

Lecture Notes – PostgreSQL Installation

Section 1: Lecture Summary

The lecture covers steps to install **PostgreSQL** on various operating systems as an optional database alongside **MySQL Server** and **MySQL Workbench**, which will be used most frequently in the course. It demonstrates downloading the installer, running it on macOS, setting a memorable password like "admin1234", keeping default port and location settings, deselecting optional Stack Builder for additional tools, and launching **pgAdmin 4** to connect to the server using the password. The instructor notes creating a **companyDB** database in the next section for practicing SQL on both **MySQL** and **PostgreSQL**.

Section 2: Key Concepts and Explanations

PostgreSQL (referred to as PostGreSQL or PostgresSQL) is presented as an additional database option with open choice for users. Installation involves selecting the operating system (Windows, macOS, or Linux), downloading the graphical installer, entering a password for the server, retaining default port (e.g., 5432), and choosing default database cluster location. **pgAdmin 4** is a GUI tool included for accessing the server and default "postgres" database, similar to **MySQL Workbench**. Users can create custom databases like **companyDB** after installation. **Stack Builder** is optional for extra drivers and tools, deselected during setup.

Section 3: Example Code and Use Cases

No SQL code examples are provided in the lecture, as it focuses on installation. After setup, connect via **pgAdmin 4** and create **companyDB** using its schema:

```
CREATE DATABASE companyDB;
```

Switch to **companyDB** and use its tables (Departments, EmployeeProjects, Employees, Projects) for SQL practice in upcoming sections, compatible with **MySQL** or **PostgreSQL**.

Section 4: Key Takeaways

Install **PostgreSQL** via official download page using the graphical installer for your OS. Set and remember a simple password, keep defaults for port and location, and use **pgAdmin 4** to verify connection. **MySQL** remains primary; **PostgreSQL** is optional. Prepare **companyDB** in the next section for SQL exercises on either system.