

Group 9

HR Management System



What we used



MySQL



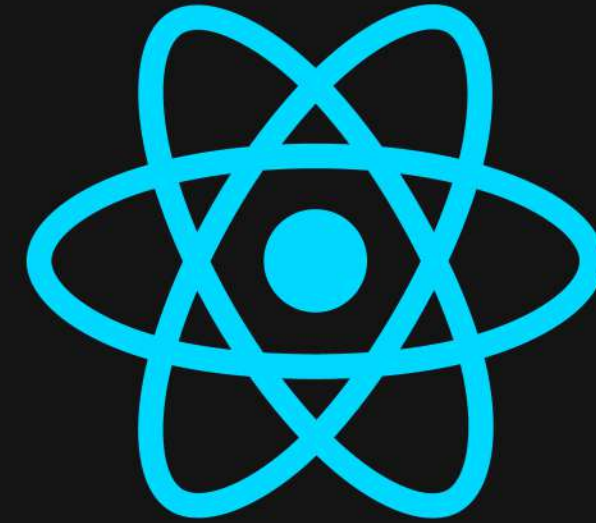
For Database



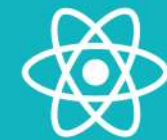
Express



For Backend



React



For Frontend

Features



Storing Employee Details

Employees can view their details

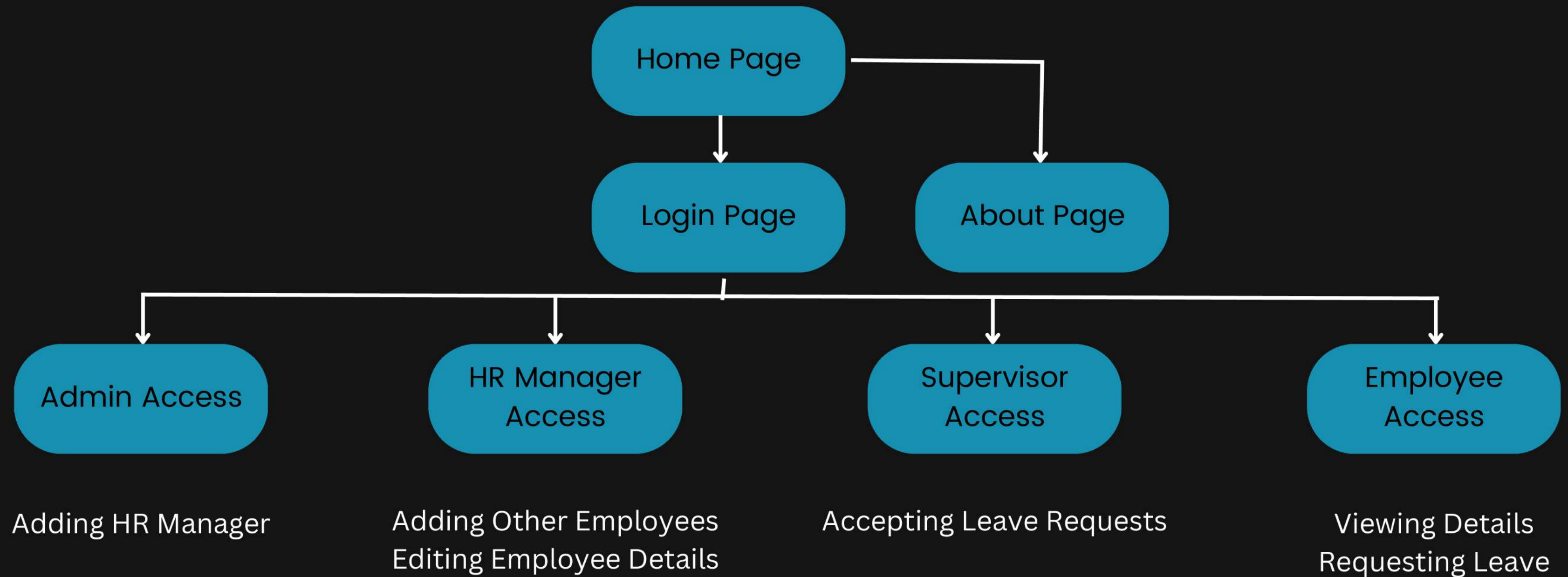
Admin User have privilage to Manage other users

Employees can request a leave

Supervisors can accept leaves

HR Manager can edit employee details

Flow





Home Page

Users can login to the system and go to see about details from this

About Page



This page is about the organization details and creators

A blurred background image showing a wooden table with various items: papers with charts, a laptop, pens, and hands of people working.

Jupiter
Human Resource Management System



Created By
Group 9 - Batch 21
Department of Computer Science & Engineering
University of Moratuwa

210180L - SANJULA GATHSARA
210196P - SAHAN GUNATHUNGA
210201F - SITHIKA GURUGE
210277P - DILRANGI SANKALPANA
210396E - SHASHINI MUNASINGHE

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Login Page

Employees can Login From this page

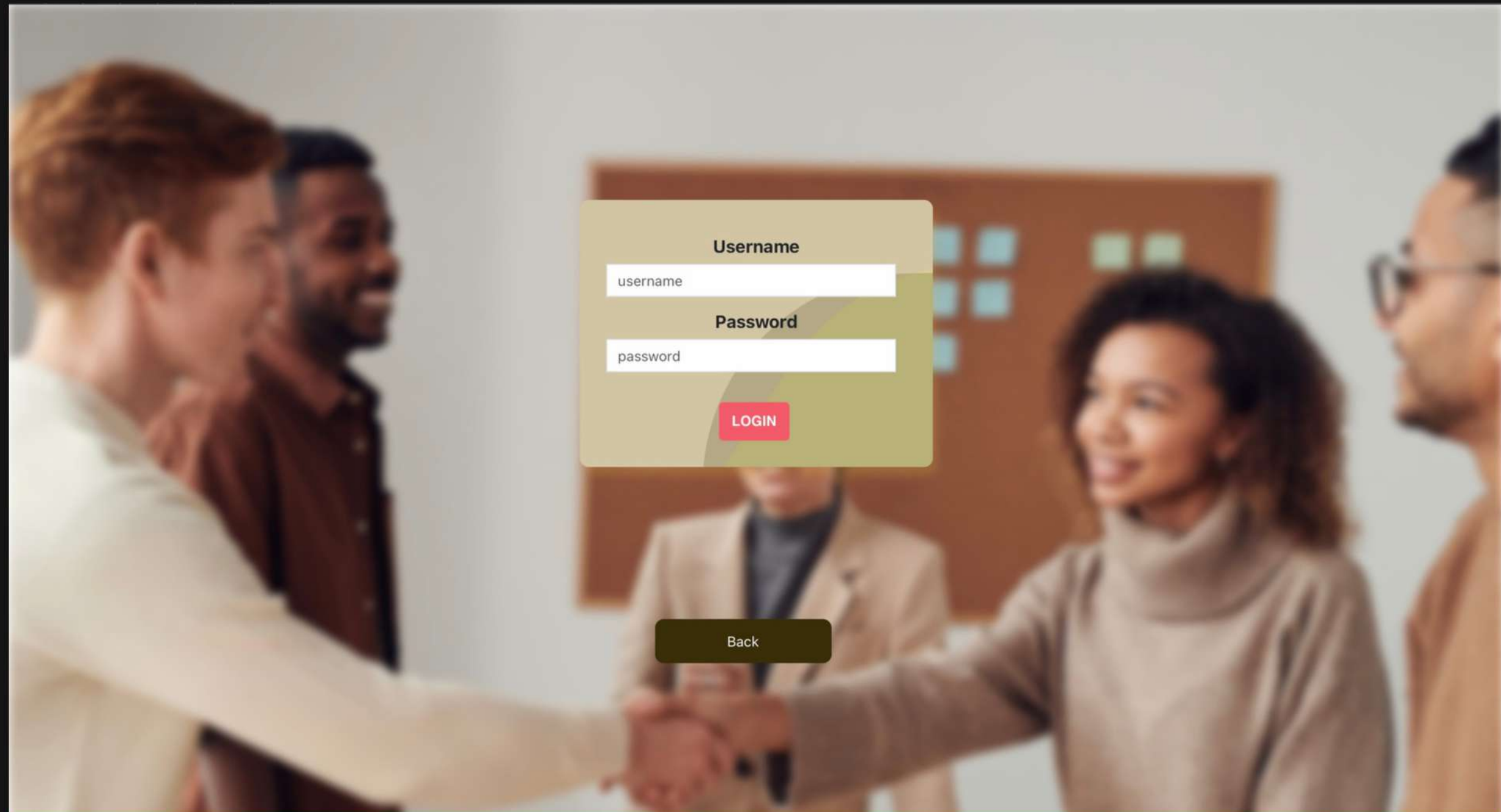
	
	

Admin Access

HR Manager
Access

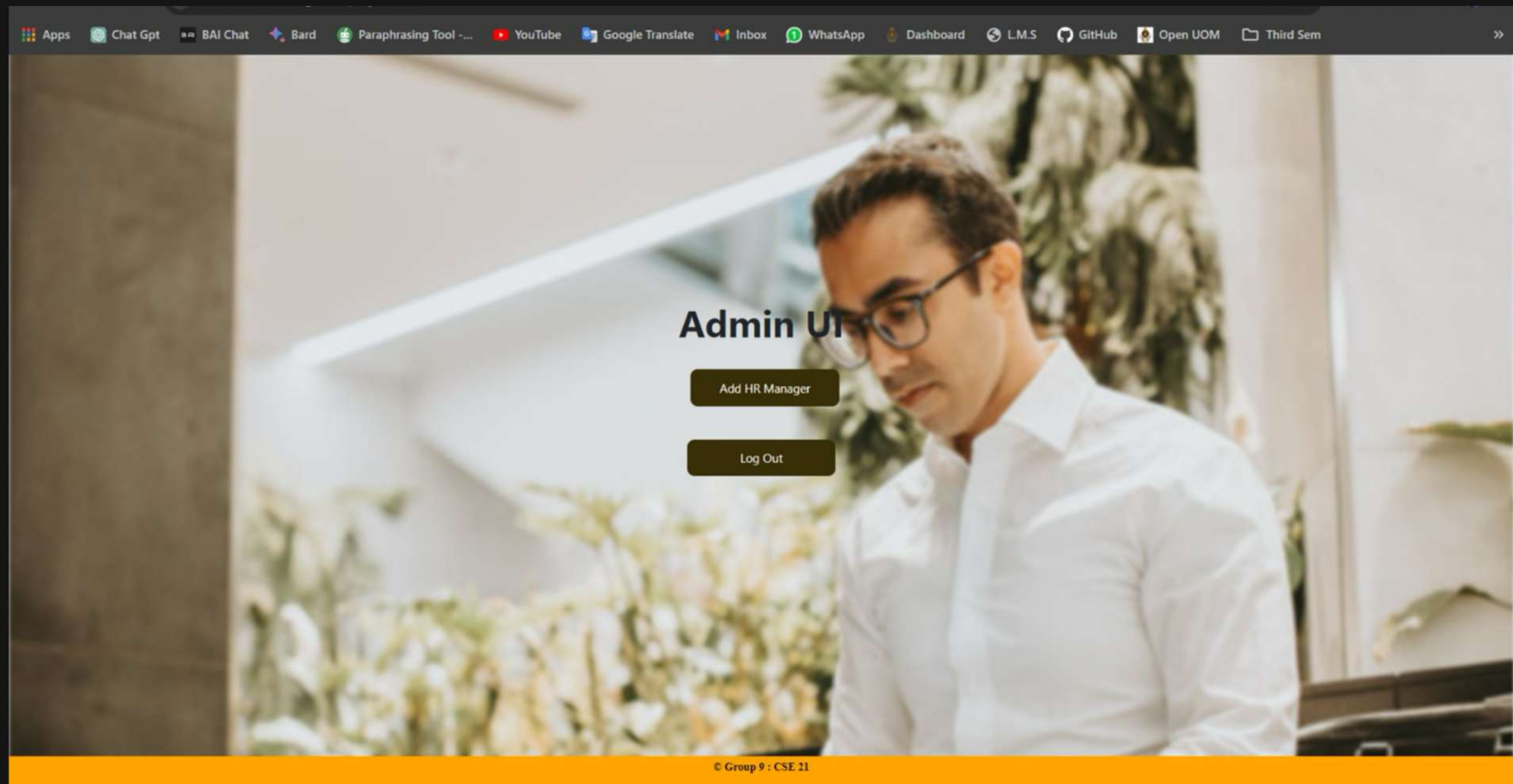
Supervisor
Access

Employee
Access



Admin Page

This page is for admin



Adding HR Manager

Admin can add HR Manager



Personal Informations

Name:

Branch Name:

Birthday:

Contact Number:

Gender:

Department :

Marital Status:

Job Title:

Status:

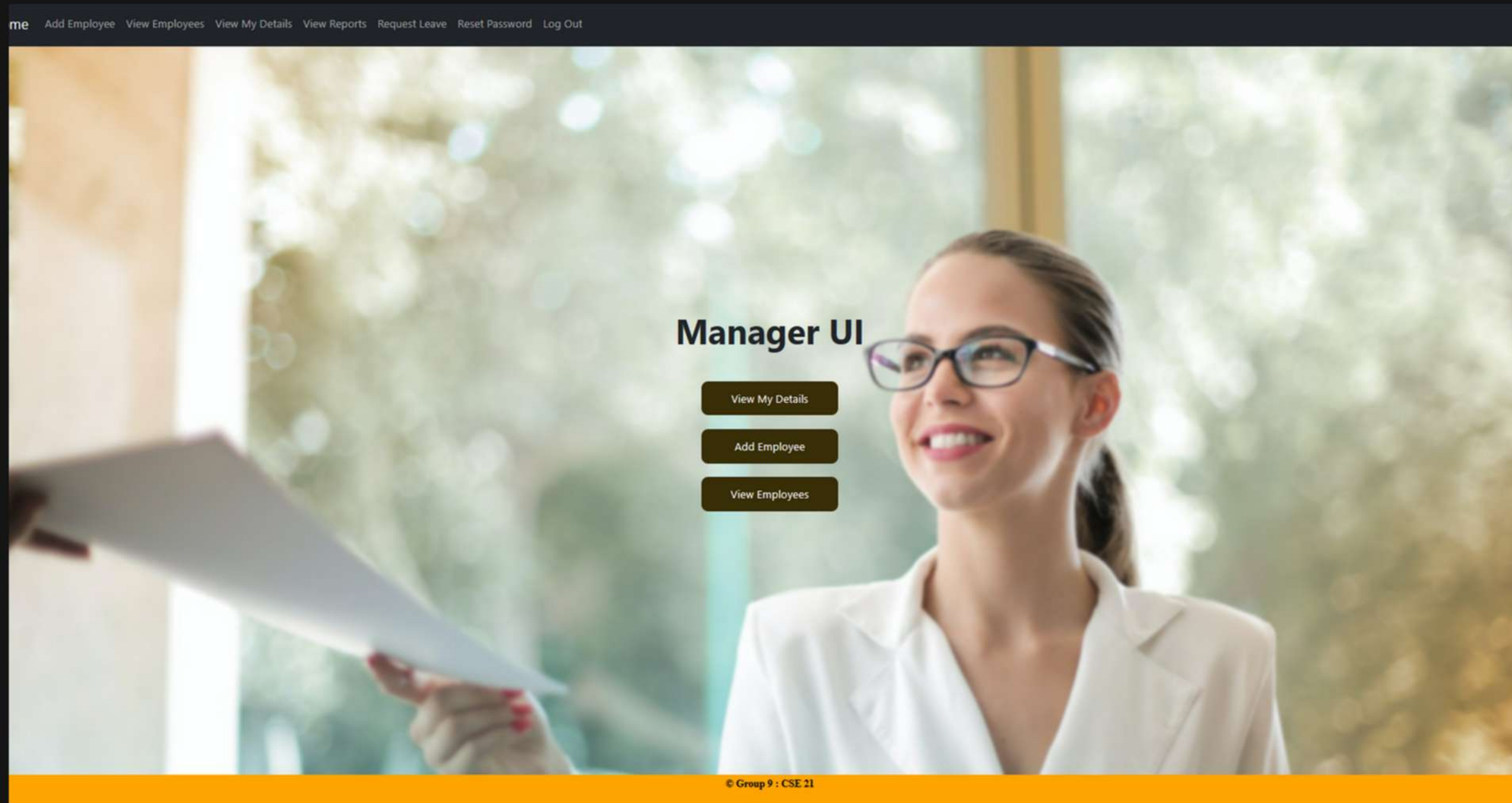
Pay Grade:

Supervisor :

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HR Manager Page

This page is for HR Manager



Adding New Employee

This page is for HR Manager



Personal Informations

Name:

Branch Name:

Birthday:

01/11/2023

Contact Number:

Gender:

Select Gender

Department :

Select a supervisor

Marital Status:

Select marital status

Job Title:

Select Job Title ID

Status:

Select Status

Pay Grade:

Select Pay Grade

Supervisor :

Select a supervisor

Add Custom Attributes

Add Dependants Details

Back

Submit

Clear

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Adding Custom Attributes



This page is for HR Manager

Personal Informations

Name:

Branch Name:

Birthday:

01/11/2023

Contact Number:

Gender:

Select Gender

Department :

Select a Department

Marital Status:

Select marital status

Job Title:

Select Job Title

Status:

Select Status

Pay Grade:

Select Pay Grade

Supervisor :

Select a supervisor

Attribute:

Value:

Delete

Attribute:

Value:

Delete

Add Custom Attributes

Add Dependants Details

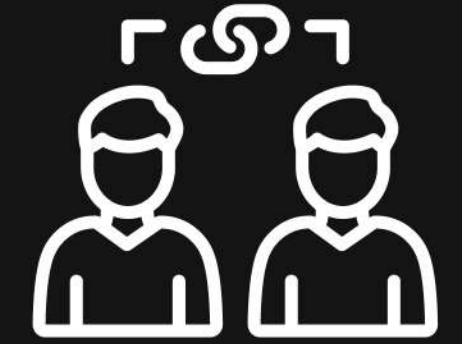
Back

Submit

Clear

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Adding Dependant Details



This page is for HR Manager

Name:

Branch Name:

Birthday:

Contact Number:

Gender:

Department :

Marital Status:

Job Title:

Status:

Pay Grade:

Supervisor :

Add Custom Attributes

Name:

Relationship:

Age:

Status:

Delete

Name:

Relationship:

Age:

Status:

Delete

Name:

Relationship:

Age:

Status:

Delete

Add Dependants Details

Back

Submit

Clear

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Personal Information Page



This page is for HR Manager to view and edit employee details

[Logout](#)

Personal Information

Name : Kasun Silva
Job Title : HR Manager
Branch : Sri Lanka
Birthdate : 22/08/1985
Gender : Male
Emergency Contact Number : 0713455432
Department : Customer Service
Marital Status : Un-Married
Status Type : Contract-fultime
Pay Grade : Level 5

Dependents Details

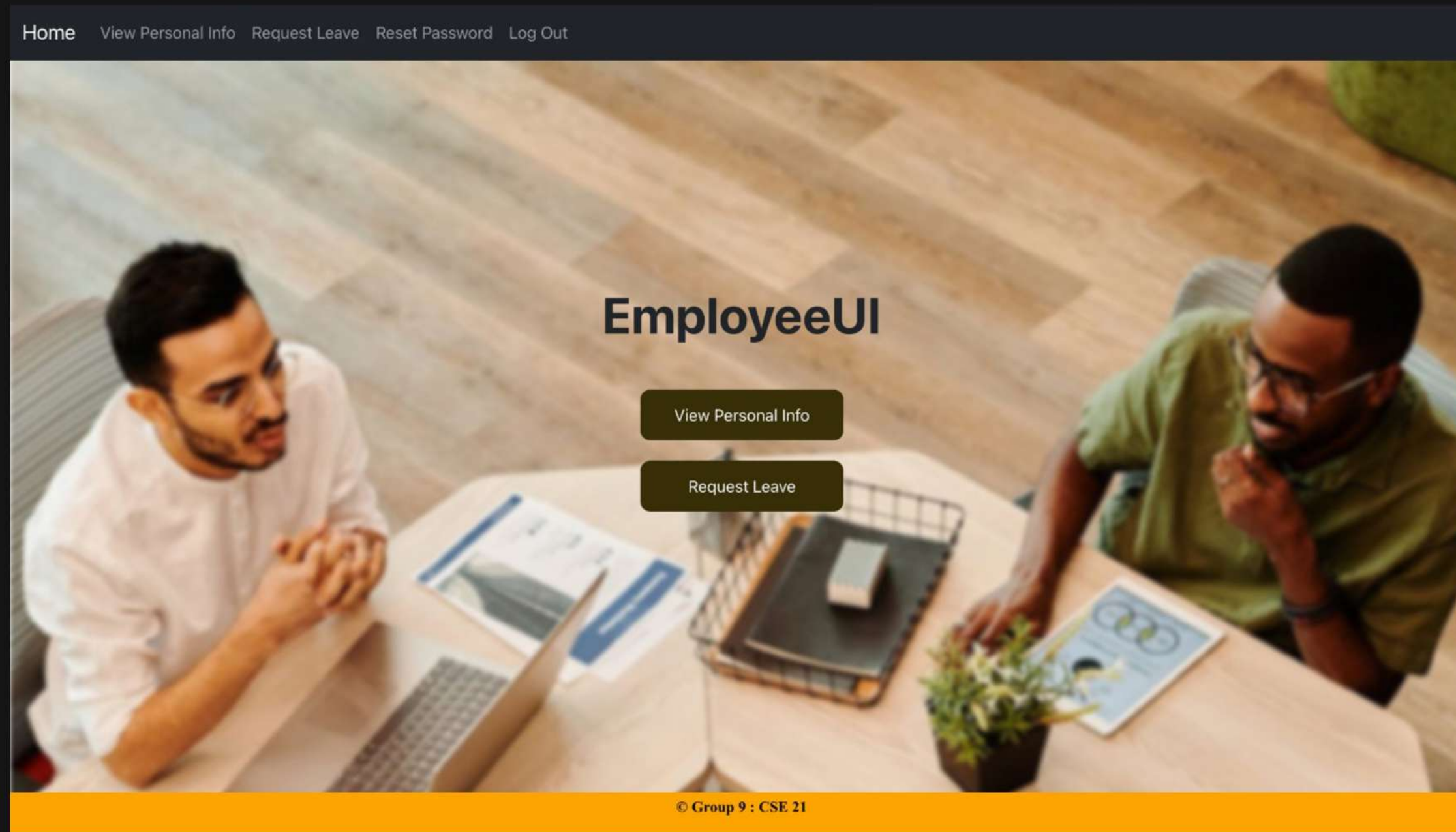
Name	Age	Relationship	Status
Nimasha Pathum	10	Daughter	Student
Dilini Prathibha	8	Daughter	Student

[Back](#)[Edit](#)

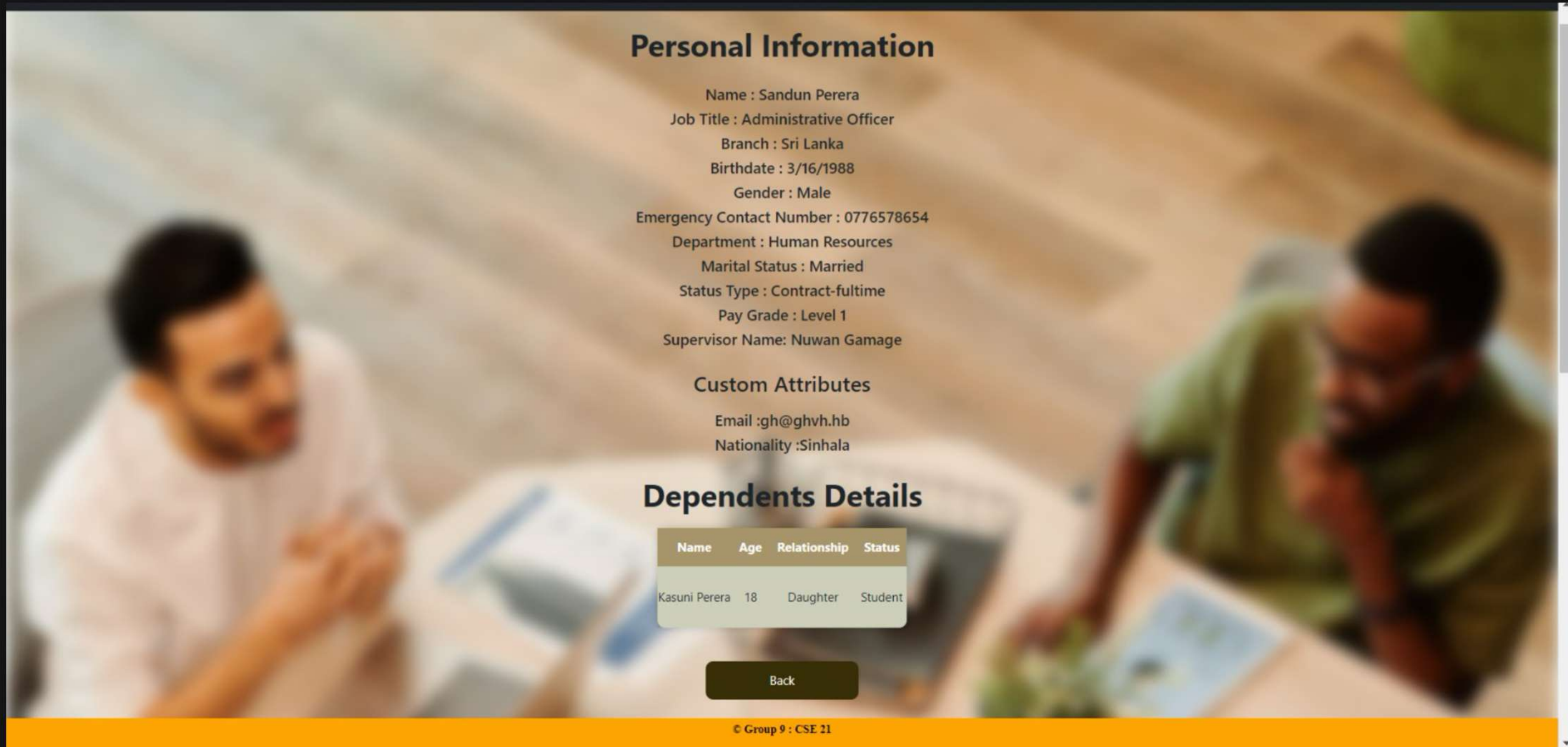
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Employee Page

This page is for Employee



Employees can view personal Info



Personal Information

Name : Sandun Perera
Job Title : Administrative Officer
Branch : Sri Lanka
Birthdate : 3/16/1988
Gender : Male
Emergency Contact Number : 0776578654
Department : Human Resources
Marital Status : Married
Status Type : Contract-fultime
Pay Grade : Level 1
Supervisor Name: Nuwan Gamage

Custom Attributes

Email :gh@ghvh.hb
Nationality :Sinhala

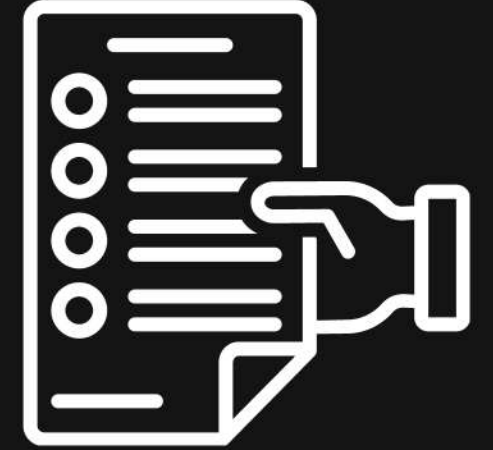
Dependents Details

Name	Age	Relationship	Status
Kasuni Perera	18	Daughter	Student

Back

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Leave Requests



Leave Request Form

Remaining Maternity Leave count :0
Remaining No Pay Leave count : 9
Remaining Annual Leave count : 4
Remaining Casual Leave count : 6

Select Leave Type:

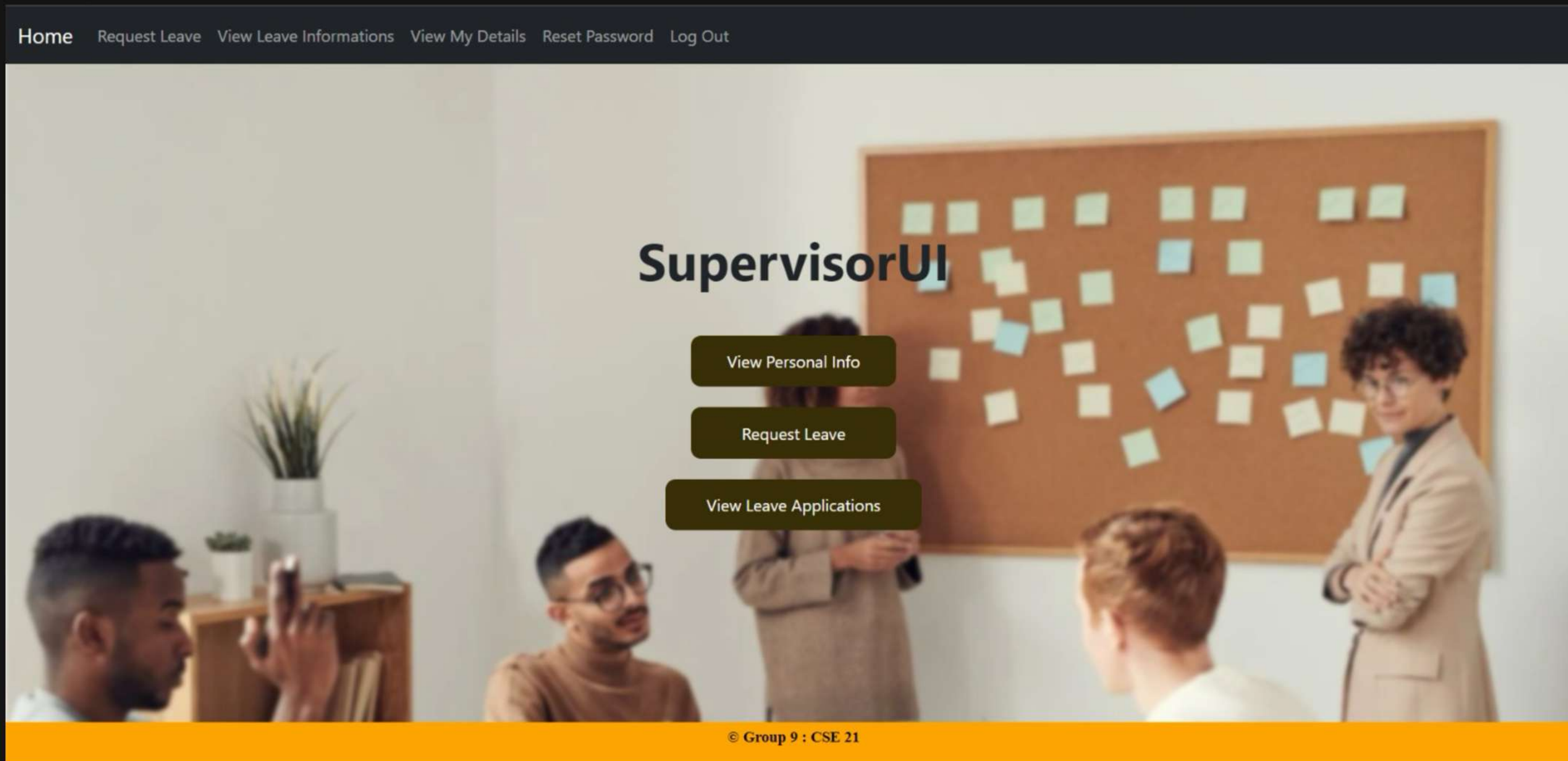
Start Date:

End Date:

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Supervisor Page

This page is for Supervisor



Leave Requests Approval



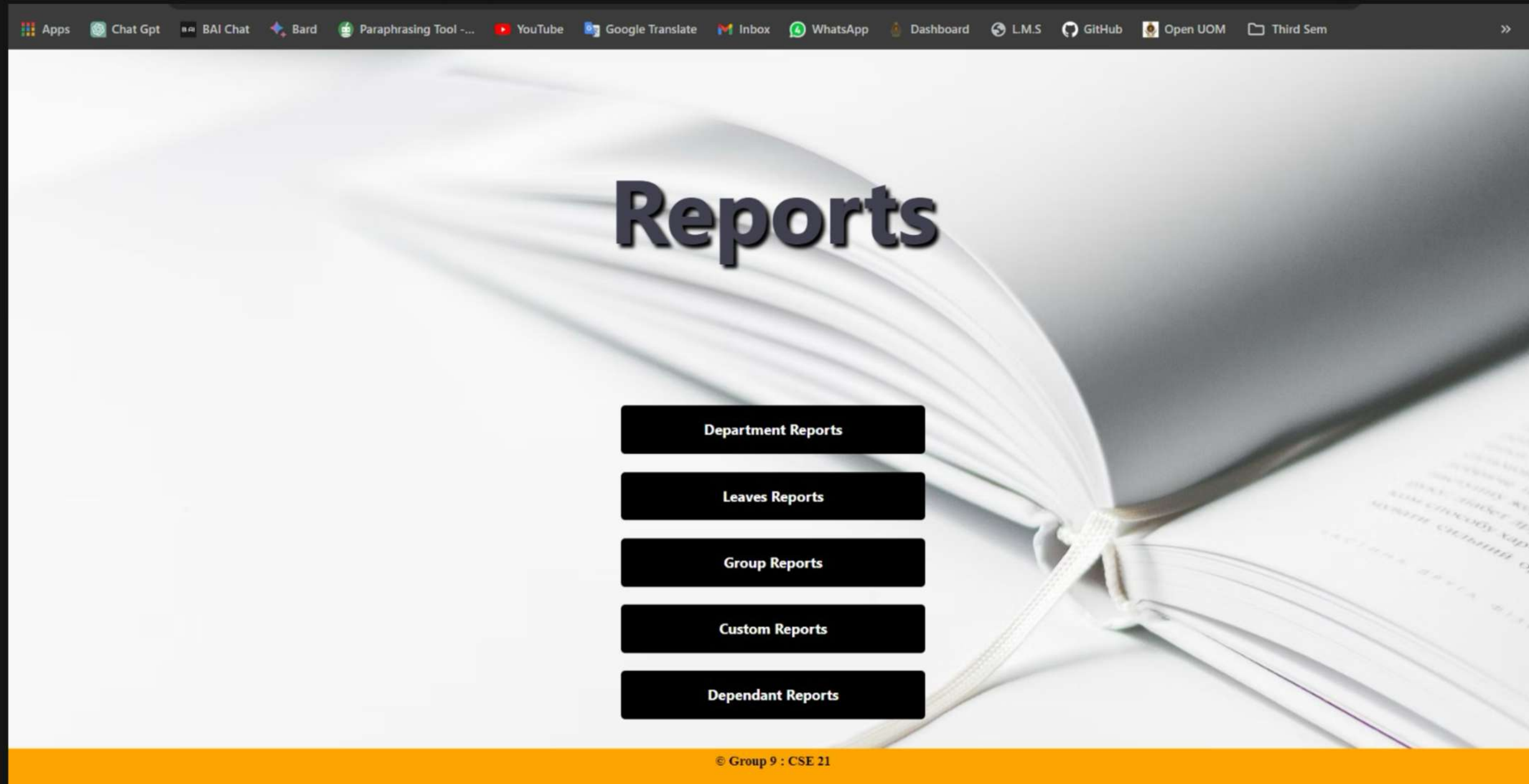
Leave Application

Leave Application ID	Employee ID	Leave Type	Start Date	End Date	Remaining Relavent Type Leave Count	Accept / Reject	
L020	E004	No-pay	2023-11-15	2023-11-17	Remaining No-pay Leave Count: 9	Accept	Reject
L022	E004	Annual	2023-10-17	2023-11-08	Remaining Annual Leave Count: 0	Accept	Reject

Back

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Report Generation



Reports



Jupiter : HRM

localhost:3000/employee-by-department

Employees by Department

Select Department:

Human Resources

Submit

Selected Department: Human Resources

Employees in the selected department:

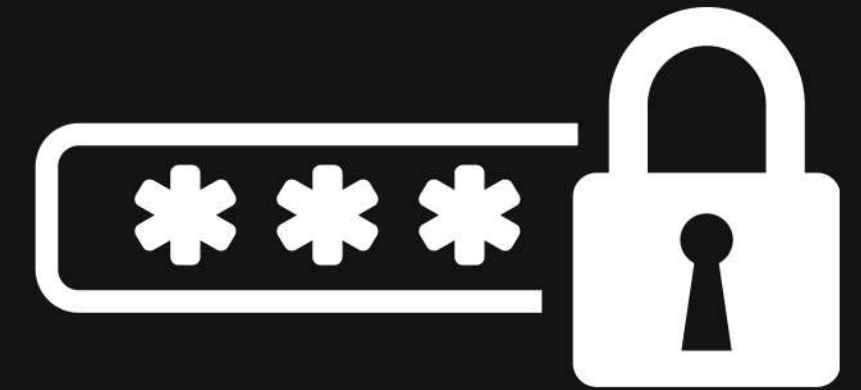
Employee ID: E003
Name: Nirasha Jayasinghe
Gender: Female
Department: Human Resources
Job Title: Administrative Officer

Employee ID: E005
Name: Sandun Perera
Gender: Male
Department: Human Resources
Job Title: Software Engineer

Employee ID: E008
Name: Ahmed Khan
Gender: Male
Department: Human Resources
Job Title: Senior QA Engineer

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Changing Password



M Q A C P H C Jupiter : HRM Employee drawing graph on flipchart during meeting in workspace · Free Stock Photo

Current Password:

New Password:

Confirm New Password:

Reset Password

Go Back

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Hashing for Encrypting Password in database



Result Grid Filter Rows: Edit: Export/Import: Wrap Cell Content:			
	Employee_ID	user_name	password
▶	E001	Kavindu Prabath	\$argon2id\$v=19\$m=65536,t=3,p=4\$VFdAskJVqypQ2wcKyC9ZWQ\$hpKvcVtJhmgWhgyQa7pY2R3WUN/OzlgV51In+j1or6w
	E002	Kasun Perera	\$argon2id\$v=19\$m=65536,t=3,p=4\$wIhemmaP4nFLat1Isw+nkg\$jBHOIut+PIKrIxem2fA1CInwIxNGu6v1H+lsfO5hgo8
	E003	Nirasha Jayasinghe	\$argon2id\$v=19\$m=65536,t=3,p=4\$59hWjXMFxudtombrB1TgWw\$tU6/E1TGc3EhSI/TtTWWI7JJio7UtJQsnrTcTj73EvU
	E004	Nuwan Gamage	\$argon2id\$v=19\$m=65536,t=3,p=4\$uKOn62Xui7PwEgdKzVSqYQ\$WCL4qNdyPWKBoAk/tQ8CCY6/Et2YyD5Vt5gIAb9+JLU
	E005	Sandun Perera	\$argon2id\$v=19\$m=65536,t=3,p=4\$QYhQIvtTqFd8v8aYVhCCow\$Ehik7ay4UW28BhQiUAvg4YAthaA8BPsb37qKdofqtk
	E006	John Doe	\$argon2id\$v=19\$m=65536,t=3,p=4\$WzVaVQ5uNBT8GnBJxJVwg\$7rkCAxwj1ghom8gCW7ViN+Cr/LCkQWPJ0Nd8sNjyzE
	E007	Jane Ayere	\$argon2id\$v=19\$m=65536,t=3,p=4\$DtB8fd1NVE3+w7s8AuMhQ\$wmSh1ajk1pM/PjzbpY3RfIg5qCoYary7nOaY5N/AjPs
	E008	Ahmed Khan	\$argon2id\$v=19\$m=65536,t=3,p=4\$mBXMq7q5ptJYd0y5sKpUKA\$YxKox9CPaQpkdTE0HuobuCCuKZKdYH1iLxMVDyrdBE0
	E009	Sara Ahmed	\$argon2id\$v=19\$m=65536,t=3,p=4\$YgCJLMi0SbbFGIZbcY7QgA\$7x06xGyuOrSrhDEdfg29wIGwk7s5C0Ow+WymvLbU4AQ
	E010	Ali Hassan	\$argon2id\$v=19\$m=65536,t=3,p=4\$A4qwtWSz33bu+OlFZADI7w\$TGqVRvm42tJE+GAXhH9fGCijcLBqR2X8jEolpZeU6+s
	E011	Mehak Ali	\$argon2id\$v=19\$m=65536,t=3,p=4\$gqpFiChnR0Wl1L8N9VZ77g\$fvXN5/oHaKToa3n3xS6DZMvsU2801BfmXtfK6avfQUw
	E012	Kamran Khan	\$argon2id\$v=19\$m=65536,t=3,p=4\$xyzMDSt+kUbIjKcNcyy4nw\$XuXe0QMDnU+zQ8yEPF4CpvdFDIsLnko05AsUbqwx7QI
	E013	Aisha Malik	\$argon2id\$v=19\$m=65536,t=3,p=4\$tX3XZbcuGO9trjYtY4KeRQ\$N41cyIheS7hsVQOI0M/Kr9mGLPgh7DNFbxCfbHh+SNI
	E014	Ahmad Shah	\$argon2id\$v=19\$m=65536,t=3,p=4\$Or7BiDjTqI3DPM38OACLsQ\$UblOi+X8SjGEkiNJ5zSEKolkjy3ShpKfx29jV4Dnn4

user_account 1 x

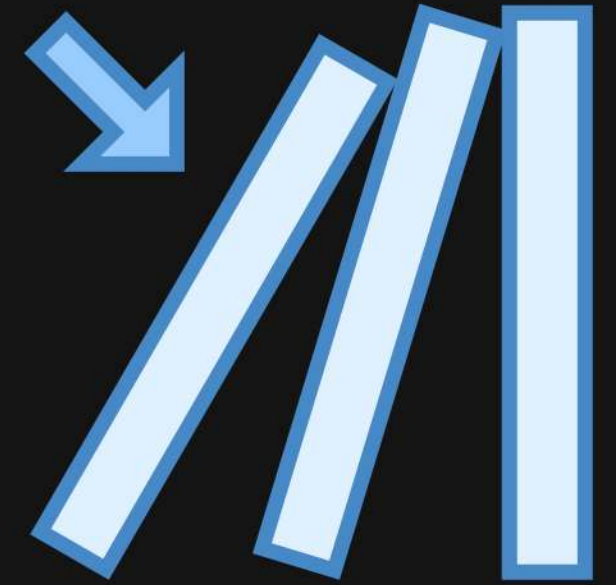
**Environment Variables
for protecting
database credentials**



.env

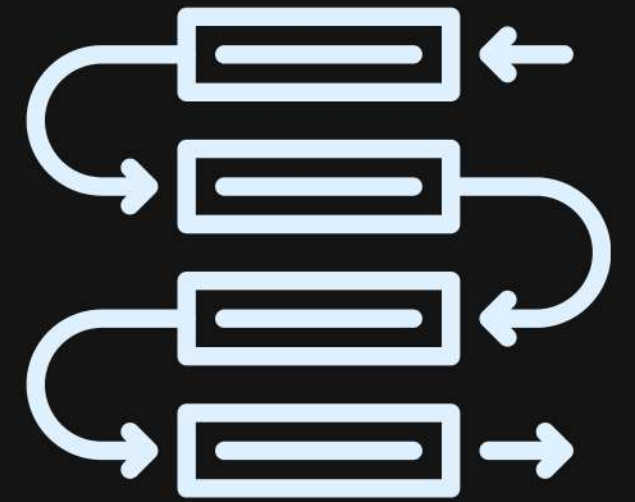
Triggers in database

- **Employee ID Auto Generation**
- **Leave Request ID Auto Incrementing**
- **Dependant ID Auto Incrementing**



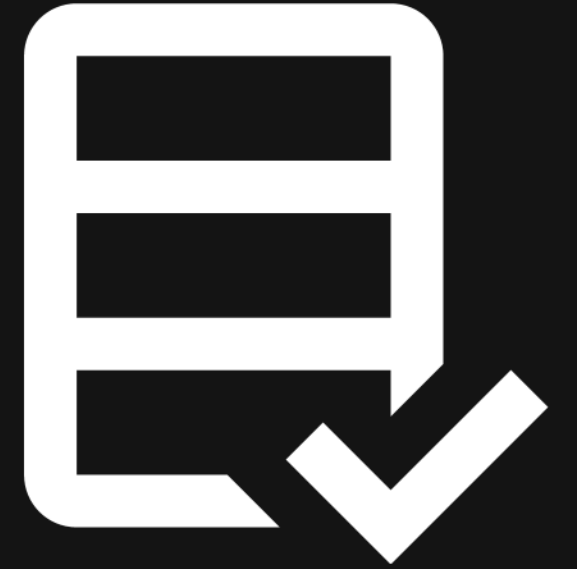
Procedures in database

- When adding a new employee auto generating username and password
- Remaining leave count.
- Dependant table auto update
- Custom Attributes Updating



Views in database

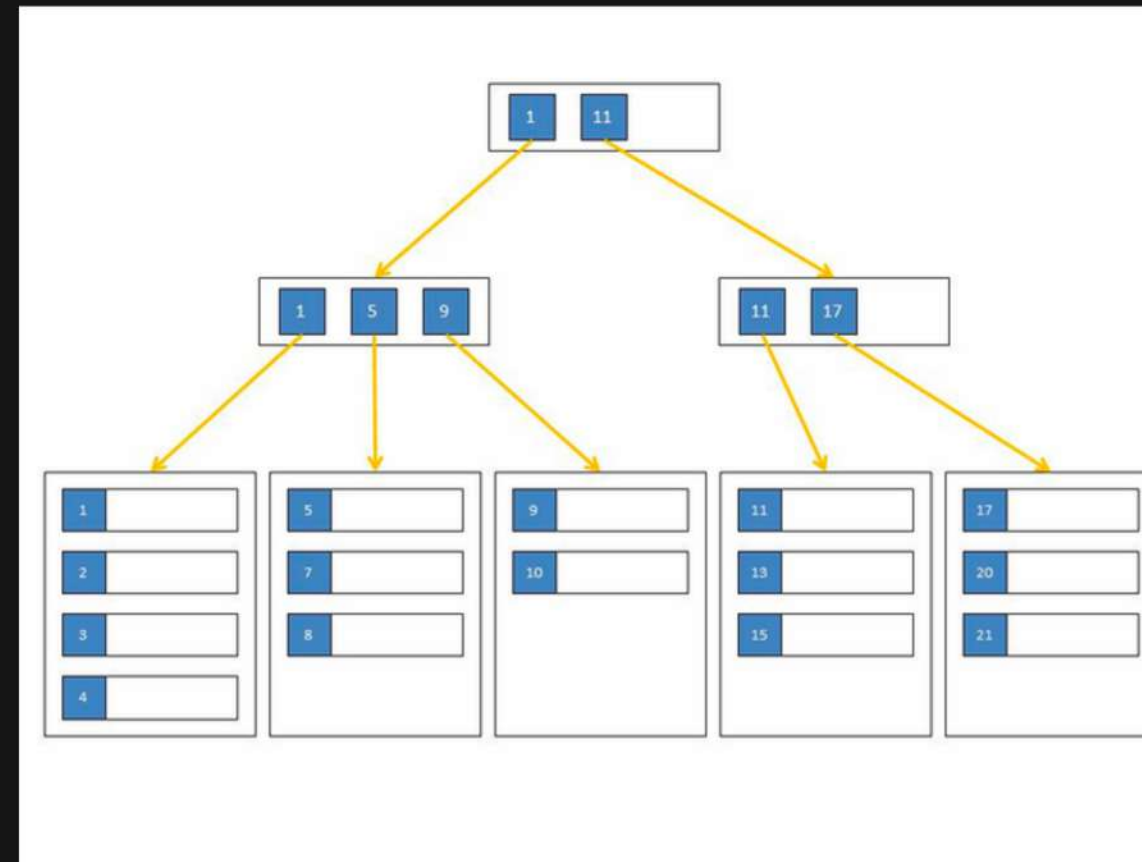
- When generating reports we used views to get data from several tables. So we get the query directly from view.



Indexing



- Having a non clustering Indexing
- Using BTree



Sessions



- When a person logs to the system he can be logged in a session.
- Person cannot go to another employee's account by http address





Thank You

