**ITEC 3200 Database Project Final Report Components (100 points)**

**One team member from each group will upload a word document with the following components. Please do not have multiple people from each team upload separate documents. The report needs to be uploaded no later than end of day Wednesday November 17, 2021 by one team member. Please note that the dropbox will close after this date. No late submissions can be accepted due to the deadline to post final grades.**

The following parts need to be included in the report document. You can save it as a pdf file as well. The grading is based on the following areas of the report.

1. Cover Page (Title page that indicates your database project title, and each team member names as it appears in d2l)
2. Description of database (milestone #1, with feedback incorporated, if everything was good in milestone 1, you can include it as it was submitted)
3. E.R model description (milestone 2 with feedback incorporated, if everything was good in milestone 2, you can include it as it was submitted))
4. E/R Model Screen Shot (Should be clear from milestone 2 and make changes based on feedback provided)
5. Relational form representation of database tables (Please use correct formatting to show primary keys and foreign keys and mention referential integrity rules)

    a. At least 3 different tables. (if you are three-person group, please have at least 4 tables)
    b. Establish appropriate relationships between the tables via foreign keys
    c. Example of relational form- TEXTBOOK(ISBN, Title, Edition, Year, *PublisherID*, *AuthorID*)
6. Database implementation- Please describe how you implemented your E.R model in MySql. Please include some screen shots to document the process.
7. Screen shots of the database schema, database tables, attributes, data types and actual data. You need to show this for each table, the attributes, foreign key information and actual data. Included below is a sample screen shot of one table. Please include the screen shot for all tables. If the screen shots are too small and not clear, you will not receive points.
8. Queries- Please include a brief description of every query and how you expect the results of the shown by the query to be helpful to the business. There should be five queries of the following types
    a. **Query1**: a compound condition (AND, OR)
    b. **Query2**: one of the built-in functions, SUM, AVG, COUNT, MAX, or MIN in the Design view
    c. **Query3**: Sub-query
    d. **Query 4:** Group By Clause
    e. **Query5**: the join of two or more tables

9. Please include the queries that you have created in SQL. Under every query, please include the screen shot with the results
10. Conclusion and lessons learned
11. Contributions and team work- Each team will include a brief description of how you and your team member communicated and worked on this part virtually and also list the tasks that each

team member completed. It is important for all team members to equally contribute to receive the same grade on the project. If all team members worked equally, you can state that each team member worked equally on the project

All screen shots need to be clear. You can use the snipping tool that comes with Windows for your screen shots.

**Report component 4: Sample screen shot of database model (The cardinalities, attributes, PKs and FKs should be clearly visible)**
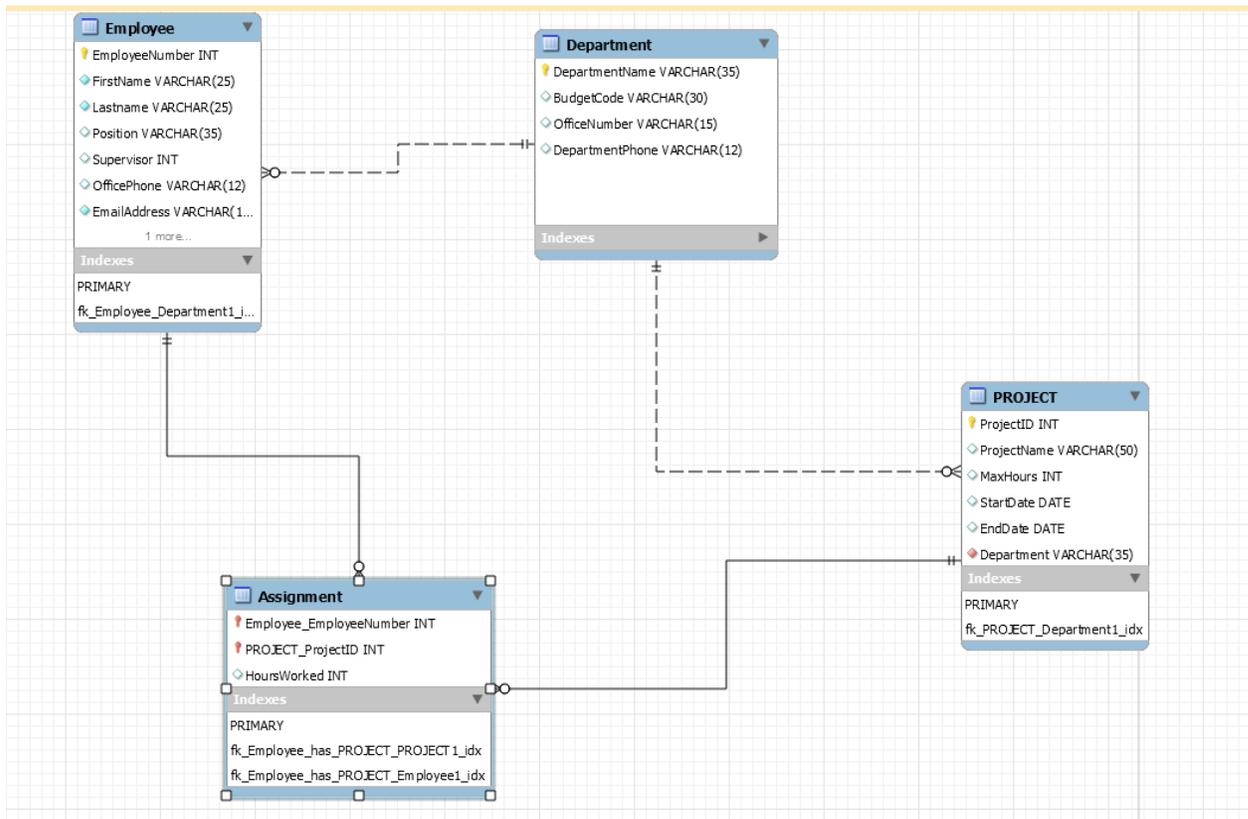
## Report Component 7 example on screen shots

Sample Screen shot of one table (Please include this for all tables you have)

A. Sample screen shot of schema
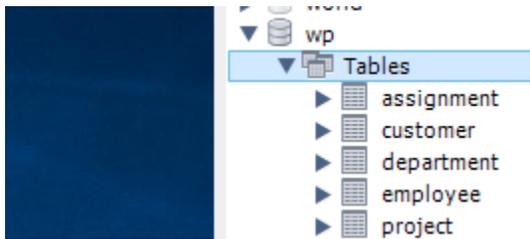


B. Sample screen shot of table and its attributes
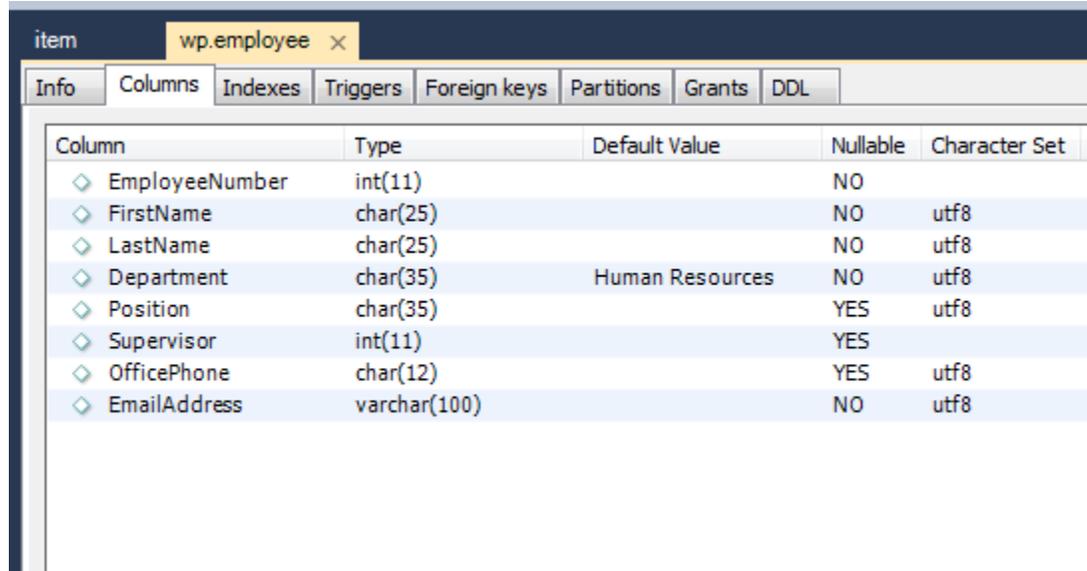


| Column | Type | Default Value | Nullable | Character Set | |
|---|---|---|---|---|---|
| EmployeeNumber | int(11) | | NO | | |
| FirstName | char(25) | | NO | utf8 | |
| LastName | char(25) | | NO | utf8 | |
| Department | char(35) | Human Resources | NO | utf8 | |
| Position | char(35) | | YES | utf8 | |
| Supervisor | int(11) | | YES | | |
| OfficePhone | char(12) | | YES | utf8 | |
| EmailAddress | varchar(100) | | NO | utf8 | |

C. Sample screen shot of foreign keys identified for table with foreign keys
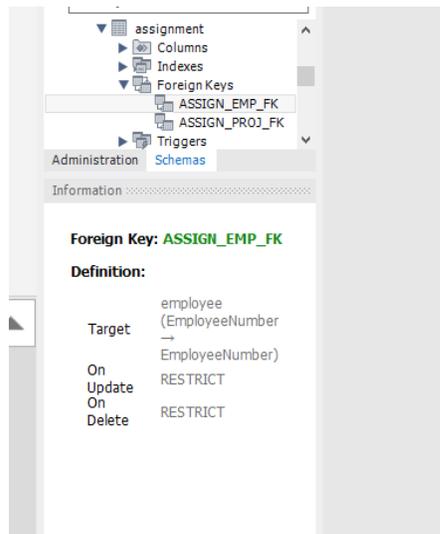


D. Sample screen shot on actual data in the table



| EmployeeNumber | FirstName | LastName | Department | Position | Supervisor | OfficePhone | EmailAddress |
|---|---|---|---|---|---|---|---|
| 1 | Marv | Jacobs | Administration | CEO | NULL | 360-285-8110 | Marv.Jacobs@WP.com |
| 2 | Rosalie | Jackson | Administration | Admin Assistant | 1 | 360-285-8120 | Rosalie.Jackson@WP.com |
| 3 | Richard | Bandalone | Legal | Attorney | 1 | 360-285-8210 | Richard.Bandalone@WP.com |
| 4 | George | Smith | Human Resources | HR3 | 1 | 360-285-8310 | George.Smith@WP.com |
| 5 | Alan | Adams | Human Resources | HR1 | 4 | 360-285-8320 | Alan.Adams@WP.com |
| 6 | Ken | Evans | Finance | CFO | 1 | 360-285-8410 | Ken.Evans@WP.com |
| 7 | Marv | Abernathy | Finance | FA3 | 6 | 360-285-8420 | Marv.Abernathy@WP.com |
| 8 | Tom | Caruthers | Accounting | FA2 | 6 | 360-285-8430 | Tom.Caruthers@WP.com |
| 9 | Heather | Jones | Accounting | FA2 | 6 | 360-285-8440 | Heather.Jones@WP.com |
| 10 | Ken | Numoto | Sales and Marketing | SM3 | 1 | 360-287-8510 | Ken.Numoto@WP.com |
| 11 | Linda | Granger | Sales and Marketing | SM2 | 10 | 360-287-8520 | Linda.Granger@WP.com |
| 12 | James | Nestor | InfoSystems | CIO | 1 | 360-287-8610 | James.Nestor@WP.com |
| 13 | Rick | Brown | InfoSystems | IS2 | 12 | NULL | Rick.Brown@WP.com |

**Report Component 8 example**

**Sample screen shot of query description, the actual SQL query and query result**

Brief description for each query -> example- This query shows all the employees from the legal department. This will help our business further analyze employee information from a specific department such as legal.

```
                                    Limit to 1000 rows
1 •   SELECT *
2     FROM Employee
3     WHERE Department= 'Legal';
4
5     |
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: 

| EmployeeNumber | FirstName | LastName | Department | Position | Supervisor | OfficePhone | EmailAddress |
|---|---|---|---|---|---|---|---|
| 3 | Richard | Bandalone | Legal | Attorney | 1 | 360-285-8210 | Richard.Bandalone@WP.com |
| NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |

## General Rubric

| | |
|---|---|
| Cover page and contributions page | 5 points |
| Description of your database (milestone 1) | 5 points |
| E.R model, description and relational form (milestone 2) | 5 points |
| Database implementation description | 20 points |
| All required implementation clear screen shots | 25 points |
| Query description (need to provide a brief description of the purpose of the query) | 15 points |
| Clear Screen shot of queries showing SQL code and results | 20 points |
| Conclusion and lessons learned | 5  points |