### **Group3.Instructors [Zhihan][Level 0]**

* InstructorId (PK): udt.SurrogateKeyInt (int)
* FirstName: udt.NameType (nvarchar(40))
* LastName: udt.NameType (nvarchar(40))
* FullName: udt.NameType (nvarchar(40))

### **Group3.Building [Mo][Level 0]**

* BuildingId (PK): udt.SurrogateKeyInt (int)
* BuildingName: udt.BuildingNameType (nvarchar(20))

### **Group3.Room [Mo][Level 1]**

* RoomId (PK): udt.SurrogateKeyInt (int)
* RoomNo: udt.RoomNo (nvarchar(10))
* BuildingId (FK): udt.SurrogateKeyInt (int)

### **Group3.Class [Jawwad] [Level 2]**

* ClassId (PK): udt.SurrogateKeyInt (int)
* Semester udt.SemesterType (nvarchar20)
* Section udt.SectionType(int)
* CourseId (FK): udt.SurrogateKeyInt (int)
* InstructorID (FK): udt.SurrogateKeyInt (int)
* StartTime: udt.Timetype (datetime)
* EndTime: udt.Timetype (datetime)
* Day: udt.DayName (nvarchar(20))
* Enrolled: udt.countType (int)
* Limit: udt.countType (int)
* RoomId (FK): udt.SurrogateKeyInt (int)
* ModeOfInstructionID (FK): udt.SurrogateKeyInt (int)

### **Group3.ModeOfInstruction [Kishan] [Level 0]**

* ModeId (PK): udt.SurrogateKeyInt (int)
* ModeDescription: udt.Description (nvarchar(500))

### **Group3.Course [Loyd] - Original Data [Level 0]**

* CourseId (PK): udt.SurrogateKeyInt (int)
* CourseCode: udt.CodeType (nvarchar(10))
* CourseName: udt.NameType (nvarchar(40))
* Course Description: udt.Description (nvarchar(500))
* Credits: udt.smallInt (int)
* HoursPerWeek: udt.smallInt (int)

### **Group3.Department Table [Loyd] [Level 0]**

* DepartmentID (PK): udt.SurrogateKeyInt (int)
* DepartmentName: udt.NameType (nvarchar(40))

### **Schemas**

* Group3: Stores all tables (create schema Group3)
* Udt: Stores data types (create schema Udt)
* Process: For all stored procedures (create schema Process)

**Stored Procedures**

**Entry point :** dbo.LoadDatabase

1. Process.WorkflowSteps+WorkflowSteps [Just run this ]
2. dbo.CreateSchemas
3. Process.usp\_UserAuthorization
4. Process.CreateDataTypes
5. Process.Course
6. Process.Instructors
7. Process.Building
8. Process.ModeOfInstruction
9. Process.Room
10. Process.ClassTable
11. Process.Department

**Queries:**

1. List of Instructors with Full Names
2. Count of Classes by Department
3. classes in Each Building
4. List of Classes with Mode of Instruction:
5. Instructor Schedule
6. Room Usage Schedule:
7. List building room with number in order
8. What instructors share the same room: display each individual room number and number of instructors share that room to teach in.
9. Generate a list showing the weekly schedule for each instructor, including the days, start times, end times, and room numbers for the classes they are teaching.
10. Calculate the average class size for each instructor.
11. Room Utilization Report: Generate a report showing how frequently each room is used, detailing the number of classes scheduled in each room, along with the times and days these classes are held.
12. Return the classes on a monday-wednesday Schedule.
13. Classes with no Rooms assigned yet.

**DATA CLEANUP**

* Brainstorm

**Naming Conventions** :   
User defined data types -> udt.[Datatype\_Name]

Tables -> Group3.TableName

Stored Procedure -> Process.TableName