**COM106 Introduction to Databases  
  
Assignment 2 - 60% [Video screencast for Database Project]**

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| **Criteria**  **(100%)** | **0-39%**  **Fail**  **Limited-Unacceptable** | **40-49%**  **3rd**  **Adequate** | **50-59%**  **2.2**  **Acceptable** | **60-69%**  **2.1**  **Good quality work** | **70-100%**  **1st**  **Excellent-Outstanding** |
| **Database Design**  **30%** | *No ER diagram or very limited ER diagram which does not represent the business scenario.*  *No cardinality ratios discussed or no justification of the presented cardinality ratios.*  *No participation constraints discussed or no justification of the presented participation constraints.*  *No Relational schema is presented or it is presented but no PKs or FKs are evidenced. Tables are not in 3NF. No justification for any additional tables/attributes.*  *Overview of data types is incomplete. No justifications provided for chosen data types.*  *No tables are in 3NF and descriptions provided for each are limited*  *Assumptions for the modelling process are not provided or not at all relevant.* | *ER diagram is presented but it might not be fully representative of the business scenario and does not correctly present all cardinality ratios or participation constraints.*  *Cardinality ratios are discussed but the justification is barely adequate and in some cases incorrect.*  *Participation constraints are discussed but the justification is barely adequate and in some cases incorrect.*  *Relational schema is presented but it might not evidence FKs or they might not be in the optimal tables. Tables might not all be in 3NF. Any additional tables/attributes are not sufficiently justified.*  *All data types and necessary justifications are discussed. Not all justifications are logical or optimised.*  *Most tables are in 3NF and descriptions provided for each are adequate.*  *Assumptions for the modelling process are basic and only somewhat relevant.* | *ER diagram presented with acceptable representation of the business scenario. All cardinality ratios and participation constraints are clear from the diagram alone but some may not be correct.*  *All cardinality ratios are discussed and their justification is acceptable.*  *All participation constraints are discussed and their justification is acceptable.*  *Relational schema is acceptable. PKs and FKs are indicated but more optimal attributes or tables could have been selected for some FKs. Tables in schema are in 3NF. Any additional tables/attributes have acceptable justifications.*  *All data types and necessary justifications are discussed. Justifications acceptable but some choices of data types or data lengths could be improved.*  *All tables are in 3NF and descriptions provided for each are acceptable.*  *Assumptions for the modelling process are acceptable and sufficiently relevant.* | *ER diagram is presented and its representation of the business scenario is good. All cardinality ratios and participation constraints are clear from the diagram alone and they each correctly represent the business scenario*  *All cardinality ratios are discussed and their justification is of good quality.*  *All participation constraints are discussed and their justification is of good quality.*  *Relational schema is presented and is of good quality. Good selection of PKs and FKs, including the tables the FKs are placed in. Tables in schema are in 3NF. Any additional tables/attributes have good quality justifications.*  *All data types and necessary justifications are discussed. Justifications for data types and data lengths are good.*  *All tables are in 3NF and descriptions provided for each are good.*  *Assumptions for the modelling process are good and completely relevant.* | *ER diagram is presented and its representation of the business scenario is excellent. All cardinality ratios and participation constraints are clear from the diagram alone and presentation of diagram and its components is excellent.*  *All cardinality ratios are discussed and their justification is excellent.*  *All participation constraints are discussed and their justification is excellent.*  *Relational schema is excellent. Outstanding selection of PKs and FKs, including the tables the FKs are placed in. Tables in schema are in 3NF. Any additional tables/attributes have excellent justifications.*  *All data types and necessary justifications are discussed. Justifications for data types and data lengths are outstanding.*  *All tables are in 3NF and descriptions provided for each are excellent.*  *Assumptions for the modelling process are excellent and completely relevant.* |
| **Database Implementation**  **30%** | *Limited correctness and completeness of SQL code with limited discussion on the creation and population of database tables.*  *No constraints, default values, on delete clauses, stored procedures or triggers are used or demonstrated.*  *No use of comments in SQL code or Jupyter Notebook.*  *Limited SQL code layout and readability.*  *Assessment of the solution’s conformity to the business scenario is not provided*  *Limitations for either the modelling process or the implemented solution are not discussed or not at all relevant.* | *Adequate correctness and completeness of SQL code, including adequate discussion on either code to create and populate tables or the process to import data from a file.*  *Only the use of constraints is presented in the video. Default values, on delete clauses, stored procedures and triggers are not used or demonstrated.*  *Minimal use of comments in SQL code. No comments used in Jupyter Notebook.*  *Adequate SQL code layout and readability.*  *Assessment of the solution’s conformity to the business scenario is provided but not all requested points of discussion (completeness of approach, limitations) are addressed.*  *Limitations for either the modelling process or the implemented solution are basic and only somewhat relevant.* | *Acceptable correctness and completeness of SQL code, including acceptable discussion on either code to create and populate tables or the process to import data from a file. Acceptable presentation of any SQL code required to handle imported data.*  *Acceptable use of constraints and default values is presented in the video. On delete clauses, stored procedures or triggers are not used or demonstrated.*  *Acceptable use of comments in SQL code and Jupyter Notebook.*  *Acceptable SQL code layout and readability.*  *Assessment of the solution’s conformity to the business scenario is provided. Requested points of discussion (completeness of approach, limitations) are acceptable.*  *Limitations for either the modelling process or the implemented solution are acceptable and sufficiently relevant.* | *Good correctness and completeness of SQL code, including good discussion and presentation of either SQL code to create and populate tables or the process to import data from a file. Good presentation of SQL code required to handle imported data (if necessary for selected approach).*  *Good use of constraints, default values and on delete clauses is presented in the video. Good use of either stored procedures or triggers is also demonstrated.*  *Use of good quality comments in SQL code and Jupyter Notebook.*  *SQL code layout and readability are of good quality*  *Assessment of the solution’s conformity to the business scenario is provided. Requested points of discussion (completeness of approach, limitations) are of good quality.*  *Limitations for both the modelling process and the implemented solution are good and completely relevant.* | *Excellent correctness and completeness of SQL code, including excellent discussion and presentation of either SQL code to create and populate tables or the process to import data from a file. Excellent presentation of SQL code required to handle imported data (if necessary for selected approach).*  *Excellent use of constraints, default values, on delete clauses, stored procedures and triggers is presented in the video.*  *Use of excellent comments in SQL code and Jupyter Notebook.*  *SQL code layout and readability are outstanding.*  *Assessment of the solution’s conformity to the business scenario is provided. Requested points of discussion (completeness of approach, limitations) are of outstanding.*  *Limitations for both the modelling process and the implemented solution are excellent and completely relevant.* |
| **Business Process Queries**  **30%** | *Zero or only one business process provided in a working state i.e. returns the requested results.*  *Demonstration of business processes is limited.*  *SQL code for business processes has not been combined with Python in a Jupyter Notebook.* | *Two business processes provided in a working state i.e. returns the requested results..*  *Demonstration of business processes is adequate.*  *SQL code for business processes has been combined with Python in a Jupyter Notebook but no output is provided for any implemented query.* | *Three business processes provided in a working state i.e. returns the requested results..*  *Demonstration and discussion of business processes are acceptable.*  *SQL code for business processes has been combined with Python in a Jupyter Notebook and an output for some of the implemented queries is given within the Notebook.* | *Four business processes provided in a working state i.e. returns the requested results..*  *All business processes have been attempted and code is provided even for business processes that have not been fully supported.*  *Demonstration of business processes is good and every business process is addressed with good quality discussion.*  *SQL code for business processes has been combined with Python in a Jupyter Notebook and an output for most of the implemented queries is given within the Notebook.* | *Excellent completion of all business processes i.e. returns the requested results..*  *Demonstration and discussion of all business processes are excellent.*  *SQL code for business processes has been combined with Python in a Jupyter Notebook and an output for each query is given within the Notebook.* |
| **Presentation of Work**  **10%** | *Limited walkthrough of SQL code overview and execution with no discussion of the components from the guidelines for this section.*  *Limited or no discussion of SQL queries to support the business processes.* | *Walkthrough of SQL code overview and execution is adequate but some components from the guidelines are not addressed for this section.*  *Adequate correctness, completeness and evidence of understanding of SQL queries to support the given business processes. Some components from the guidelines are not addressed for this section.* | *Walkthrough of SQL code overview and execution is acceptable and all components from the guidelines are addressed but their discussion is not extensive.*  *Acceptable correctness, completeness and evidence of understanding of SQL queries to support the given business processes. All components from the guidelines are addressed for this section but further discussion could be provided.* | *Walkthrough of SQL code overview and execution is good and all components from the guidelines are addressed for this section with good quality.*  *Good correctness, completeness and evidence of understanding of SQL queries to support the given business processes. All components from the guidelines are addressed for this section with good quality.* | *Walkthrough of SQL code overview and execution is excellent and all components from the guidelines are addressed for this section outstandingly.*  *Excellent correctness, completeness and evidence of understanding of SQL queries to support the given business processes. All components from the guidelines are addressed for this section outstandingly.* |