list all the information that is required.
- The system should be PC based; i.e. used on a single PC rather than a network.
- The Database System should help to store, modify, and update data on customers, accounts, and inventory of items, as well as each of their related data.
- The system should be able to perform the queries that are listed in the reports above. This is an indicative report/query list, and the teams should expand on it.

Please note that the reports will be graded based on correct usage of SDLC methodology, application of concepts learned in the lectures, as well as the technical concepts used in the lab, proper system design, neatness, timeliness, and correct use of the **English Language**, including **correct spelling and grammar**. You will be graded on use of language. Remember- if you were a consultant or a systems analyst in a company, your promotion and possibly the future of your job would depend on the performance of your team on this project.