

# 9:15 am - Group 3- Group Midterm Project

Prepared by:  
David Rabinovich

# Making the data model, naming domains, and creating constraints

Meet the team:

**David Rabinovich**

**Rabina Aryal**

**Seungwon Chun**

**Cristian Molina**



# Our Assignments:

**David Rabinovich: Make PowerPoint, Conceptual data model, make VHDX file**

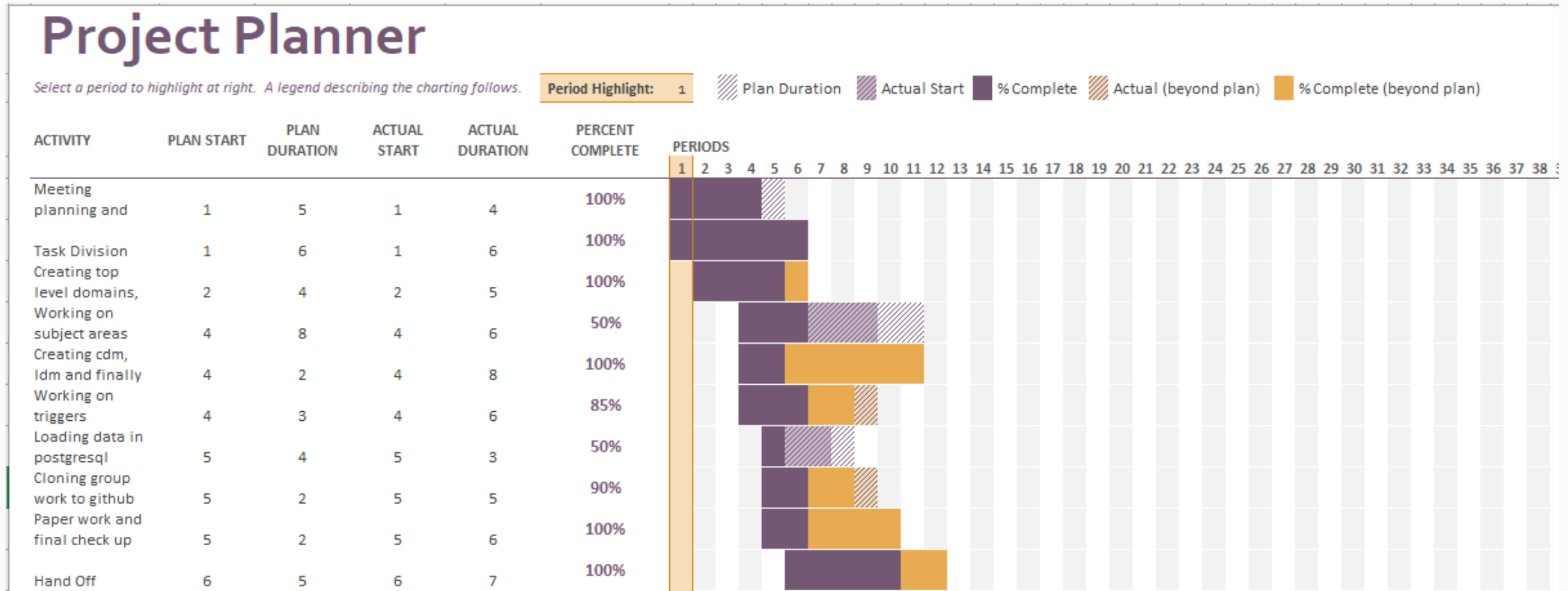
**Rabina Aryal: Work on project Planner and to-do list, Physical and Logical data model**

**Seungwon Chun: Work on the top-level domains, UDT, relationships.**

**Cristian Molina: Creating triggers and loading the data in Postgresql and Mysql, cloning work to GitHub.**



# Project Planner



# To- Do list

Project 2						
% done	Phase	Start By	Original Due By	Revised Due By	Number Of Days	Revision Notes
100%	Planning	10/24/2022	10/24/2022	24-Oct-22	1 day	decide the time-table for meetups via discord
75%	Preparation	10/25/2022	10/25/2022	25-Oct-22	1 day	Make sure all the team members has read the project specification
100%	follow up with the Project Specification	10/26/2022	10/26/2022	26-Oct-22	1 day	Make sure to understand all the materials about creating UDT and top level doamins, stored procedure, parent to child relationship, creating tiggers in PostgresSQL.
50%	task-split	10/27/2022	10/27/2022	27-Oct-22	1 day	Divide all the tasks equally among the group members. Assign individual work and procedure to each team members.
100%	Creating domains and UDT	10/27/2022	10/29/2022	29-Oct-22	2 days	Create all the required procedures needed for the Project
75%	Creating Subject areas and work on CDM,	10/31/2022	11/2/2022	2-Nov-22	3 days	Create LDM, CDM and PDM explaining the flow of the design
100%	Creating triggers and cloning group work to	11/3/2022	11/5/2022	5-Nov-22	2 days	Creating triggers and loading data to Postgres and mysql.
60%	Paperwork	11/5/2022	11/5/2022	5-Nov-22	1 day	Start working on ppt, explaining each team members work and recording them, documentation, vhdX file. .
75%	Handoff	11/6/2022	11/6/2022	6-Nov-22	1 day	Handoff- the project atleast 2-3 hours before the due date because it takes time to submit it
100%	Final Checkup	11/7/2022	11/7/2022	7-Nov-22	1 day	Follow up with the team member last time to check for any bugs in the code. Make sure the project contains the views of all team members. from individual team members.

# UDT



UDT stands for User Defined Data type.

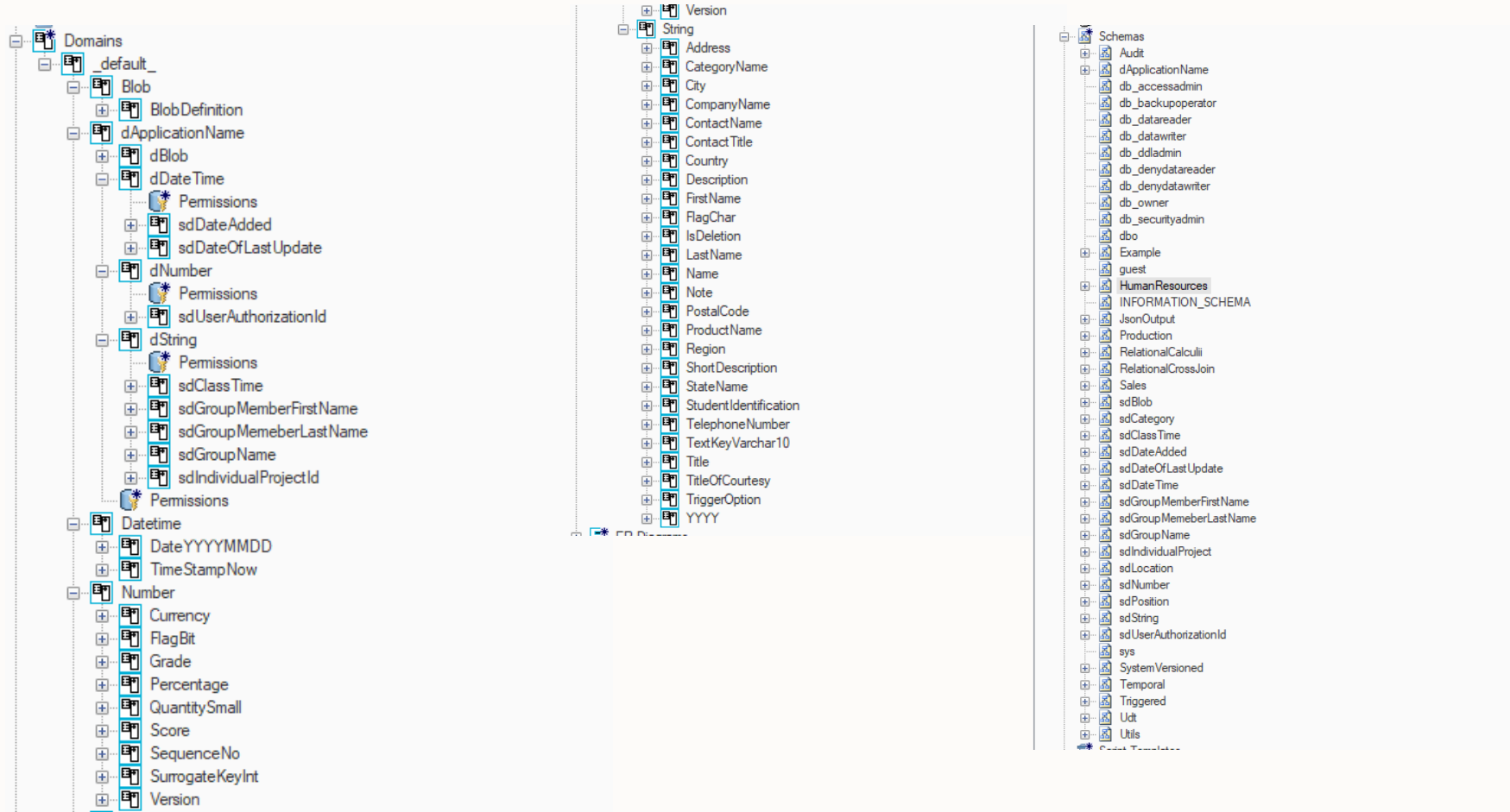


A UDT is a data type that is derived from an already existing data type



We use udt's to standardize our naming of the data types to simplify naming the type of data each of our columns use.

# Our UDT part 1



# Our UDT part 2

SQL Server Table 'DbSecurity.UserAuthorization' Column 'ClassTime' Editor

Tables: DbSecurity.UserAuthorization

Physical Name	Domain Parent	Physical Data Type	Primary Key	Foreign Key	Physical Only	PKI	Comments
UserAuthorizationId	App...	char(18)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
ClassTime	sdClass...	nchar(5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IndividualProject	sdString	char(18)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
GroupMemberLastName	sdGro...	nvarchar(25)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
GroupMemberFirstName	sdGro...	nvarchar(35)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
GroupName	sdGro...	nvarchar(20)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
DateAdded	sdDat...	datetime2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
DateOfLastUpdate	sdDat...	datetime2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

General SQL Server Constraint Link Indexes Style Comment Where Used UDP History Notes Extended Notes

Check Constraints

☐ Use Inherited Constraint

Name: CHK\_ApplicationName\_1770

Validation: CHK\_ApplicationName

With Check: ☒ Is Not For Replication: ☐ Disabled: ☐

Default

☐ Use Inherited Default Value

Name: DF\_DbSecurity.UserAuthorization\_Class\_Time\_1076896947

Default: DF\_DbSecurity.UserAuthorization\_Class\_Time

9:15

Snip & Sketch

Snip saved to clipboard

Select here to mark up and share the image

Physical Name	Domain Parent	Physical Data Type	Generate As Udd	Physical Only
Version	Number	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>
String	default_	varchar(20)	<input type="checkbox"/>	<input type="checkbox"/>
Address	String	nvarchar(60)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
CategoryName	String	nvarchar(15)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
City	String	nvarchar(15)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
CompanyName	String	nvarchar(40)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ContactName	String	nvarchar(30)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ContactTitle	String	nvarchar(30)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Country	String	nvarchar(15)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Description	String	nvarchar(200)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
FirstName	String	nvarchar(25)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LastName	String	nvarchar(25)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

General SQL Server Permission Constraint Comments Where Used UDP Notes Extended Notes

Code Type

SQL

Datatype

Physical Datatype: nvarchar(15)

Null Option: Null

Volumetrics

Average Width:

Percent Null:

Options

Row GUID: ☐

Sparse: ☐

Schema: sdCategory

Collation

SQL\_Latin1\_General\_CP1\_CI\_AS

XML

XML Schema Collection:

XML Document Type:

Populate All Rows With Default Value

☐

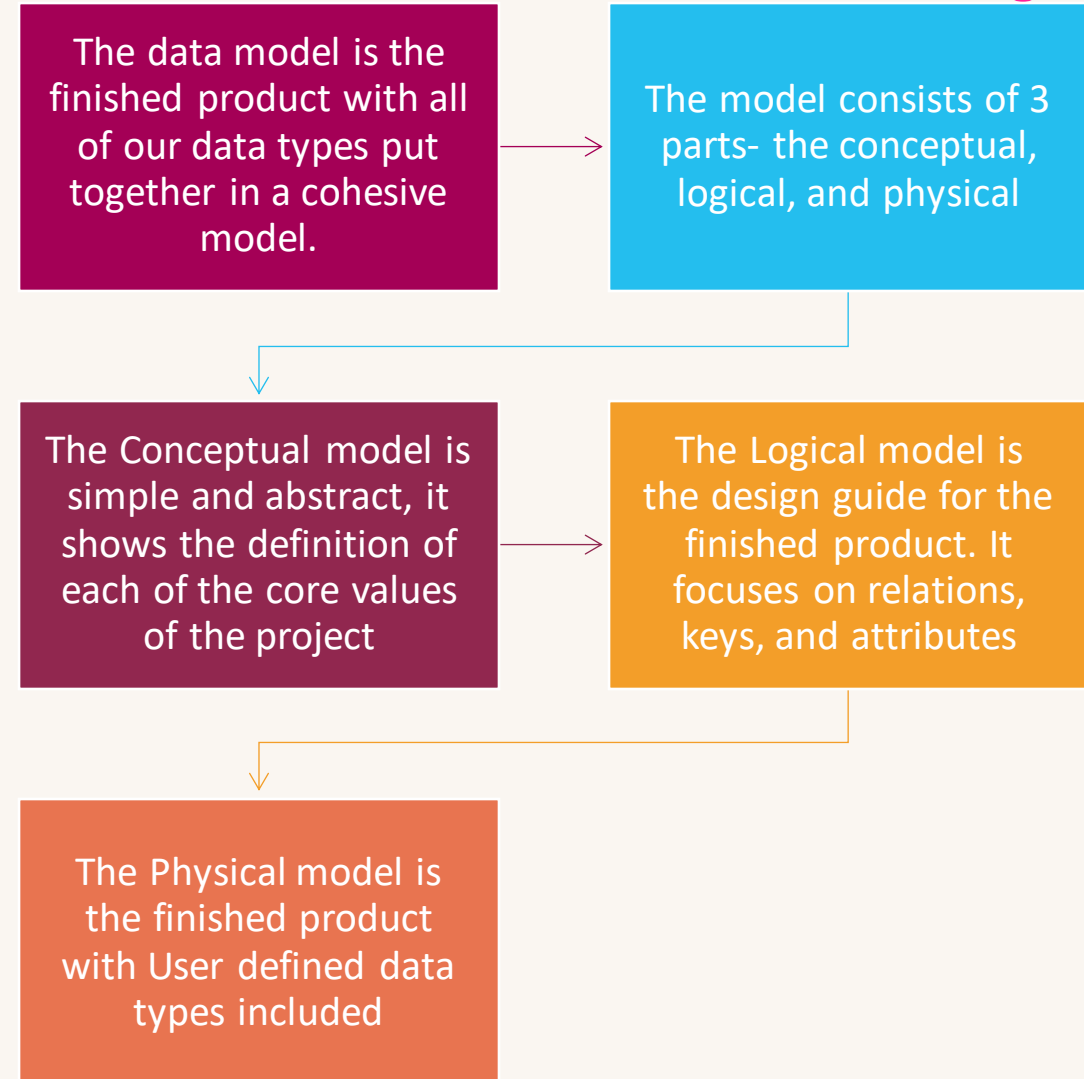
Expression

Enter SQL text here...

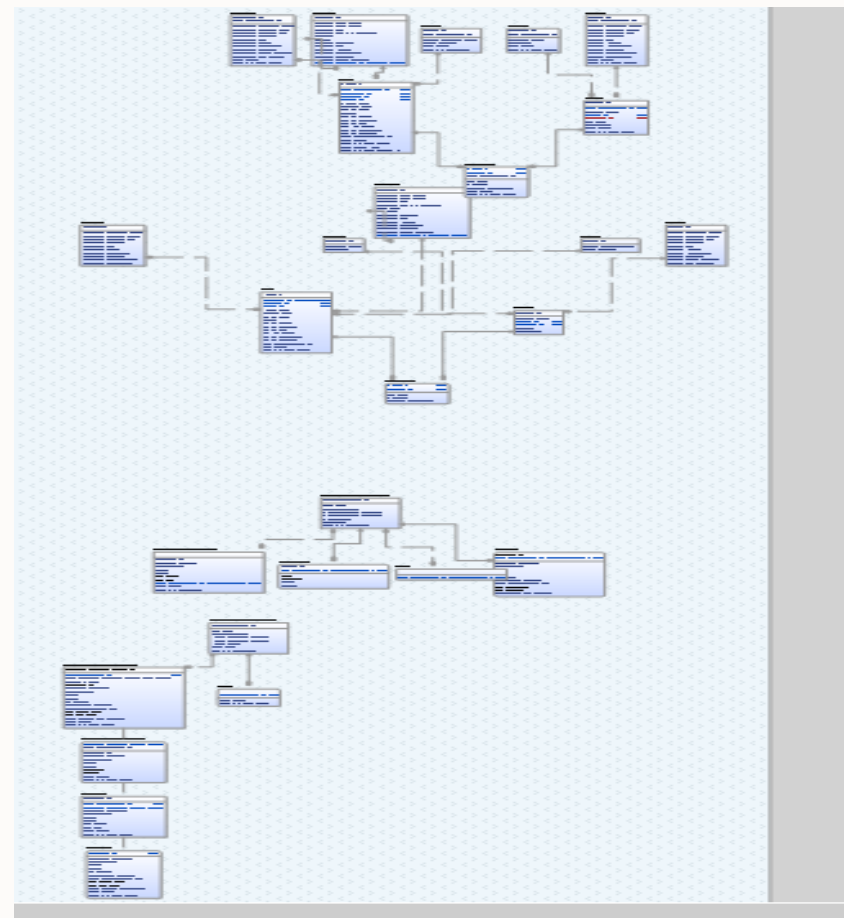
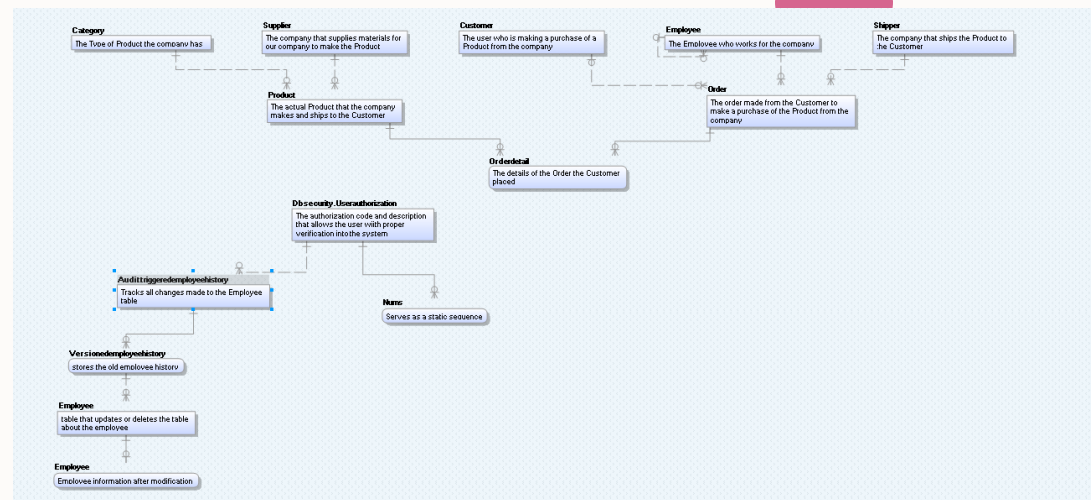
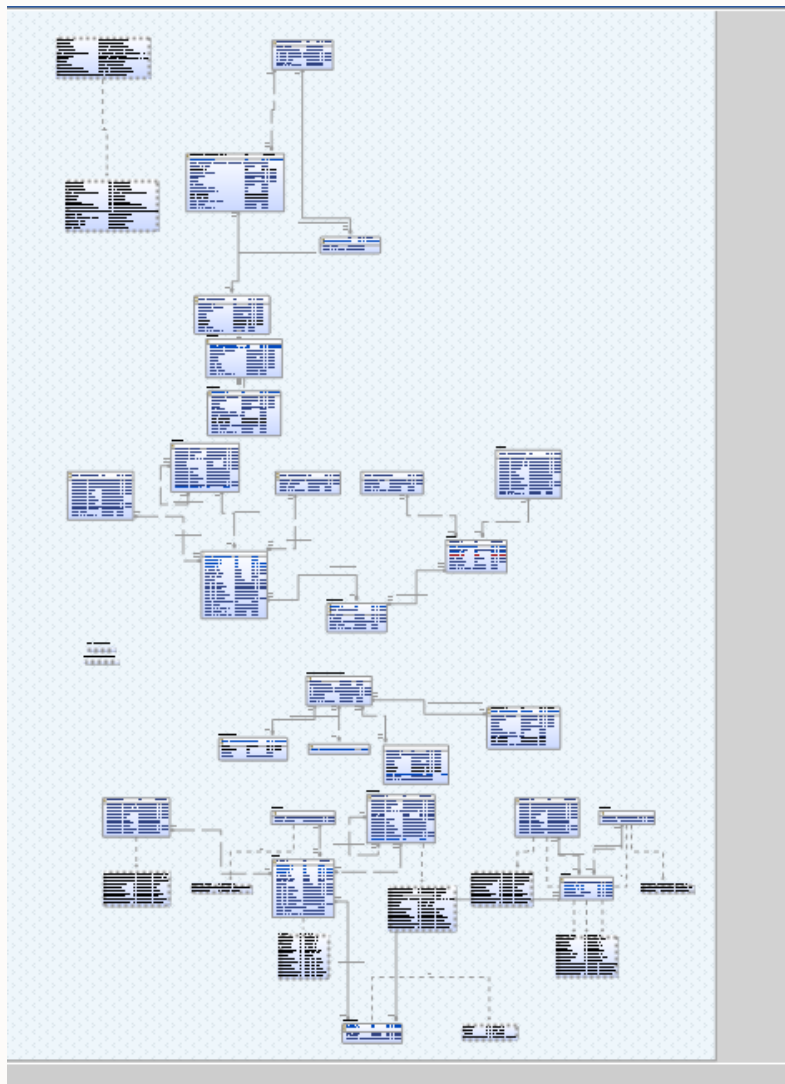
Persisted: ☐



# Data model



# Data Models



# Forward Engineering

The screenshot displays a web-based database management tool interface. The browser's address bar shows the file path: `C:/Users/StudentCSCI381Erwin/Documents/My%20Database%20Documentation/127.0.0.1,13001-2022-11-14T14-19-53/main.html`.

On the left side, there is a sidebar with a tree view containing the following items:

- .0.0.1,13001
- 27.0.0.1,13001 (highlighted)
- User databases
- CSCI381MidtermGroup

The main content area shows the breadcrumb path: `Project > 127.0.0.1,13001 > User databases > CSCI381MidtermGroup`. Below this, the title "CSCI381MidtermGroup Database" is displayed with a database icon.

There are two main sections in the main area:

- Object Types**: A list of database objects with icons:
  - Tables
  - Views
  - Stored Procedures
  - Scalar-valued Functions
  - User-Defined Data Types
  - Users
  - Database Roles
  - Schemas
- Database Properties**: A section with a table header "Property".



# Benefits of the project

This Project helped us know the skills that are required in real working world.

It mainly helped us develop stronger communication skill.

More effective product, creativity and motivation as compared to individual projects.

Much lighter workload cause the work was divided among each team member.

It helped us planned and manage time.

Accountable to each other.