EsemkaCorporation Test Project

Introduction

EsemkaCorporation is a corporation providing Information Technology Services. It has **five departments** (**Information Technology, Operations, Finance and Accounting, Procurement, Human Capital**) leads by **Board of Management**. The **job** position is ordered in **ascending** from **Staff, Officer, Supervisor, Manager, to Director**.

They would like to develop a new **Desktop Application** using **C# Programming Language** to manage their **employee data**. The application must have several features such as **login authentication**, **viewing employee profile**, or **applying for job mutation** or **promotion**. Below are some of the requirements that has been arranged by the analysts and designers.
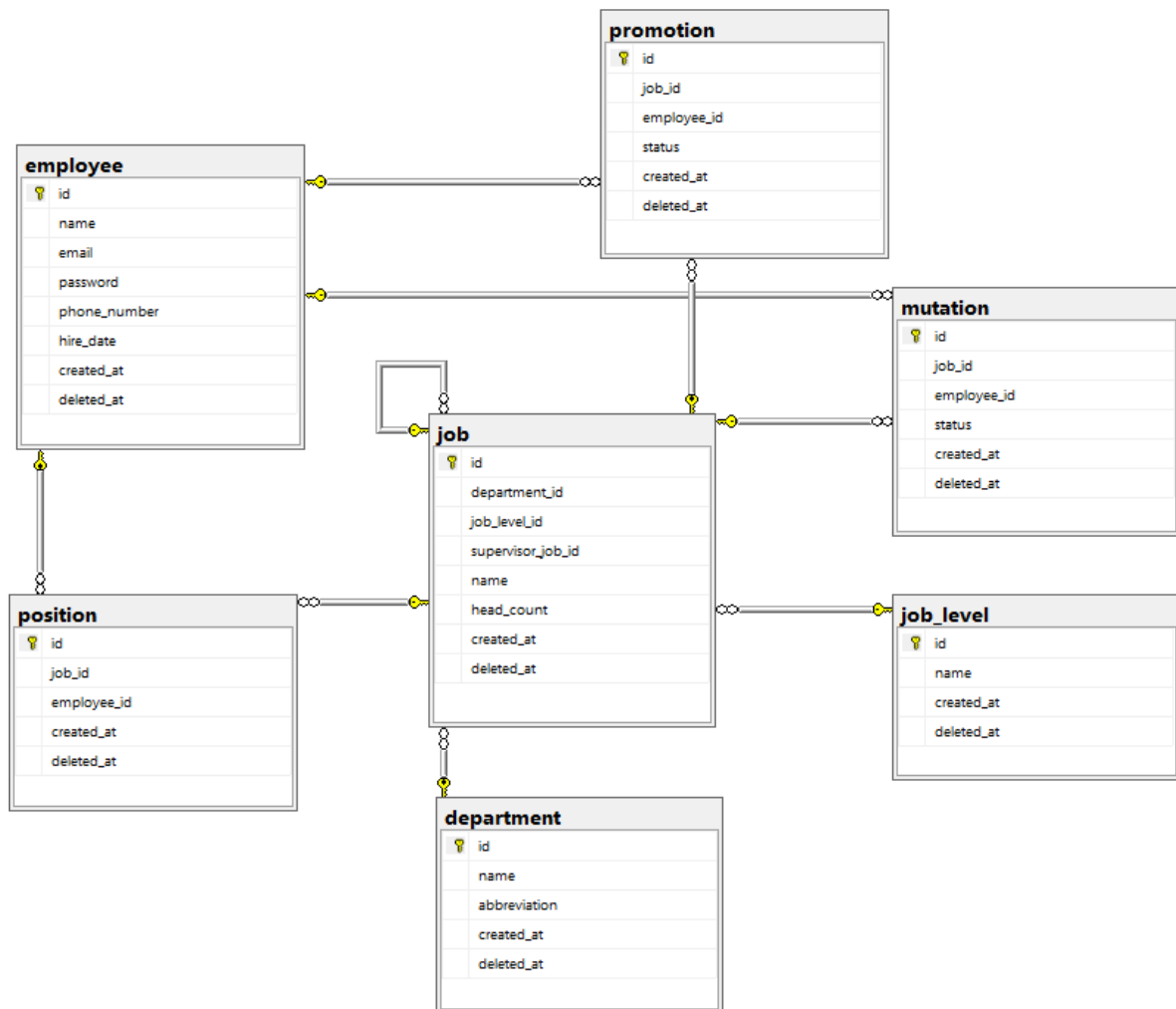
Contents

In this test project there are some files and usable resources:

1. EsemkaCorporation_TP.pdf   (Test project file)
2. EsemkaCorporation_DB.sql   (Database Script File)

Project Description and Tasks

- Project Criteria:
  - ✓ The project name should be "DESKTOP_I_[XX]", where XX is your PC number.
  - ✓ Time management is a crucial factor for the success of this project. So, manage your time wisely and submit all your works on time.
- Application User Interface:
  - ✓ The application wireframe is already provided. You are allowed to modify the application interfaces as long as it doesn't interfere the business and application flow.
  - ✓ The scoring will be focused on the features of the application.
- Validation and Error Messages:
  - ✓ The application must runs well with a proper validation and shows a useful error messages to the user.
  - ✓ Analyze the required validation(s) that is/are needed in the application. This is one of the scoring criteria for your analytical skills for the project. Any specific validation will be given in the project description.
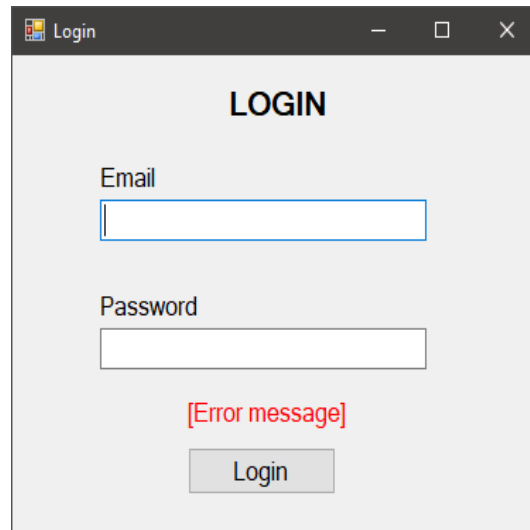
Entity Relationship Diagram

Entity-Relationship Diagram (ERD) is provided to help you understand the database structure of the requested EsemkaCorporation Desktop Application. This diagram explains the concept and representation of the data model that is used in the database.

NB: The database implements **soft delete** technique; it means that records are not actually removed from the database. Instead, a **'deleted_at'** timestamp is set on the record.
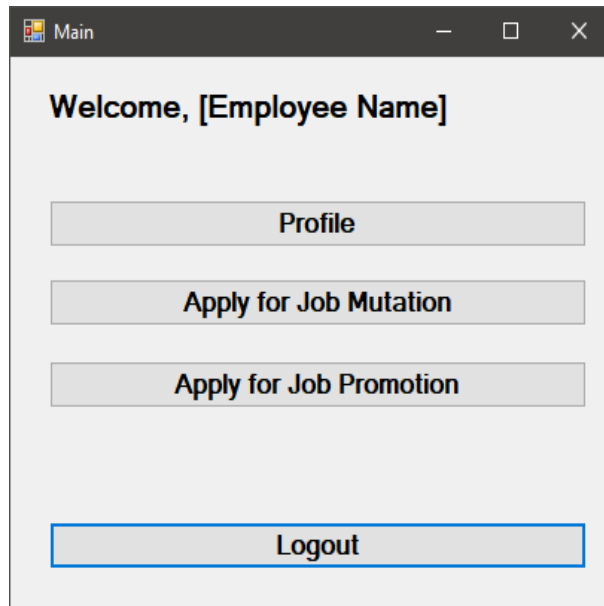
1. Login Form

This is the first screen that will be used by the employee to login to the application. Employee can **login** to the application by **filling their email** and **password**.

- If the **combination exists** in the database, the user will be **directed to** the **main screen** of the application.

- If the **combination doesn't exist** in the database, **let the user know**.

2. Main Form

In this screen, employee can navigate to other forms.

- Display the **employee's name**.

- **Button Profile** redirects employee to **Profile Form**.

- **Button Apply for Job Mutation** redirects employee to **Mutation Form**.

- **Button Apply for Job Promotion** redirects employee to **Promotion Form**.

- **Button Logout** ends current employee session and redirects to **Login Form**.

3. Profile Form

Profile Form shows the previously selected employee profile.

- This form **shows** the employee **profile detail**. All data shown is **non editable**.

- Clicking the **Direct Supervisor Link Text** will redirect to the **profile form** of that **supervisor**.

- **Job History DataGridView** displays all the employee's previous job positions ordered by job level descending.

- **Subordinate DataGridView** display all the employee's direct subordinate.

- **Works With DataGridView** displays all other employee that share same supervisor with this employee.

- **Button Main** can be used to **redirect to Main Form.**

4. Mutation Form

Mutation Form is used by the employee to apply for **job mutation**.

- This form shows the employee **job detail**. All data shown is **non editable**.

- **Available Job Mutation DataGridView** displays all **applicable job positions** for the employee to apply. The requirements are:

  ✓ Must be in the **same job level** as **current job position**.

  ✓ There is **vacancy** for those job position.

  ✓ **Cross department** job position is **allowed**.

- The employee can apply to the job position by clicking **Apply Button** in the selected row. Once the application is made, **disable** the **Apply Button**. The **application status then will be set as 'Pending'.**

- **Multiple application** at the same time is **allowed** if it is **different job position**.

- **Button Main** can be used to redirect to **Main Form**.

5. Promotion Form

Promotion Form is used by the employee to apply for **job promotion**.

- This form shows the employee **job detail**. All data shown is **non editable**.

- **Available Job Promotion DataGridView** displays all **applicable job positions** for the employee to apply. The requirements are:

  - ✓ Must be **one level above** the **current job position level**.

  - ✓ There is **vacancy** for those job position.

  - ✓ **Cross department** job position is **allowed**.

- The employee can apply to the job position by clicking **Apply Button** in the selected row. Once the application is made, **disable** the **Apply Button**. The **application status then will be set as 'Pending'.**

- **Multiple application** at the same time is **allowed** if it is **different job position**.

- **Button Main** can be used to redirect to **Main Form**.

"Talk is cheap. Show me the code." - Linus Torvald