

## IE-462

Section 1, CRN: 33602/03/04 Section 2, CRN: 38318/19/20 Section 3, CRN: 76433/34/35

First Semester 1442H (Fall-2020) – 2(2,1,1) "INDUSTRIAL INFORMATION SYSTEMS"

Wednesday, October 07, 2020 (20/02/1442H)

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 consisting of exactly **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, and how they are related (i.e. the company's **business model**)
  - 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)
  - 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 to 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 by 2 PM on the day of your scheduled **presentation** (no late work will be accepted):
  - **Report** showing all steps and details of the complete work accomplished in this project (.docx format)
  - **Presentation** (.pptx format)
  - 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.
  - MS Access database file (with sample queries) and all modelingrelated files and figures.
  - Place all work in **one folder** then **submit your work by email**, in one



zipped file (e.g. "Project GO4.zip) to aelsherbeeny@ksu.edu.sa. Let me know if your work exceeds 25 MB as the KSU server does not allow attachments exceeding 25 MB.

- Make sure to include your **group number** on all submitted work (cover page of report / first slide of presentation).
- i) The scheduled presentation date is: Sunday, Dec. 6<sup>rd</sup>, 2020 (21/04/1442H) after Asr prayer (starting exactly at 3:15 PM).
  - The presentations will be held via Zoom, at the usual address (https://zoom.us/j/2557992359). Groups should be prepared to start and be waiting in the waiting room 5 minutes prior to the designated starting time. As soon as the prior group has completed your group will be allowed to enter.
  - A total of 15 minutes are allotted to each group, distributed as follows:
    - 6 to 7-minute presentation (as mentioned above)
    - 4 to 5-minute Q/A session
    - 2 to 3-minute transition to the new group

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
1	Alayady Alalmiah (spare parts)	Inventory
2	Al-Babtain	Production
3	AlHabib Hospital	Appointment
4	Aljaz Factory	Ordering
5	Alkaabs	Inventory
6	Al-Khorayef	Inventory
7	Alshablan Medical Center	Appointment
8	Auntie Anne's Pretzels	Ordering
9	Bamasaq (spare parts)	Customer-ordering
10	Beez (Logistic Company)	Inventory
11	Boodi's Burger	Ordering
12	Ceramic Home	Sales
13	Dodge	Maintenance
14	Elixir Bunn	Ordering
15	Estechtab Factory - Plastics and Molds	Production
16	EX9 (coffee shop)	Billing
17	Gansu	Payroll
18	Kawader Training	Payroll
19	King Fahad Public Library	Borrowing
20	King Saud University	Deanship Admission / Registration
21	King Saud University Library	Borrowing
22	King Saudi University Medical City	Purchasing
23	Laan Care	Ordering
24	Maison Global	Inventory
25	Mustach Burger	Ordering and Cooking
26	NAQEL	Shipping



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27	Obeikan Folding Carton (OFC)	Production		
28	Real Burger	Ordering		
29	Riyadh Airport Station	COVID-19 Test Appointment System		
30	Sahar Vital	Production		
31	SMASCO	Customer-ordering		
32	Tamimi Markets	Ordering		
33	Tanatel Furniture Factory	Inventory		
34	Tathmeen	Valuation		
35	Texas Chicken	Customer-ordering		
36	Top 100	Distribution		
37	Varietal café	Ordering		
38	Which Wich	Ordering		