IE-462
Section 1, CRN: 35771/72/73
Section 2, CRN: 48769/70/71

Second Semester 1445 (Spring-2024) – 2(2,1,1)
"INDUSTRIAL INFORMATION SYSTEMS"

Monday, February 19, 2024 (09/08/1445)

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 must include either the **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 **IDEF0** 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: **Saturday, May 4th, 2024 (25/10/1445H)**.

- The presentations will be held via Zoom, at the following address (https://zoom.us/j/2557992359 – password: 0). 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	Alfanar Cable factory	Production
11	AlHabib Hospital	Appointment
12	Aljaz Factory	Ordering
13	Aljazeera Cables	Production
14	Aljazierah Home Appliances	Assembly
15	Al-Jomaih Bottling	Inventory
16	Alkaabs	Inventory
17	Al-Khorayef	Inventory
18	Al-Khorayef	Production
19	Alrahden Soap Factory	Production
20	Al-Rashid Boxes and Plastics Factory	Production

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

43	Gansu	Payroll
44	Golden Block	Inventory
45	Golden Sheet Factory	Production
46	Haif Dates Factory	Inventory
47	Hamburgini	Ordering
48	Hikma Pharmaceutical	Inventory
49	Jeraisy Furniture Factory	Inventory
50	Jeraisy Furniture Factory	Production
51	Kawader Training	Payroll
52	King Fahad Public Library	Borrowing
53	King Saud University	Deanship Admission / Registration
54	King Saud University Library	Borrowing
55	King Saudi University Medical City	Purchasing
56	King Saudi University Medical City	Recruitment
57	KSU Campus	COVID-19 Vaccination System
58	KSU Central Lab	Sample Analysis
59	KSU Press	Production
60	Laan Care	Ordering
61	Maison Global	Inventory
62	Milling Company 2 (MC2)	Production
63	Milling Company 2 (MC2)	Inventory
64	Mustach Burger	Ordering and Cooking

65	NAQEL	Shipping
66	Nota Nota	Ordering
67	Obeikan Company for Plastics	Inventory
68	Obeikan Folding Carton (OFC)	Production
69	Obeikan Graphics Center	Production
70	Papa John's Dough Factory	Production
71	PPC (Product Packaging Co.)	Production
72	Prima International Factory	Inventory
73	Prima International Factory	Production
74	Real Burger	Ordering
75	Riyadh Airport Station	COVID-19 Test Appointment System
76	Riyadh Carton Factory	Inventory
77	SACO	Inventory
78	Sahar Vital	Production
79	Saline Water Conversion Corp. (SWCC)	Inventory
80	Sary Company	Inventory
81	Sary Company	Delivery
82	SayaraTech	Appointment
83	SMASCO	Customer-ordering
84	Tamimi Markets	Ordering
85	Tanatel Furniture Factory	Inventory
86	Tathmeen	Valuation

87	Tazej Food Co.	Production
88	Texas Chicken	Customer-ordering
89	Top 100	Distribution
90	United Co - Caravans & Prefab Houses	Inventory
91	United Wire Factories Co. (ASLAK)	Production
92	Urth Caffé	Ordering
93	Varietal café	Ordering
94	Which Wich	Ordering
95	Zoujaj Glass	Production

Wall of Fame

Fall 2023: