

IE-462

Section 1, CRN: 33602/03/04

Section 2, CRN: 38318/19/20

Section 3, CRN: 76433/34/35

First Semester 1445 (Fall-2023) – 2(2,1,1)
“INDUSTRIAL INFORMATION SYSTEMS”

Sunday, August 20, 2023 (04/02/1445)

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 including photos, 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 tables, forms, queries, and reports)
 - All **modeling**-related **files** (e.g. MS Visio) 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, etc.).
- i) The scheduled presentation date is: **Thursday, Nov. 16th, 2023 (2/5/1445H)**.
- 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 is 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	Aljazierah Home Appliances	Assembly
14	Al-Jomaih Bottling	Inventory
15	Alkaabs	Inventory
16	Al-Khorayef	Inventory
17	Al-Khorayef	Production
18	Alrahden Soap Factory	Production
19	Al-Rashid Boxes and Plastics Factory	Production
20	Alshablan Medical Center	Appointment

21	Al-Shamloul Trading Est (Nuts)	Inventory
22	Arabian Plastic Mfg. Co. (APLACO)	Inventory
23	Arabian Plastic Mfg. Co. (APLACO)	Production
24	Arak (Plastic Company)	Production
25	Astra Mining Co.	Production
26	Auntie Anne's Pretzels	Ordering
27	Bamasaq (spare parts)	Ordering
28	Beez (Logistics Company)	Inventory
29	Boodi's Burger	Ordering
30	Capri-Sun Factory	Production
31	Ceramic Home	Sales
32	Ceramic World	Ordering
33	Cozy Cafe	Ordering
34	Dodge	Maintenance
35	Elixir Bunn	Ordering
36	EQEW (film and video equipment)	Ordering
37	Estechtab Factory - Plastics and Molds	Production
38	EX9 (coffee shop)	Billing
39	Gansu	Payroll
40	Haif Dates Factory	Inventory
41	Hamburgini	Ordering
42	Jeraisy Furniture Factory	Inventory

43	Kawader Training	Payroll
44	King Fahad Public Library	Borrowing
45	King Saud University	Deanship Admission / Registration
46	King Saud University Library	Borrowing
47	King Saudi University Medical City	Purchasing
48	King Saudi University Medical City	Recruitment
49	KSU Campus	COVID-19 Vaccination System
50	KSU Central Lab	Sample Analysis
51	KSU Press	Production
52	Laan Care	Ordering
53	Maison Global	Inventory
54	Milling Company 2 (MC2)	Production
55	Mustach Burger	Ordering and Cooking
56	NAQEL	Shipping
57	Nota Nota	Ordering
58	Obeikan Folding Carton (OFC)	Production
59	Papa John's Dough Factory	Production
60	PPC (Product Packaging Co.)	Production
61	Prima International Factory	Inventory
62	Prima International Factory	Production
63	Real Burger	Ordering
64	Riyadh Airport Station	COVID-19 Test Appointment System

65	Riyadh Carton Factory	Inventory
66	SACO	Inventory
67	Sahar Vital	Production
68	Saline Water Conversion Corp. (SWCC)	Inventory
69	Sary Company	Inventory
70	Sary Company	Delivery
71	SayaraTech	Appointment
72	SMASCO	Customer-ordering
73	Tamimi Markets	Ordering
74	Tanatel Furniture Factory	Inventory
75	Tathmeen	Valuation
76	Tazej Food Co.	Production
77	Texas Chicken	Customer-ordering
78	Top 100	Distribution
79	United Wire Factories Co. (ASLAK)	Production
80	Urth Caffé	Ordering
81	Varietal café	Ordering
82	Which Wich	Ordering
83	Zoujaj Glass	Production