**SQL Workshop-2: DDL and DML in Depth**

**Introduction**

This document details an in-depth workshop module covering the topic of Data Definition Language (DDL) and Data Manipulation Language (DML) statements. It provides practical examples of these statements within the context of the HireMeNow Job Portal Application.

**Workshop Organization**

This workshop is organized into sections that cover the creation of user access, databases, and associated tables. The content includes both Data Control Language (DCL) and Data Definition Language (DDL) statements.

**Data Control Language (DCL)**

--- Create User Access

Grant necessary permissions to a user named 'test' for data access and manipulation.

CREATE LOGIN test WITH PASSWORD = 'root';

CREATE USER test FOR LOGIN test;

GRANT SELECT, INSERT, UPDATE, DELETE ON HireMeNowDB.[dbo].[Experiences] TO test;

**Data Definition Language (DDL)**

---Create Database

CREATE DATABASE HireMeNowDB;

USE HireMeNowDB;

**Users Table**

CREATE TABLE [dbo].[Users](

Id UNIQUEIDENTIFIER DEFAULT NEWID() PRIMARY KEY,

[FirstName] [varchar](50) NULL,

[LastName] [varchar](50) NULL,

[Email] [varchar](50) NOT NULL UNIQUE,

[Gender] [varchar](50) NULL,

[Location] [varchar](50) NULL,

[Phone] [varchar](50) NULL,

[Password] [varchar](50) NULL,

[Role] [varchar](50) NULL,

[About] [varchar](50) NULL,

[Designation] [varchar](50) NULL,

[CompanyId] [uniqueidentifier] NULL,

[Status] [varchar](50) NULL,

[Image] [varchar](50) NULL

);

ALTER TABLE Users ADD CONSTRAINT email\_unique UNIQUE (Email);

**Experiences Table**

CREATE TABLE [dbo].[Experiences](

Id UNIQUEIDENTIFIER DEFAULT NEWID() PRIMARY KEY,

[UserId] [uniqueidentifier] NULL,

[JobTitle] [varchar](50) NULL,

[Company] [varchar](50) NULL,

[Duration] [varchar](50) NULL,

[Year] [varchar](50) NULL

);

-- Rename table and add foreign key constraint

EXEC sp\_rename 'Experience', 'Experiences';

ALTER TABLE Experiences ADD CONSTRAINT fk\_users\_id FOREIGN KEY (UserId) REFERENCES Users(Id);

ALTER TABLE Experiences ALTER COLUMN Company varchar(50);

Data Manipulation Language (DML)

**Users Table**

-- Add Job Provider

INSERT INTO Users VALUES ('9b80c5d4-5de6-4f16-acd5-26f7d392b8b9', 'Soudha', 'AM', 'soudha.aitrich@gmail.com', 'Female', 'Thrissur', NULL, '123', 'Jobprovider', NULL, NULL, NULL, 'Active', NULL);

-- Add Jobseekers

INSERT INTO Users VALUES ('6fa50404-3754-4062-a4b0-ca333468e69a', 'yadhu', 'krishna', 'yadhu.aitrich@gmail.com', NULL, 'Thrissur', NULL, '123', 'Jobseeker', NULL, NULL, NULL, 'Active', NULL);

-- Add Company Member

INSERT INTO Users VALUES ('08569e5d-b488-4c09-a7d1-e60fe4e5a512', 'shini', 'parameswaran', 'shini.aitrich@gmail.com', NULL, 'Thrissur', NULL, '123', 'CompanyMember', NULL, NULL, 'ab5f391e-d83e-4eae-87cd-bca23175cf22', 'Active', NULL);

**Experiences Table**

-- Add Experiences

INSERT INTO Experiences (UserId, JobTitle, Company, Duration, Year)

VALUES ('6fa50404-3754-4062-a4b0-ca333468e69a', 'Dotnet Developer', 'Aitrich Technologies', '2 years', '2021-2023'),

('6fa50404-3754-4062-a4b0-ca333468e69a', 'Dotnet Developer', 'TCS', '2 years', '2019-2021');

**Conclusion**

Congratulations on completing this in-depth DDL and DML workshop! You have gained hands-on experience with creating databases, tables, and manipulating data. Feel free to explore and experiment further to enhance your SQL skills.

Happy coding!