19B-083-SE Muneeb Sikandar
19B-097-SE Hamza Siddiqui
19B-091-SE Syed Faizan Ali
19B-116-SE Muhammad Waqar

Usman Institute of Technology

Introduction to Database Systems (CS311)

Course Project

Fall 2021

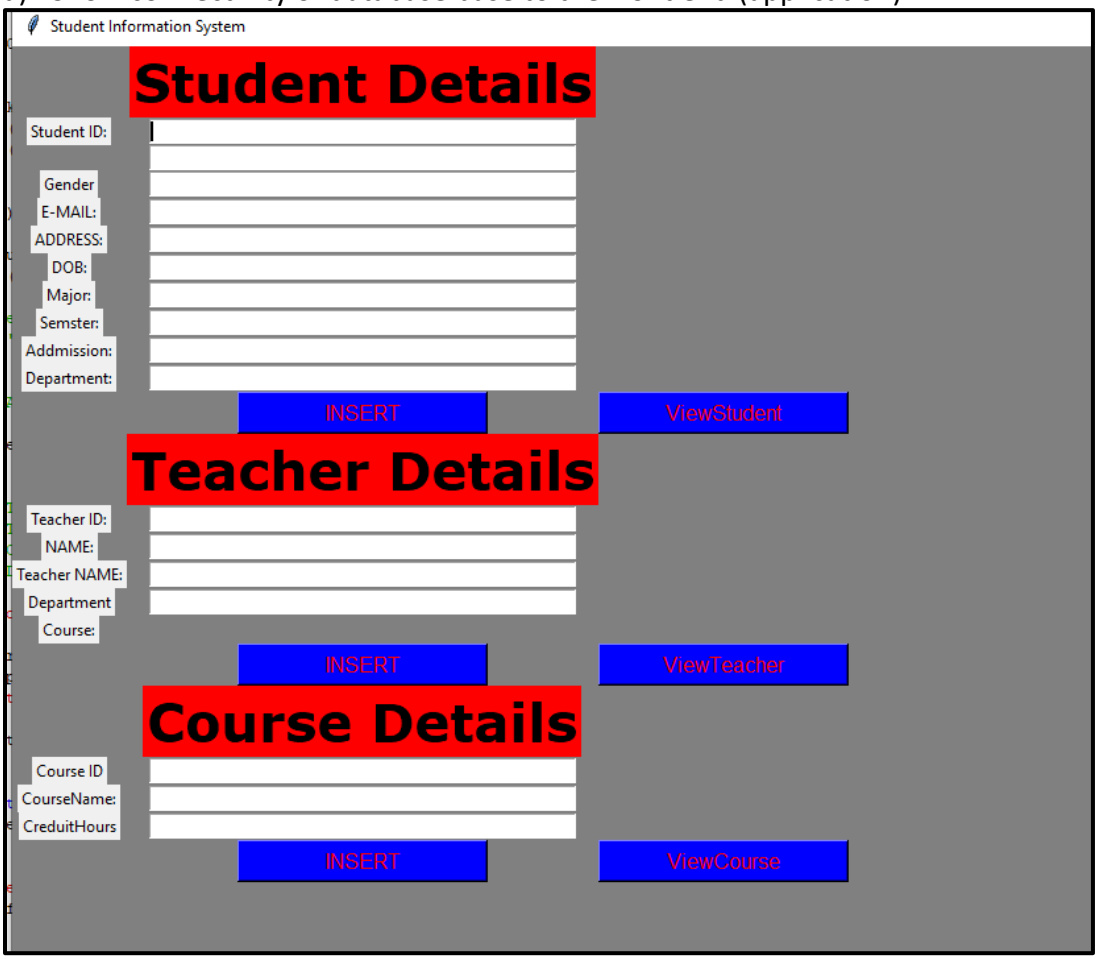
Software Engineering Section SE-B

Student Information System

Part 3

Question: Front End connectivity with Oracle Database

a) Show connectivity of database base to the front end (application).



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b) List the language, technologies and framework used for both front and backend.

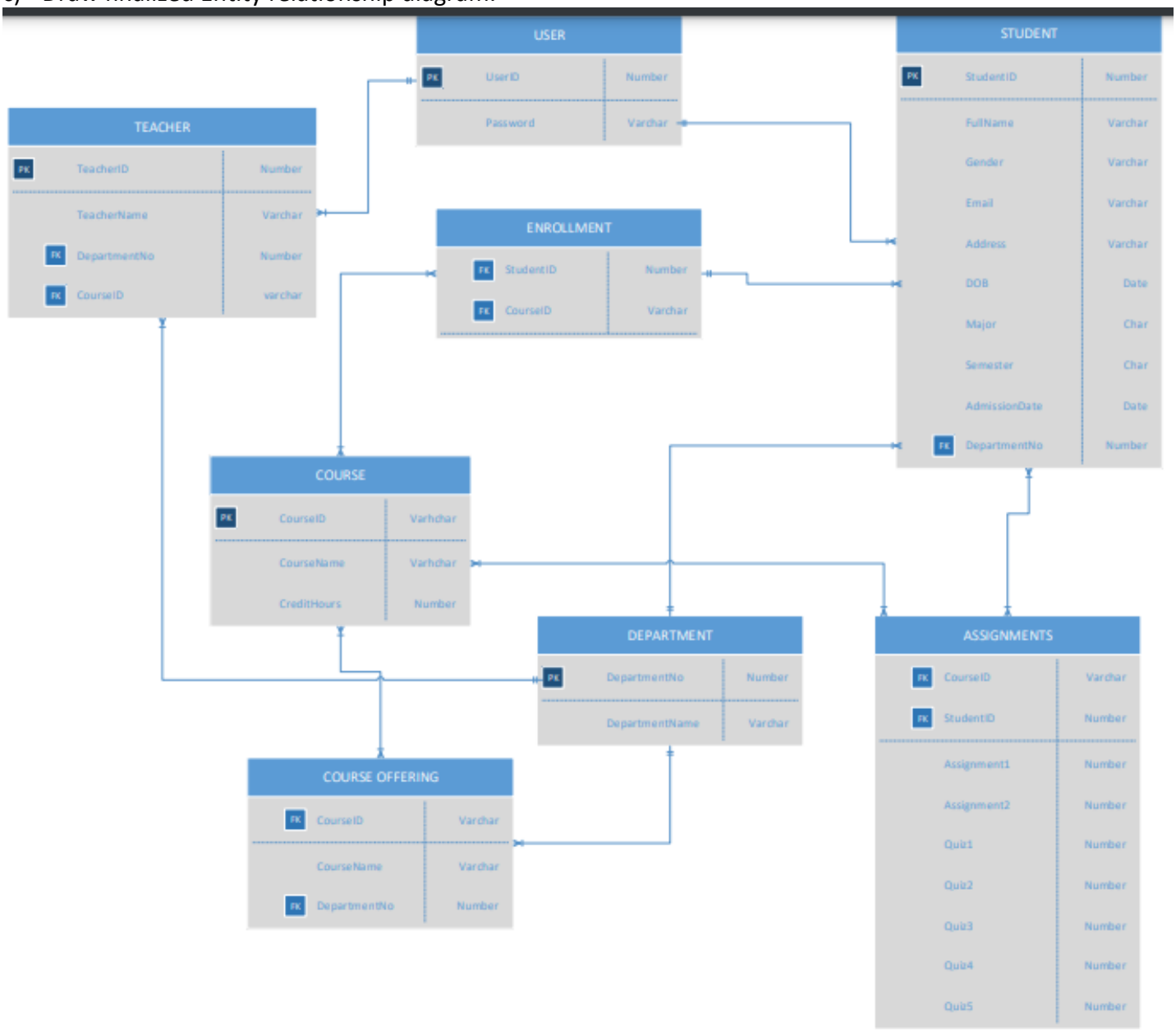
Languages:

1- Python (tkinkter) Front-end.
2- Structured Query Language Back-end.

Technologies:

1- IDLE

c) Draw finalized Entity relationship diagram.



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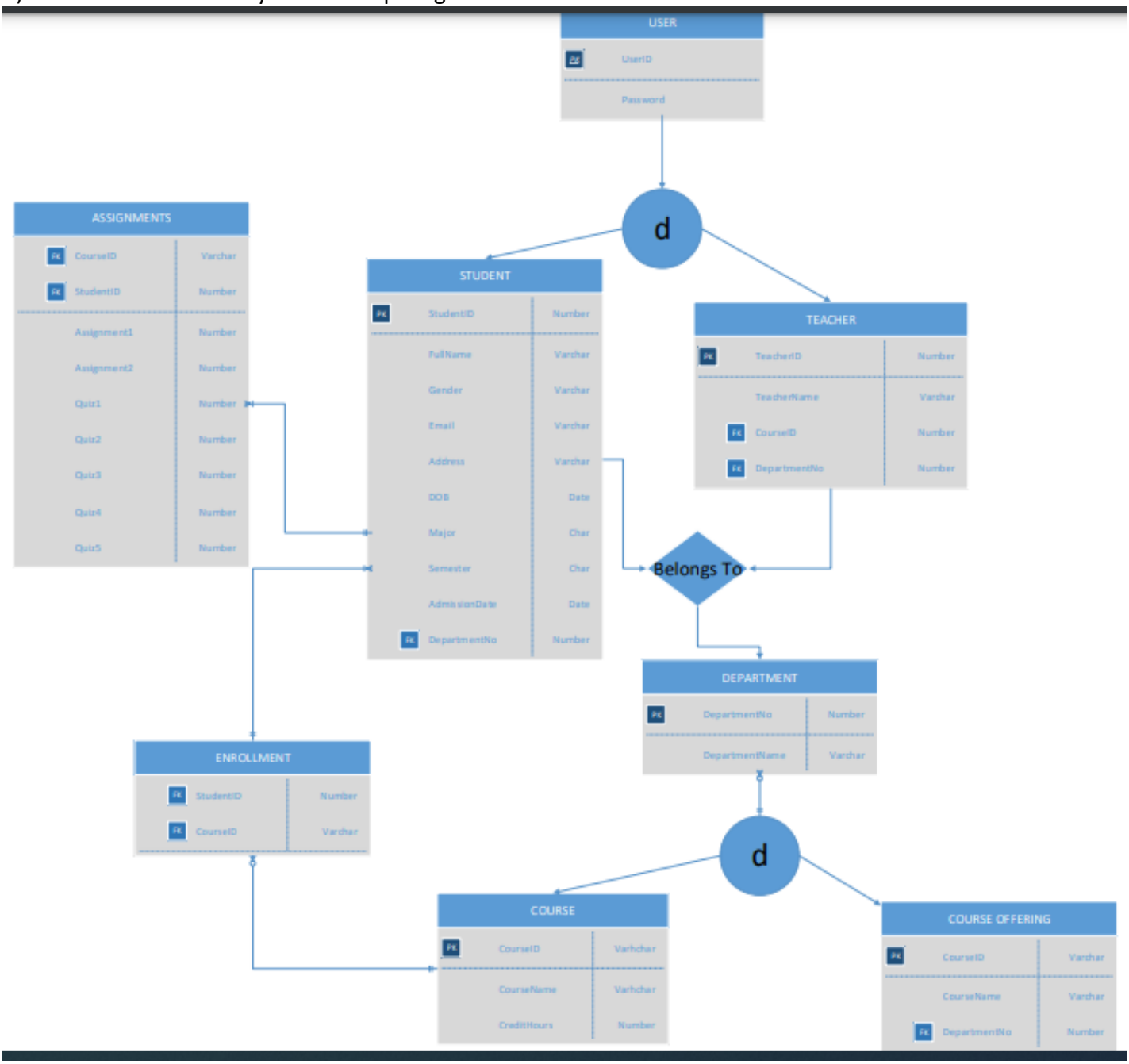
d) Draw Enhanced Entity relationship diagram.



e) Prepare video to show the working of your application. By showing the insert, delete etc. SQL statements to the database from front end.

f) Upload your complete project in .zip file. Also include readme file for installation and usage.

Note: Attached all files including MS Visio, SQL scripts, MS Word, Video etc.

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README FILE

1-Import module for GUI for showing fetched data from the Oracle Database

Module name: `tkinter`

Syntax: from `tkinter` import *

2-Import module for Oracle Connection with Python code

Module name: **cx_Oracle**

Syntax: **import cx_Oracle**

3-After step 2, Database connection will be established successfully.

Syntax for establishing connection:

Conn = cx_Oracle.connect('username/password@localhost/sid')

4-Now, Tables can be fetched from the database, this data will be displayed through Python GUI

5-Now create a schema in Oracle Sql Developer Software.

Database Schema contains following tables.

1- Department.
2- Course.
3- CourseOffering.
4- Teacher.
5- Student.
6- Assignment.
7- Users.
8- Enrollment.

Values will be inserted through GUI.