

## IE-462

Section 1, CRN: 33602/603/604 Section 2, CRN: 38318/319/320 Section 3, CRN: 76433/434/435

## First Semester 1440-41 H (Fall-2019) – 2(2,1,1) "INDUSTRIAL INFORMATION SYSTEMS"

Thursday, September 19, 2019 (20/01/1441H)

Course Project [20 Points]

## Assessment and Redesign of Industrial Information System in Saudi Workplace

You are required to contact and review a Saudi workplace or system of your choosing, then analyze, model, and redesign their industrial information system. The following rules apply:

- a) You are required to work in a team of no less than 4 and no more than 5 students. No exceptions!
- b) The workplace can include either an **entire institution**, **or –preferably– a system** within an institution (e.g. inventory or sales department for a large company); and can include any private or public sector company or institution.
- c) Academic honesty rules seriously apply! You are not permitted to use a project from a previous semester or obtained from any other external source. KSU and COE Plagiarism rules will be very strictly enforced. Any assistance received during the project must be explicitly justified.
- d) You must attach detailed photos to support your work, showing all parts of the designed IIS, sample employees at work, and the design team, etc. You must also properly cite all your utilized references (e.g. company work regulations and policies).
- e) You will earn more credit depending on the **quality** of your work (especially the **design and redesign** of the IIS).
- f) The **report** must include the following sections:
  - Background regarding your selected workplace
  - Justification for why you chose this particular workplace/system
  - List and description of **activities** and functions involved in the IIS
  - Detailed steps of what was done during the project, including work breakdown structure (WBS) and **Gantt chart**, etc.
  - IIS models, including detailed forms and explanation, before and



after the redesign phase:

- o Process modeling: detailed IDEFO model, DFD model (top level down to elemental/primitive levels)
- o Data modeling: E-R diagram
- MS Access database file to simulate how your IIS works, including:
  - Sample database tables
  - Queries and forms
- References
- Appendix 1: Who did what
- Appendix 2: Photo section (see point d above)
- Note, all presented work must be neatly typed, printed, and bound. No handwritten work will be accepted. Note, besides content and quality, you will also be graded on your spelling, grammar, formatting, neatness, etc.
- g) Your group will be required -collectively- to perform a 6-7 minute presentation (you will not be allowed to exceed the time limit).
  - You will present a summary of your research, including a slide that states your references and "who did what", as well as sample photos (see point *d* above)
  - You must also show all sections elaborated in your report, including sample queries and forms from your database
  - Note, besides the quality of the content of your work, you will receive a grade for your overall presentation and speech skills, as well as your PowerPoint slides. All group members must participate in this activity.
- h) You must **submit** the following at the time of your presentation:
  - A printed and bound report showing all steps and details of the complete work accomplished in this project.
  - Printout of slides used in your presentation (use 2-4 per page; grayscale is acceptable).
  - Copies of all **references** you have used, forms, reports, and any other material that add value and authenticity to your work. Remember, you will be monitored for plagiarism.
  - Attached, labeled **CD** containing ALL the above-mentioned items (most importantly the report, presentation, and references) as well as the MS Access database file (with sample gueries) and all modeling-related files and figures.

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- Note, you must submit all work on the day of your scheduled presentation. No late work will be accepted.
- Make sure to include to include your group number on all submitted work (cover page of report / first slide of presentation)
- i) The scheduled presentation date is: Thursday, November 28th, 2019 (01/04/1441H) after Asr prayer. Note, the location will be announced at a later time.

I wish you the very best with this project, and hope you can both learn and enjoy working on it.



## **List of Previous Projects**

Note, you are allowed to choose any Saudi workplace so long as your information system has not been chosen in a previous project.

Workplace	System
Alayady Alalmiah (spare parts)	Inventory
AlHabib Hospital	Appointment
Aljaz Factory	Ordering
Alkaabs	Inventory
Al-Khorayef	Inventory
Alshablan Medical Center	Appointment
Bamasaq (spare parts)	Customer-ordering
Ceramic Home	Sales
Dodge	Maintenance
Elixir Bunn	Ordering
Estechtab Factory for Plastics and Molds	Production
Gansu	Payroll
King Fahad Public Library	Borrowing
King Saud University	Deanship Admission and Registration
King Saud University Library	Borrowing
Maison Global	Inventory
Mustach Burger	Ordering and Cooking
NAQEL	Shipping
Real Burger	Ordering
Sahar Vital	Production
SMASCO	Customer-ordering
Tanatel Furniture Factory	Inventory
Texas Chicken	Customer-ordering
Top 100	Distribution