

Required Libraries

Make sure to change Jupyter Notebook Kernel to .NET Interactive for csharp

```
In [1]: // dotnet tool install --global Microsoft.dotnet-interactive

// dotnet interactive jupyter install

// dotnet add package Neo4j.Driver --version 5.25.0

#r "nuget: Neo4j.Driver, 5.25.0"
```

Installed Packages

- Neo4j.Driver, 5.25.0

Open Database Connection

```
In [2]: using Neo4j.Driver;

public class Neo4jConnection
{
    private static IDriver driver;

    public static IDriver ConnectDatabase(string uri, string username, string
password)
    {
        driver = GraphDatabase.Driver(uri, AuthTokens.Basic(username, passwor
d));
        return driver;
    }

    public static void CloseConnection()
    {
        driver?.Dispose();
    }
}
```

```
In [3]: public async Task CreateUserNode(IDriver driver, Dictionary<string, string> userData)
{
    var query = @"
    CREATE (u:User {
        username: $username,
        name: $name,
        email: $email,
        phone: $phone
    })
    ";

    // Run the query with the parameters
    var session = driver.AsyncSession(); // Open a session for Neo4j
    try
    {
        await session.RunAsync(query, new {
            username = userData["username"],
            name = userData["name"],
            email = userData["email"],
            phone = userData["phone"]
        });
        Console.WriteLine($"User {userData["username"]} created!");
    }
    finally
    {
        await session.CloseAsync(); // Ensure session is closed after query
    }
}
```

```
In [4]: // Sample user data dictionary
var user1Data = new Dictionary<string, string> {
    { "username", "brody675" },
    { "name", "Brody" },
    { "email", "brodykerr675@gmail.com" },
    { "phone", "832-600-8473" }
};
```

```
In [5]: // Jared Server Login Info
// var URI = "bolt://zelpa.net:7687";
// var USERNAME = "neo4j";
// var PASSWORD = "55QvQu95HG";

// Brody's localhost login
var URI = "bolt://localhost:7687";
var USERNAME = "neo4j";
var PASSWORD = "recipeApp";

var driver = Neo4jConnection.ConnectDatabase(URI, USERNAME, PASSWORD);

// Creates a Single User Node
await CreateUserNode(driver, user1Data);
```

User brody675 created!