

IE-462

Section 2, CRN: 38318/19/20

Section 4, CRN: 87867/68/69

First Semester 1444H (Fall-2022) – 2(2,1,1)

“INDUSTRIAL INFORMATION SYSTEMS”

Tuesday, September 13, 2022 (17/02/1444)

Course Project [20 Points]

[CLO1: 25%, CLO2: 25%, CLO3: 50%]

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 **4-5** students. No exceptions!
- b) The workplace can include either an **entire institution, or –preferably– a system** within an institution (e.g. inventory or production 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 can 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
 - The company’s **business model**: schematic describing functions, data requirements, and interaction between those two components (refer to examples of business models discussed throughout the course).
 - 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:
 - Process modeling:
 - (a) detailed **IDEFO** model (top level down to elemental levels), including **breakdown structure**
 - (b) detailed **DFD** model (context diagram down to primitive DFDs), including **process hierarchy chart**
 - Data modeling: **E-R diagram** (with attributes)
 - MS Access **database file** to simulate how your IIS works, including:
 - Sample database tables
 - Sample forms, queries, and reports
 - Proposed **improvements** (shown for *each model*), and what results are expected due to these improvements
 - **References**
 - Appendix 1: **Who did what**
 - Appendix 2: **Photo section** (see point *d* above)
 - Note, all presented work must be **neatly typed** (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 project, and you **MUST** include slides (at the end) that state **ALL references**, **“who did what,”** as well as sample **photos** (see point *d* above).
 - You must also *briefly* show **all sections elaborated in your report**, including sample tables, forms, queries, and reports from your database.
 - Note, besides the quality of the content of your work, you will receive a grade for your team coordination, 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 adds value and authenticity to your work. Remember, you will be monitored for plagiarism.

- **MS Access** database file (with sample queries and reports) and all modeling-related files and figures.
 - Place all work in **one folder** then **submit your work by email**, in one zipped file (e.g. "Project_G04.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: **Saturday, Oct. 29th, 2022** (04/04/1444H).
- The presentations will be held via Zoom, at the following 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 selected information system has not been chosen in a previous project.

#	Workplace	System
1	Absolute Solutions	Inventory
2	Abyat	Delivery
3	Adab Publishing	Ordering
4	Advanced Board Co	Inventory
5	Alayady Alalmiah (spare parts)	Inventory
6	Alayed Hoses	Production
7	Al-Babtain	Inventory
8	Al-Babtain	Production
9	Alfakhera Company	Production
10	AlHabib Hospital	Appointment
11	Aljaz Factory	Ordering
12	Aljazeera Cables	Production
13	Alkaabs	Inventory
14	Al-Khorayef	Inventory
15	Al-Khorayef	Production
16	Al-Rashid Boxes and Plastics Factory	Production
17	Alshablan Medical Center	Appointment
18	Arak (Plastic Company)	Production
19	Auntie Anne's Pretzels	Ordering
20	Bamasaq (spare parts)	Ordering

21	Beez (Logistics Company)	Inventory
22	Boodi's Burger	Ordering
23	Capri-Sun Factory	Production
24	Ceramic Home	Sales
25	Ceramic World	Ordering
26	Cozy Cafe	Ordering
27	Dodge	Maintenance
28	Elixir Bunn	Ordering
29	EQEW (film and video equipment)	Ordering
30	Estechtab Factory - Plastics and Molds	Production
31	EX9 (coffee shop)	Billing
32	Gansu	Payroll
33	Haif Dates Factory	Inventory
34	Hamburgini	Ordering
35	Kawader Training	Payroll
36	King Fahad Public Library	Borrowing
37	King Saud University	Deanship Admission / Registration
38	King Saud University Library	Borrowing
39	King Saudi University Medical City	Purchasing
40	King Saudi University Medical City	Recruitment
41	KSU Campus	COVID-19 Vaccination System
42	KSU Central Lab	Sample Analysis

43	KSU Press	Production
44	Laan Care	Ordering
45	Maison Global	Inventory
46	Mustach Burger	Ordering and Cooking
47	NAQEL	Shipping
48	Nota Nota	Ordering
49	Obeikan Folding Carton (OFC)	Production
50	PPC (Product Packaging Co.)	Production
51	Prima International Factory	Inventory
52	Prima International Factory	Production
53	Real Burger	Ordering
54	Riyadh Airport Station	COVID-19 Test Appointment System
55	Riyadh Carton Factory	Inventory
56	SACO	Inventory
57	Sahar Vital	Production
58	Sary Company	Inventory
59	Sary Company	Delivery
60	SayaraTech	Appointment
61	SMASCO	Customer-ordering
62	Tamimi Markets	Ordering
63	Tanatel Furniture Factory	Inventory
64	Tathmeen	Valuation

65	Texas Chicken	Customer-ordering
66	Top 100	Distribution
67	Urth Caffé	Ordering
68	Varietal café	Ordering
69	Which Wich	Ordering
70	Zoujaj Glass	Production

