

### ASSIGNMENT GOALS

Case development is a learning technique which is designed to engage students in the educational experience and ease the transition from a classroom to a workplace. Case studies help us decipher, understand and use the information gained through the course. Students will apply course content, including major concepts and principles to **develop a business case**, including database design and business process mapping.

In groups, you will develop a short case, similar to the **Sample Case** posted. Your group must also include a detailed solution to the case including a completed business process map, entity relationship diagram, relational schema diagram, and SQL code.

### ASSIGNMENT GUIDELINES

1. You should base your case on a real company. Begin your case with a **narrative**, describing the company you have chosen and enough context for the reader to understand the situation. Next, your group will need to devise a specific **business process** and associated **database**. The process should lend itself to business process mapping and should be complex enough to be challenging, while simple enough to be manageable.
2. Before developing the database, you decide to draw out the **Business Process Map** to help you with your planning. Using *Diagrams.net* or another tool, create the business process map to capture the details from your case. Make sure that the diagram shapes are clear and text easy to read. **Save** your diagram as high-resolution **PNG image**, named as your **group number-BPM**.
3. Design a database to store the required data. Draw an **Entity Relationship Diagram (entities, attributes, and relationships)** for the case using **ERDPlus.com**. Name each **entity** and **attribute** in accordance with good database design. Make sure that the diagram is clear and easy to read. **Export** your diagram as **PNG image** (ERDPlus > Menu > Export Image > check High Resolution -- do NOT check Transparent Background). Name your PNG image with your **group number-ERD**.
4. Transform your **Entity Relationship Diagram** from the previous step to **Relations**. Use **ERDPlus.com** convert your Entity Relationship Diagram into Relational Schema diagram. Identify the **primary key** for each table and identify any needed **foreign keys**. Name each **table** and **field** in accordance with good database design. Make sure that the diagram is clear and easy to read. **Export** your diagram as **PNG image**, named as your **group number-RS**.
5. In the **ERDPlus.com** Relational Schema, set the column data types/sizes and then **Generate SQL** code to create this database. Copy the code and save as text (TXT) file named with your **group number-SQL**.

### ASSIGNMENT SUBMISSION REQUIREMENTS

Submit the following **5 files** via **Canvas Assignments**:

- **File 1:** The **Assignment** in **PDF** format including the following
  - **Cover Page** with title, course/section #, group #, and group members' student numbers (last 5 digits only)
  - 2<sup>nd</sup> page: **Case** narrative and business process description in about 500 words (+/- 100 words)
  - 3<sup>rd</sup> page: **Business Process Map (BPM)**
  - 4<sup>th</sup> page: **Entity Relationship Diagram (ERD)**
  - 5<sup>th</sup> page: **Relational Schema (RS)**
  - 6<sup>th</sup> page: **SQL Code** (use as many pages as needed for the full code)
- **Files 2-3-4:** The **BPM**, **ERD** and **RS** diagrams in **PNG** format (high resolution image)
- **File 5:** The **SQL** code in **TXT** format

### Peer Evaluation

Each group member is expected to contribute equally to the team effort. Peer evaluation represents an opportunity for you and your peers to evaluate your individual participation and contributions based on work within your team. At the end of term, each team member must complete **Group Peer Evaluation via iPeer** indicating each of team member's contribution to the group project. On iPeer, **each individual member** will be asked to allocate a **total of 100 marks per each teammate** (you can give more or less than 100 marks per each member, but they all have to add up to 100 marks \* number of members) and **comment** on their contribution -- including yourself!

Students who do NOT submit **Group iPeer Evaluation** by the deadline will be **deducted 10%** of the total Group Projects mark (e.g. if the total score for the group project is set to 100 pts, the deduction will be -10 pts)! **Incomplete** Group iPeer Evaluations would be **deducted 5%** of the total Group Projects mark (e.g. insufficient feedback comments, same comments for most members, missing self-evaluation, etc.)

### CASE DEV GRADING RUBRIC

Case Dev Rubric (15%)	
Criteria	Points
<b>Narrative:</b> clear description of the company and enough context for the reader to understand the situation	25
<b>Business Process &amp; Database:</b> clear description of the fictitious process and associated database	30
<b>Business Process Map:</b> clear BPM design, aligned with the business process description	25
<b>Entity Relationship Diagram:</b> clear ERD design, contains all required elements	25
<b>Relations (Relational Data Model):</b> clear Relational Schema design, contains all required elements	25
<b>SQL:</b> appropriate data types and sizes, demonstrates good database design	20
<b>Deductions:</b> Missing files, spelling or grammatical errors, formatting issues, or otherwise not following assignment instructions (max 50%)	-75
<b>TOTAL</b>	150

NOTE: each of the **Criteria** will be marked using the following scale:

Below Expectations 50-65%	Meets Expectations 70-85%	Exceeds Expectations 90-100%
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### IMPORTANT NOTE

This project is worth **15%** of your course grade! See **Canvas Assignments** for the exact **deadline**!

**LATE assignments will NOT be accepted and will result in zero grade for the whole team!**

**NOTE:** If you do NOT participate in the group project, you will receive **zero (0)** mark on the assignment! Please keep in mind that your actual grade on this project may be adjusted, according to your group's evaluation of your contribution on the **Group iPeer Evaluation**.