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

**Second Semester 1446 (Spring-2025) – 2(2,1,1)**
**"INDUSTRIAL INFORMATION SYSTEMS"**

**Saturday, January 25, 2025 (25/07/1446)**

**Course Project** [25 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.; no project will be accepted without this. 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
- Brief **summary** of the project
- **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, screenshots, 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** (make sure you number it according to your group number, e.g. "Project_G04"), **upload** the folder to a cloud-based storage service (e.g. Google Drive or OneDrive), then **send an email** to aelsherbeeny@ksu.edu.sa including a link to your work.

- 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, Apr. 19<sup>rd</sup>, 2025 (21/10/1446H)**.

- 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 finished, 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 | Al Hoshani Polystyrene Factory | Inventory |
| 6 | Alayady Alalmiah (spare parts) | Inventory |
| 7 | Alayed Hoses | Production |
| 8 | Alayed Industrial | Inventory |
| 9 | Al-Babtain | Inventory |
| 10 | Al-Babtain | Production |
| 11 | Al-Bilad | Production |
| 12 | Albilad Concrete Pipes | Production |
| 13 | Alfakhera Company | Production |
| 14 | Alfanar Cable factory | Production |
| 15 | AlHabib Hospital | Appointment |
| 16 | Aljaz Factory | Ordering |
| 17 | Aljazeera Cables | Production |
| 18 | Aljazierah Home Appliances | Assembly |
| 19 | Al-Jomaih Bottling | Inventory |
| 20 | Alkaabs | Inventory |

| 21 | Al-Khorayef | Inventory |
|---|---|---|
| 22 | Al-Khorayef | Production |
| 23 | Alowaidah Industries | Production |
| 24 | Alrahden Soap Factory | Production |
| 25 | Alrajhi Steel | Inventory |
| 26 | Al-Rajhi Steel | Production |
| 27 | Al-Rashid Boxes and Plastics Factory | Production |
| 28 | Alshablan Medical Center | Appointment |
| 29 | Al-Shamloul Trading Est (Nuts) | Inventory |
| 30 | Aluminium Granada | Inventory |
| 31 | Arabian Plastic Mfg. Co. (APLACO) | Inventory |
| 32 | Arabian Plastic Mfg. Co. (APLACO) | Production |
| 33 | Arak (Plastic Company) | Production |
| 34 | Astra Mining Co. | Production |
| 35 | Attieh Group (Steel) | Production |
| 36 | Auntie Anne's Pretzels | Ordering |
| 37 | Ava Water | Inventory |
| 38 | Bamasaq (spare parts) | Ordering |
| 39 | Beez (Logistics Company) | Inventory |
| 40 | Boodi's Burger | Ordering |
| 41 | Capri-Sun Factory | Production |
| 42 | Century Gate Factory | Inventory |
| 43 | Ceramic Home | Sales |

| 44 | Ceramic World | Ordering |
|----|---------------|----------|
| 45 | Cozy Cafe | Ordering |
| 46 | Dalcobond | Inventory |
| 47 | Dodge | Maintenance |
| 48 | Elixir Bunn | Ordering |
| 49 | EQEW (film and video equipment) | Ordering |
| 50 | Estechtab Factory - Plastics and Molds | Production |
| 51 | EX9 (coffee shop) | Billing |
| 52 | Faces of Care | Inventory |
| 53 | Fesh FashProduction | Production |
| 54 | Gansu | Payroll |
| 55 | Golden Block | Inventory |
| 56 | Golden Block | Production |
| 57 | Golden Sheet Factory | Production |
| 58 | Golden Sheet Factory | Inventory |
| 59 | Haif Dates Factory | Inventory |
| 60 | Hamburgini | Ordering |
| 61 | Herfy | Production |
| 62 | Hikma Pharmaceutical | Inventory |
| 63 | Jeraisy Furniture Factory | Inventory |
| 64 | Jeraisy Furniture Factory | Production |
| 65 | Kawader Training | Payroll |
| 66 | King Fahad Public Library | Borrowing |

| 67 | King Saud University | Deanship Admission / Registration |
|---|---|---|
| 68 | King Saud University Library | Borrowing |
| 69 | King Saudi University Medical City | Purchasing |
| 70 | King Saudi University Medical City | Recruitment |
| 71 | KSU Campus | COVID-19 Vaccination System |
| 72 | KSU Central Lab | Sample Analysis |
| 73 | KSU Press | Production |
| 74 | Laan Care | Ordering |
| 75 | Maison Global | Inventory |
| 76 | MATCO Factory | Production |
| 77 | Milling Company 2 (MC2) | Production |
| 78 | Milling Company 2 (MC2) | Inventory |
| 79 | Mustach Burger | Ordering and Cooking |
| 80 | Naas Petrol | Production |
| 81 | Najla Food Packaging Factory | Inventory |
| 82 | NAQEL | Shipping |
| 83 | Nota Nota | Ordering |
| 84 | Obeikan Co. for Plastics | Production |
| 85 | Obeikan Co. for Plastics | Inventory |
| 86 | Obeikan Folding Carton (OFC) | Production |
| 87 | Obeikan Graphics Center | Production |
| 88 | Papa John's Dough Factory | Production |
| 89 | PPC (Product Packaging Co.) | Production |

| 90 | Prima International Factory | Inventory |
|---|---|---|
| 91 | Prima International Factory | Production |
| 92 | Rabadh | Inventory |
| 93 | Real Burger | Ordering |
| 94 | Riyadh Airport Station | COVID-19 Test Appointment System |
| 95 | Riyadh Carton Factory | Inventory |
| 96 | Riyadh Foundry | Inventory |
| 97 | Riyadh Pharma | Inventory |
| 98 | SACO | Inventory |
| 99 | Safia Factory | Inventory |
| 100 | Sahar Vital | Production |
| 101 | Saline Water Conversion Corp. (SWCC) | Inventory |
| 102 | SAPPCO | Inventory |
| 103 | Sary Company | Inventory |
| 104 | Sary Company | Delivery |
| 105 | SayaraTech | Appointment |
| 106 | SMASCO | Customer-ordering |
| 107 | Soyab | Inventory |
| 108 | Sudair Manufacturing | Production |
| 109 | Tamimi Markets | Ordering |
| 110 | Tanatel Furniture Factory | Inventory |
| 111 | Tathmeen | Valuation |

| 112 | Tazej Food Co. | Production |
|-----|----------------|-----------|
| 113 | Texas Chicken | Customer-ordering |
| 114 | Thermal Pipes Factory | Production |
| 115 | Top 100 | Distribution |
| 116 | Tosy Pump Factory | Production |
| 117 | United Cartons Industries Co. | Inventory |
| 118 | United Co - Caravans & Prefab Houses | Inventory |
| 119 | United Wire Factories Co. (ASLAK) | Production |
| 120 | Urth Caffé | Ordering |
| 121 | Varietal café | Ordering |
| 122 | Which Wich | Ordering |
| 123 | Yamama Cement | Inventory |
| 124 | Zoujaj Glass | Production |

## Wall of Fame



Fall 2023: