

| **PROJECT ON**  **(Project Title)** |
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| **Developed by**  **Members:**   | **No.** | **Student Name** | **Student ID** | | --- | --- | --- | | 1 | HO NGOC DUC | Student1219661 | | 2 | VU THI THOM | Student1233668 | | 3 | DANG MINH THOI | Student13160 | | 4 | LE HOANG PHUC BAO | Student1144200 |  * **Class No.: C2103G** * **Start Date: May-25-2022** * **End Date: Jun-24-2022** * **Name of the Coordinator: Mr. Phan Huu Tri** * **Date of Submission: Jun-27-2022** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SYSTEM ANALYSIS** |

| **System Summary:**  **Title : Transfer employee management**  **According to user's request :**  **An employee transfer processing system.**  **Handle the management including :**  **+Login ( ROLE : ADMIN , EMPLOYEE )**  **+ Admin interface :**   * **Employee manager**   + **Add employee**   + **Update employee**   + **Find employee**   + **Employee detail** * **Transfer Management:**   + **Confirm employee transfer request**   + **Search for a transfer request to a location, department, or project** * **Location Management**   + **Add Location**   + **Update Location**   + **Find Location** * **Department Management**   + **Add Location**   + **Update Location**   + **Find Location** * **Project Management**   + **Add Location**   + **Update Location**   + **Find Location**   **+Employee interface :**   * **Information employee** * **Transfer request** * **change password** |
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| **CLASS DIAGRAM** |

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| **DATABASE DESIGN** |

| **Database Name:**  **Number of tables:**  **Tables Names:**   1. Employee 2. Role 3. Transfer 4. Title 5. Emp\_Location 6. Location 7. Emp\_Department 8. Department 9. Emp\_Project 10. Project   **Schematic Diagram Of Database:**  Schematic diagram of the database depicting the primary and foreign key  relationships. |
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| **TABLE DESIGN** |

| **Database Name:**  **Employees:**   | Field Name | Data type | Width | Description | | --- | --- | --- | --- | | employee\_id | int | 11 | EmployeeID (PK) | | name | varchar | 250 | Name of the employee | | dob | date |  | Birthday of the employee | | phone | varchar | 250 | Phone number of the employee | | email | varchar | 250 | Email of the employee | | gender | varchar | 250 | Gender of the employee | | image | blob | 250 | image of the employee | | title\_id | int | 11 | title\_Id of the title (FK) | | role\_id | int | 11 | role\_id of the Role (FK) | | username | varchar | 250 | Username of the employee | | password | varchar | 250 | password of the employee | | created | date |  | Created of the employee | | status | tinyint | 1 | status of the employee |   **Roles:**   | Field Name | Data type | Width | Description | | --- | --- | --- | --- | | role\_id | int | 11 | RoleID of the role (PK) | | role\_name | varchar | 250 | Name of the role | | status | tinyint | 1 | status of the role |   **Title:**   | Field Name | Data type | Width | Description | | --- | --- | --- | --- | | title\_id | int | 11 | titleID of the title(PK) | | title\_name | varchar | 250 | Name of the title | | salaries | double |  | Salaries of the title | | status | tinyint | 1 | status of the title |   **Location:**   | Field Name | Data type | Width | Description | | --- | --- | --- | --- | | location\_id | int | 11 | locationID of the location(PK) | | location\_name | varchar | 250 | Name of the title | | street\_address | varchar | 250 | Street address of the Location | | created | date |  | created of the location | | status | tinyint | 1 | status of the location |   **Emp\_Location:**   | Field Name | Data type | Width | Description | | --- | --- | --- | --- | | emp\_location\_id | int | 11 | emp\_location\_id of the emp\_Location(PK) | | location\_id | int | 11 | location\_id of the location (FK) | | employee\_id | int | 11 | employee\_id of the Employee(FK) | | FromDate | date |  | FromDate of the EmpLocation | | ToDate | date |  | ToDate of the EmpLocation | | status | tinyint | 1 | status of the EmpLocation | | description | varchar | 500 | Description of the EmpLocation |   **Department:**   | Field Name | Data type | Width | Description | | --- | --- | --- | --- | | department\_id | int | 11 | department\_idof the Department(PK) | | department\_name | varchar | 250 | Name of the department | | created | date |  | created of the Department | | status | tinyint | 1 | status of the Department |   **Emp\_Department:**   | Field Name | Data type | Width | Description | | --- | --- | --- | --- | | emp\_department\_id | int | 11 | emp\_department\_id of the emp\_department(PK) | | department\_id | int | 11 | department\_idof the Department(FK) | | employee\_id | int | 11 | employee\_id of the Employee(FK) | | FromDate | date |  | FromDate of the emp\_epartment | | ToDate | date |  | ToDate of the emp\_epartment | | status | tinyint | 1 | status of theemp\_epartment | | description | varchar | 500 | Description of the EmpDepartment |   **Project:**   | Field Name | Data type | Width | Description | | --- | --- | --- | --- | | project\_id | int | 11 | project\_id of the Project(PK) | | project\_name | varchar | 250 | Name of the project | | created | date |  | created of the project | | status | tinyint | 1 | status of the project |   **Emp\_Project:**   | Field Name | Data type | Width | Description | | --- | --- | --- | --- | | emp\_project\_id | int | 11 | Emp\_project\_id of the Emp\_project(PK) | | project\_id | int | 11 | Project\_id of the Project(FK) | | employee\_id | int | 11 | Employee\_id of the Employee(FK) | | FromDate | date |  | FromDate of the Emp\_Project | | ToDate | date |  | ToDate of the Emp\_Project | | status | tinyint | 1 | status of theemp\_project | | description | varchar | 500 | Description of the EmpProject |   **Transfer:**   | Field Name | Data type | Width | Description | | --- | --- | --- | --- | | transfer\_id | int | 11 | project\_id of the Project(PK) | | employee\_id | int | 11 | Employee\_Id of the Employee (FK) | | location\_id | int | 11 | Location\_id of the Location(FK) | | department\_id | int | 11 | Department\_idof the Department(FK) | | project\_id | int | 11 | Project\_Id of the Project(FK) | | created | date |  | Created of the Transfer | | processing\_date | date |  | Proccessing\_date of the Transfer | | status | tinyint | 1 | Status of the Transfer | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **VALIDATIONS PERFORMED** |

| **Database Name:**  **Employee:**   | Validation Required | Method Used For Validation | | --- | --- | | employee\_id | Primary key constraint | | name | character 6 > 30 ,not null | | birthday | 18+ , not null | | phone | Phone validate regex , not null | | email | Email validate regex , not null | | username | check exists , not null | | password | bycript , validate regex , not null | | role\_id | foreign key | | title\_id | foreign key | | created | Create ( set created new Date() ) , not null | | status | set status (1) |   **Role:**   | Validation Required | Method Used For Validation | | --- | --- | | role\_id | Primary key constraint | | name | not null | | status | set status (1) |   **Title:**   | Validation Required | Method Used For Validation | | --- | --- | | title\_id | Primary key constraint | | name | not null | | created | Create ( set created new Date() ) , not null | | status | set status (1) |   **Location:**   | Validation Required | Method Used For Validation | | --- | --- | | location\_id | Primary key constraint | | name | not null | | streets\_address | not null | | created | Create ( set created new Date() ) , not null | | status | set status (1) |   **Department:**   | Validation Required | Method Used For Validation | | --- | --- | | department\_id | Primary key constraint | | name | not null | | created | Create ( set created new Date() ) , not null | | status | set status (1) |   **Project:**   | Validation Required | Method Used For Validation | | --- | --- | | project\_id | Primary key constraint | | name | not null | | streets\_address | not null | | created | Create ( set created new Date() ) , not null | | status | set status (1) |   **EmpLocation:**   | Validation Required | Method Used For Validation | | --- | --- | | emp\_location\_id | Primary key constraint | | location\_id | foreign key | | employee\_id | foreign key | | FromDate | Create ( set created new Date() ) , not null | | ToDate | NULL , Update (set created new Date()) | | description | NULL |   **EmpDescription:**   | Validation Required | Method Used For Validation | | --- | --- | | emp\_description\_id | Primary key constraint | | description\_id | foreign key | | employee\_id | foreign key | | FromDate | Create ( set created new Date() ) , not null | | ToDate | NULL , Update (set created new Date()) | | description | NULL |   **EmpProject:**   | Validation Required | Method Used For Validation | | --- | --- | | emp\_project\_id | Primary key constraint | | project\_id | foreign key | | employee\_id | foreign key | | FromDate | Create ( set created new Date() ) , not null | | ToDate | NULL , Update (set created new Date()) | | description | NULL | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DATA FLOW DIAGRAM** |

| **Data Flow Diagram representing the control flow of Project Case Study.** |
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| **(WEB/WINDOWS) FORMS OUTLINE** |

| **Forms Name** | **Description** |
| --- | --- |
|  | **login**   * **Admin interface :**   **username : admin**  **password : admin123**   * **Employee interface :**   **username : employee12**  **password : employee123** |
|  | **Dashboard** |
|  | **Employees management**   * **Show list employees** * **Find id , name**   **- Show information** |
|  | **Add employee** |
|  | **Employee detail**   * **Show employee information** * **Show location history** * **Show department history** * **Show project history** * **Change password** * **No transfer request** |
|  | **Employee detail (same interface)**   * **There is a transfer request** * **Show employee information** * **Show location history** * **Show department history** * **Show project history** * **Change password** |
|  | **Update employee**   * **Change information** * **Change Location , department,project** * **Change Image** |
|  | **Transfer request**  **- Request processing**  **- Find Request** |
|  | **Location management**   * **Add , update ,find** |
|  | **Department management**   * **Add , update ,find** |
|  | **Project management**   * **Add , update ,find** |
|  | **Title management**   * **Add , update ,find** |
|  | **Employee interface :**   * **Profile** |
|  | **Transfer request**  **-Submit form transfer request** |
|  | **Change password** |

| **CONFIGURATION** |
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| **Software & Technology Used:**   * **Eclipse IDE for enterprise java 06-2021 (Swing)** * **Xampp** |
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| **PROJECT TIMELINES** |
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| **S.No.** | **Task to be performed** | **Time** |
| --- | --- | --- |
| **1** | **Unified database** | **3 day** |
| **2** | **Created and design for the application** | **4 day** |
| **3** | **Design UI** | **7 day** |
| **4** | **implement business functionalities of systems in the application** | **8 day** |
| **5** | **Test and debug** | **1 day** |
| **6** | **Document the project** | **1day** |
|  | **Total** | **24 day** |

| **INDIVIDUAL PROJECT SCHEDULE** |
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| **S.No.** | **Activity Description** | **Responsibility** |
| --- | --- | --- |
| **1.** | **Unified database** | **HO NGOC DUC** |
| **2.** | **Design UI/UX** | **HO NGOC DUC** |
| **3.** | **Employee management** | **HO NGOC DUC** |
| **4.** | **Transfer request management** | **HO NGOC DUC** |
| **5.** | **Department management** | **LE HOANG PHUC BAO** |
| **6.** | **Transfer request ( Employee )** | **LE HOANG PHUC BAO** |
| **7.** | **Login** | **VU THI THOM** |
| **8.** | **Location management ( ADMIN )** | **VU THI THOM** |
| **9.** | **Project management (ADMIN )** | **VU THI THOM** |
| **10.** | **Titles management (ADMIN )** | **VU THI THOM** |
| **11.** | **Design diagram** | **VU THI THOM** |
| **12.** | **Information employee ( Employee )** | **DANG MINH THOI** |
| **13.** | **Change password** | **DANG MINH THOI** |
| **14.** | **Test system , support team** | **DANG MINH THOI** |