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***Deliverable 2: Project Report for Desktop Application 1 Development***

1. Work In Progress: We have made significant progress in the development of our Desktop Application 1 using WPF (Windows Presentation Foundation) technology. By the time Deliverable 2 is due, the following functionalities have been implemented and are fully functional:

• User Authentication: Implemented a secure login system allowing users (employees and administrators) to log in using their email and password credentials.

• User Registration: Developed a user registration module enabling new employees and administrators to create profiles. The registration form captures essential information such as ID, name, email, password, position, department, hire date, salary, birth date, and address.

• Database Integration: Successfully integrated the application with a SQL Server database. We have created tables for Employee and Administrator entities. Screenshots of the database entries are provided below:

• Employee Table:

• Administrator Table:

• User Profile Management: Implemented functionalities for creating, updating, deleting, and retrieving user profiles from the database. Users can modify their information after registration.

• User Interface Screenshots: Attached screenshots of the developed WPF interfaces showcasing login, registration, and profile management screens.

• Login Screen:

• Registration Screen:

• Profile Management Screen:

2. Tools Finalized:

• WPF .NET Framework: We are using WPF technology provided by .NET Framework for building the user interface. The application is developed using .NET Core 3.1, ensuring compatibility and performance.

• Database Version: We are using Microsoft SQL Server 2019 as our database management system. SQL Server provides robust data storage and retrieval capabilities, essential for our application's functionality.

• Additional Tools: We are utilizing Microsoft Visual Studio 2019 as our primary integrated development environment (IDE) for coding, designing, and debugging. Visual Studio streamlines our development process and enhances collaboration among team members.

3. Plan for the Next 4 Weeks:

• Week 1-2: Complete the implementation of additional user features such as password recovery, user roles management, and access control functionalities.

• Week 3: Conduct thorough testing of the application to identify and fix bugs, ensuring a smooth user experience. Implement user feedback received during the testing phase.

• Week 4: Finalize the documentation, including user manuals and technical documentation. Prepare for the database migration to a REST API-based database for enhanced scalability and security.

• Database Migration and Testing (Week 5): Migrate the existing SQL Server database to a REST API-based database for improved performance and scalability. Develop test programs to thoroughly test the application's functionality, including edge cases and security features.

We are confident in our development progress and the planned tasks for the upcoming weeks. Our team is committed to delivering a high-quality Desktop Application 1 within the specified timeline.