

Developers Toolkit Part 2:

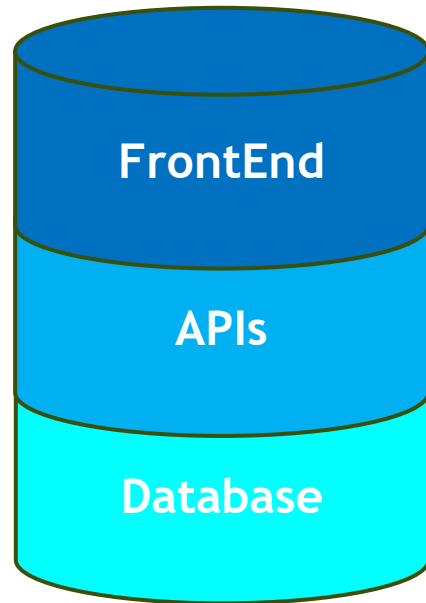
Middleware to Backend

GROUP 5 Project

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Objective

- ▶ This project serves to demonstrate the principles and knowledge learnt from this course and applied in a real-world context.
- ▶ Create a simple web application where an admin user are able to access a HR database to perform 4 basic CRUD operations.

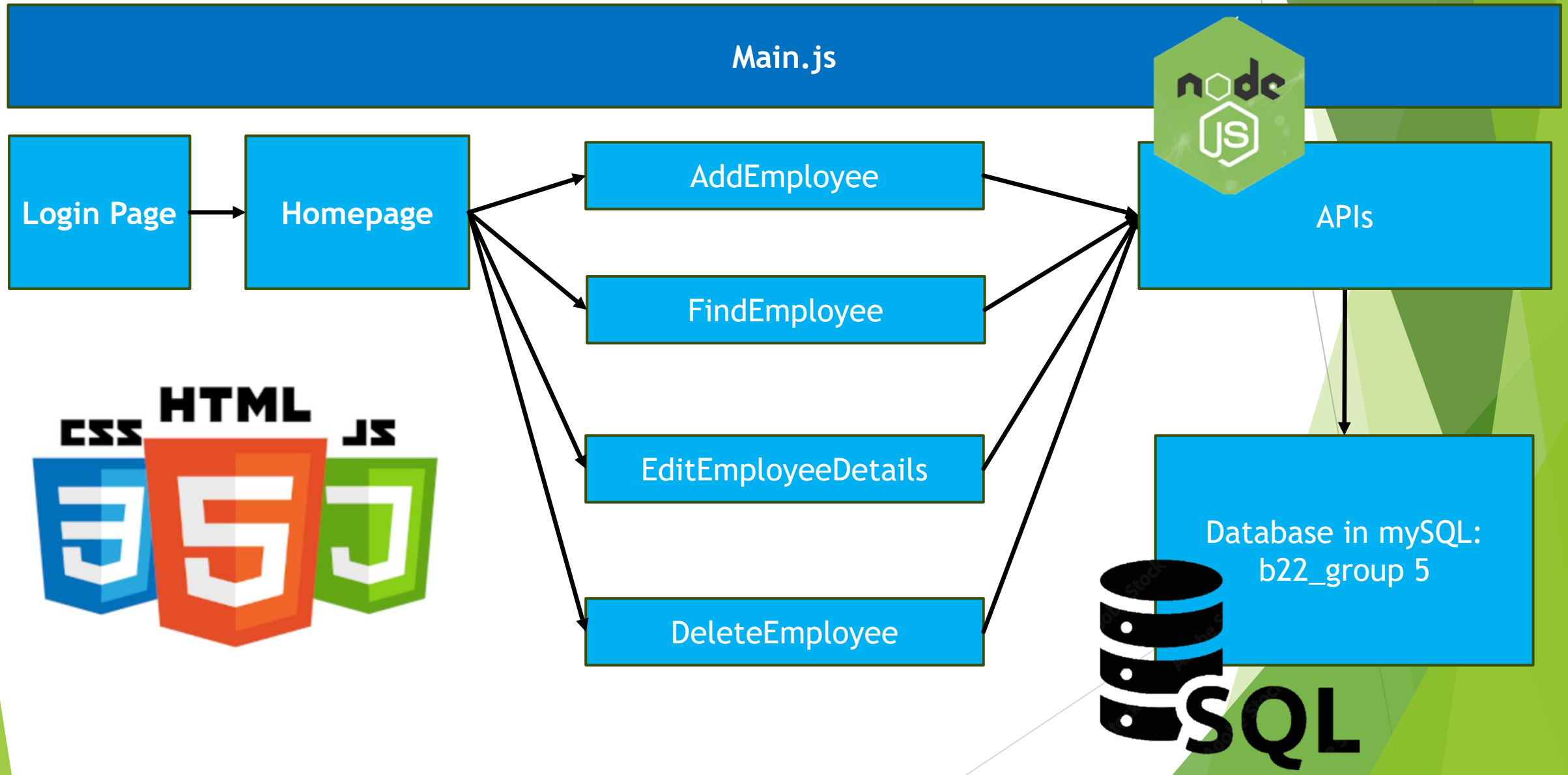


Homepages are created using FE knowledge (Html,CSS)

Taking in queries from FE and passing to BE through APIs developed using node.js

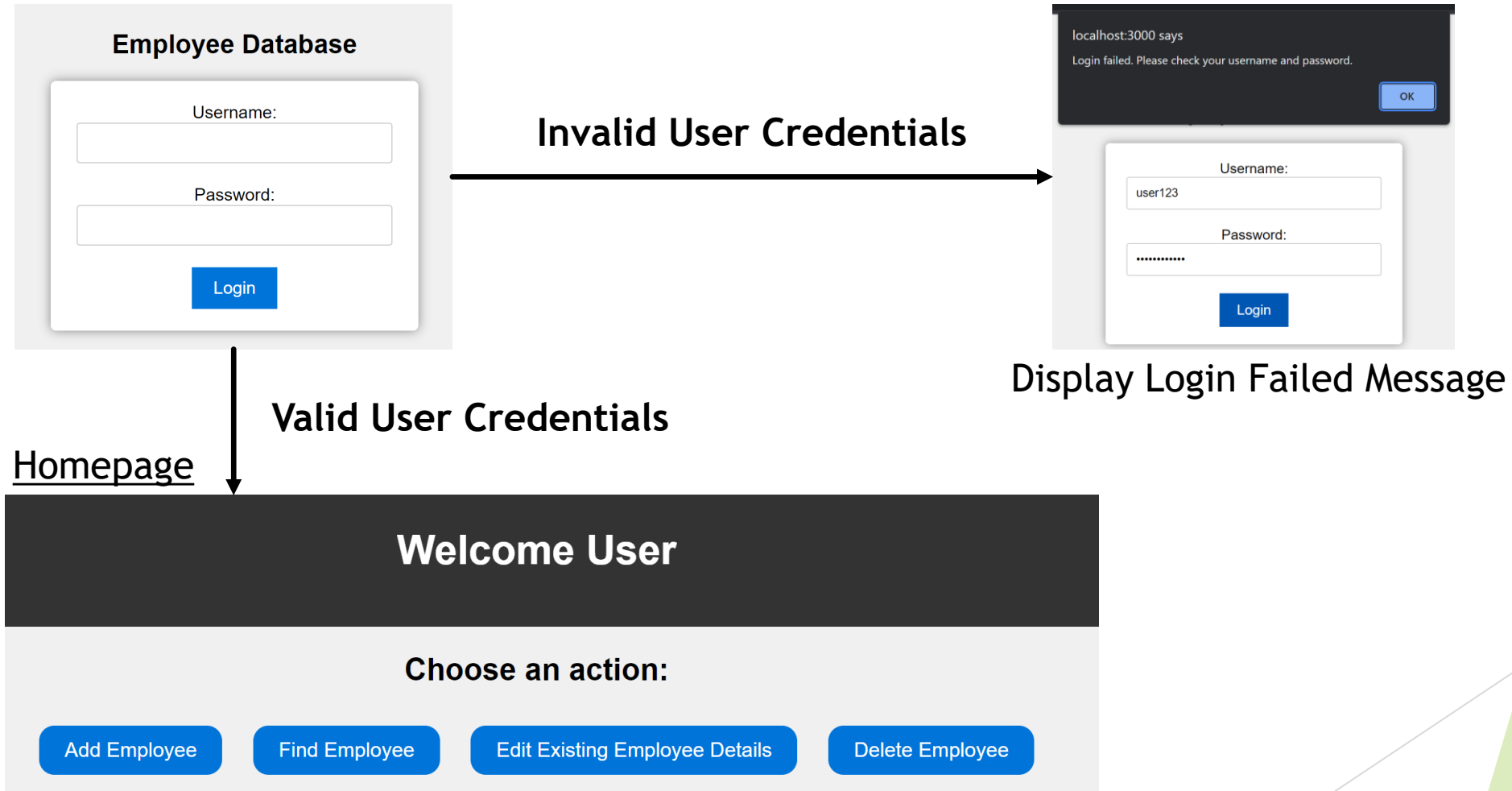
Database query via mySQL

Infrastructure



Login Page

Login



MySQL Database

EmployeeRecords

Search results

< 1 > Total 14

		* id int	* name varchar(10)	* employee_id int	* job_title varchar(10)	* salary decimal(10)
	1	1	Ben	1	Engineer	4500.00
	2	2	John	2	IT	6000.00
	3	3	Mike	3	HR	4000.00
	4	4	Jacob	4	Engineer	4500.00
	5	5	Tom	5	Engineer	4500.00
	6	6	Bob	6	IT	6000.00
	7	7	Michael	7	HR	4000.00
	8	8	Viven	8	Engineer	4500.00
	9	9	Wick	9	HR	7000.00
	10	10	Leo	10	IT	8000.00
	11	11	Leonard	11	Research	5000.00
	12	13	Wocky	13	Logistic	4700.00
	13	15	Jane	120	SWE	2344.56
	14	16	Mocky	12	QA	5500.00

Table Structure

<input checked="" type="checkbox"/>		Field varchar	Type blob	Null varchar	Key string	Default blob	Extra varchar
	1	id	int	NO	PRI	(NULL)	auto_increment
	2	name	varchar(100)	NO		(NULL)	
	3	employee_id	int	NO		(NULL)	
	4	job_title	varchar(100)	NO		(NULL)	
	5	salary	decimal(10,2)	NO		(NULL)	



Add Employee Function

Add Employee

Add Parameter:

Name:

Employee ID:

Job Title:

Salary:

Input Parameters

Add Employee

Add Parameter:

Name:

Employee ID:

Job Title:

Salary:

Employee added successfully:

Name: Shelly

Employee ID: 561

Job Title: QC

Salary: 4500

Display of Success Message

"Submit"

mySQL Database (View)

Before Adding

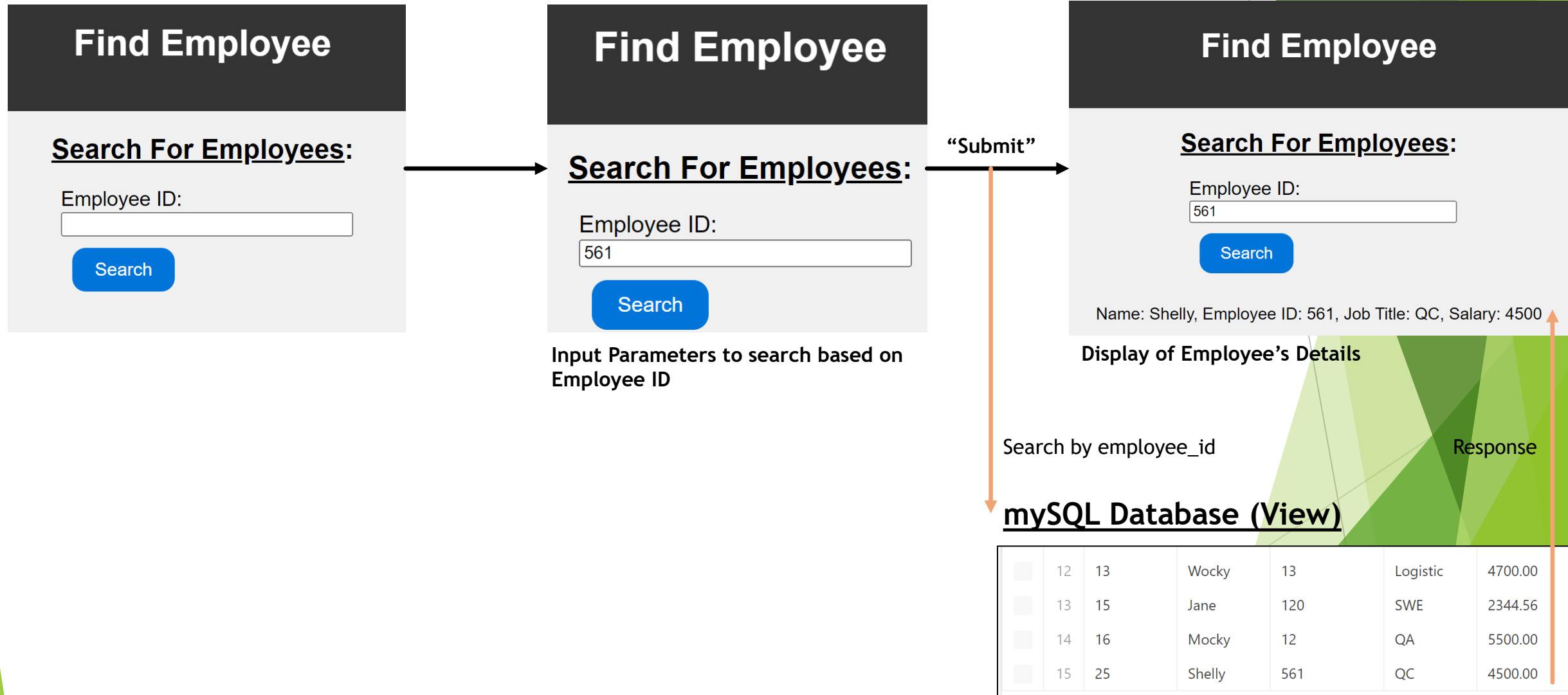
<input type="checkbox"/>	12	13	Wocky	13	Logistic	4700.00
<input type="checkbox"/>	13	15	Jane	120	SWE	2344.56
<input type="checkbox"/>	14	16	Mocky	12	QA	5500.00

After Adding

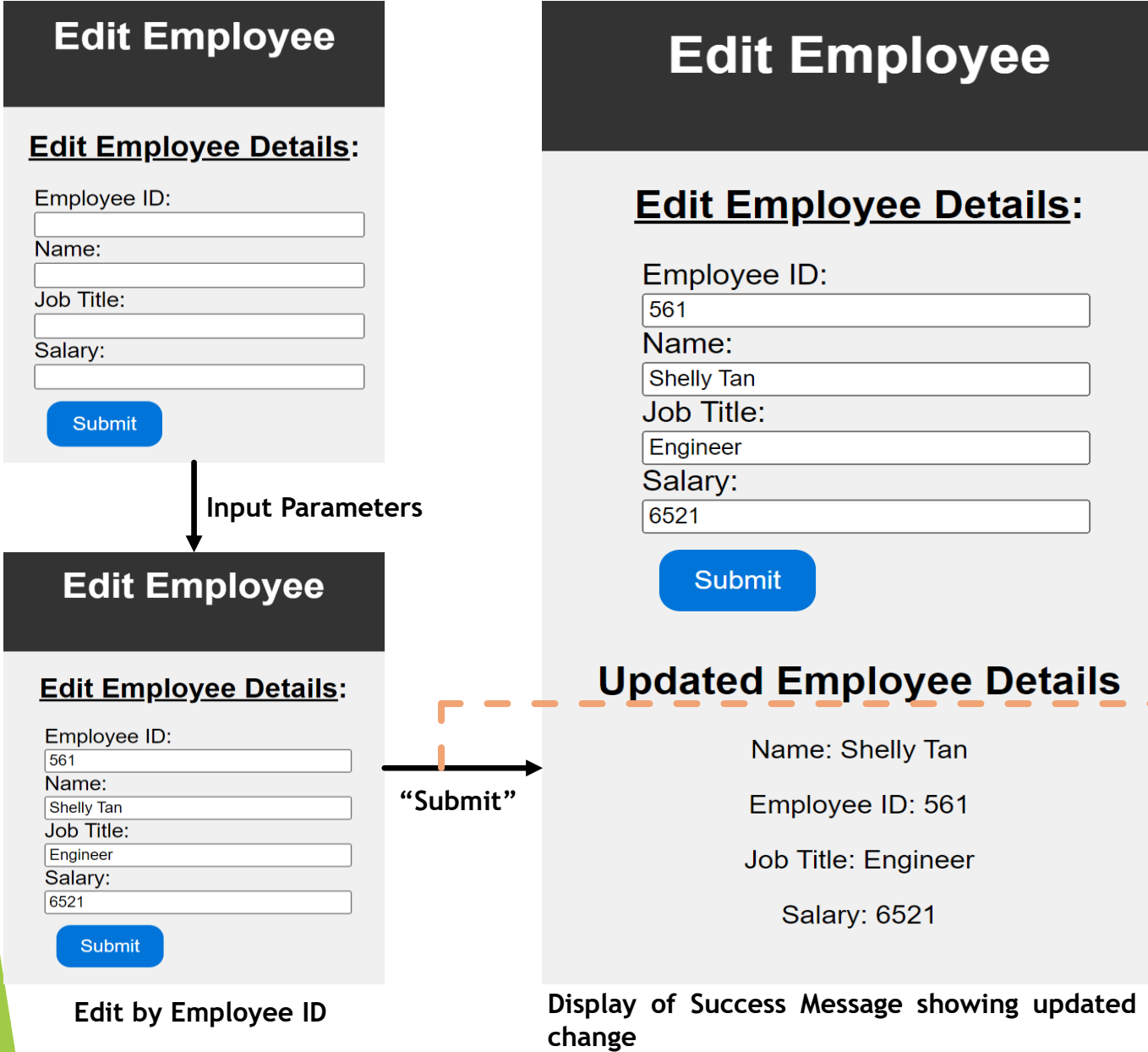
<input type="checkbox"/>	12	13	Wocky	13	Logistic	4700.00
<input type="checkbox"/>	13	15	Jane	120	SWE	2344.56
<input type="checkbox"/>	14	16	Mocky	12	QA	5500.00
<input type="checkbox"/>	15	25	Shelly	561	QC	4500.00

mySQL reflect the addition of new Employee: Shelly

Find Employee Function



Edit Employee Function



mySQL Database (View)

Before Editing

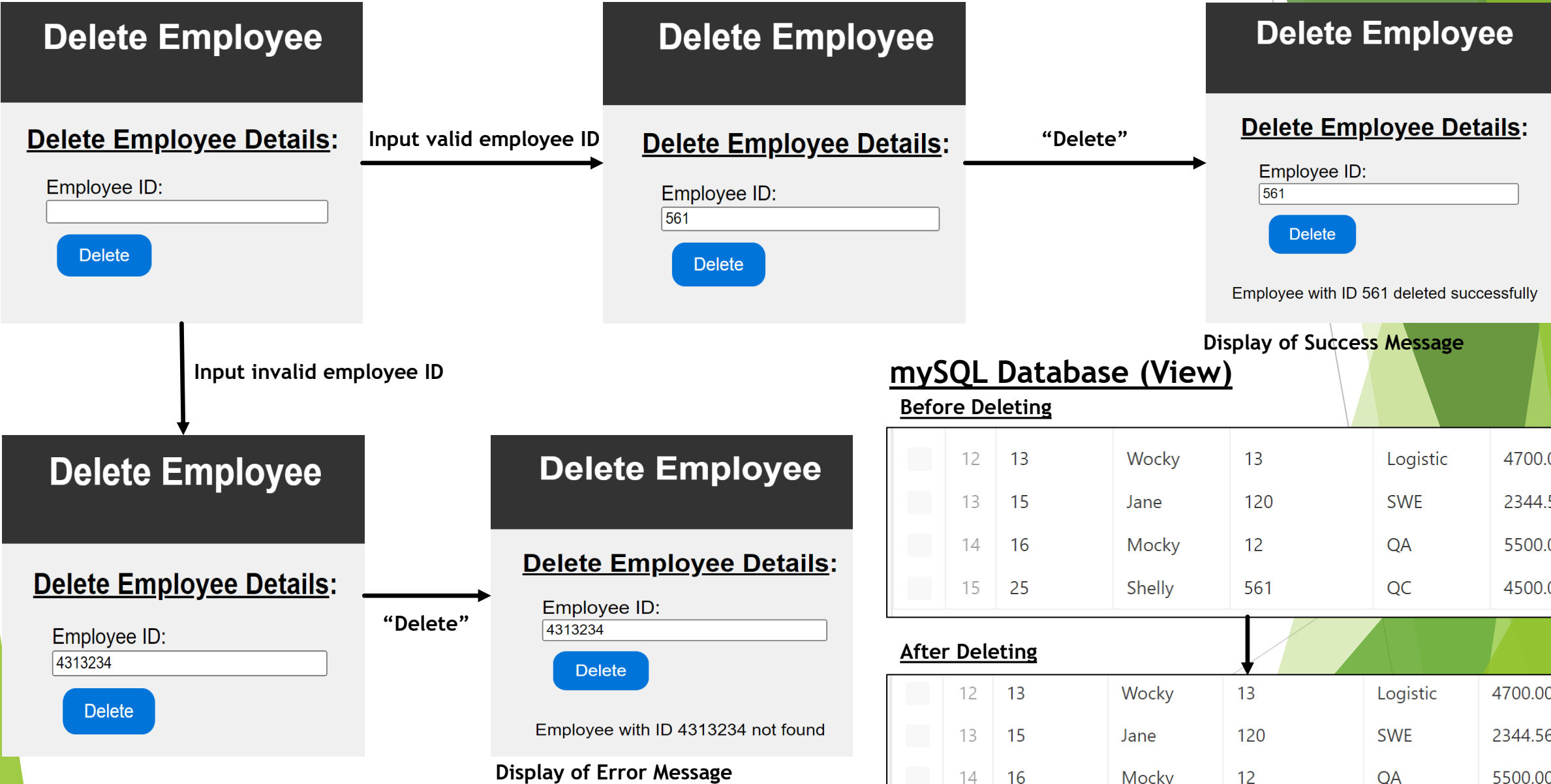
<input type="checkbox"/>	12	13	Wocky	13	Logistic	4700.00
<input type="checkbox"/>	13	15	Jane	120	SWE	2344.56
<input type="checkbox"/>	14	16	Mocky	12	QA	5500.00
<input type="checkbox"/>	15	25	Shelly	561	QC	4500.00

After Editing

<input type="checkbox"/>	12	13	Wocky	13	Logistic	4700.00
<input type="checkbox"/>	13	15	Jane	120	SWE	2344.56
<input type="checkbox"/>	14	16	Mocky	12	QA	5500.00
<input type="checkbox"/>	15	25	Shelly Tan	561	Engineer	6521.00

mySQL reflect the change made.

Delete Employee Function



mysql Database (View)

Before Deleting

<input type="checkbox"/>	12	13	Wocky	13	Logistic	4700.00
<input type="checkbox"/>	13	15	Jane	120	SWE	2344.56
<input type="checkbox"/>	14	16	Mocky	12	QA	5500.00
<input type="checkbox"/>	15	25	Shelly	561	QC	4500.00

After Deleting

<input type="checkbox"/>	12	13	Wocky	13	Logistic	4700.00
<input type="checkbox"/>	13	15	Jane	120	SWE	2344.56
<input type="checkbox"/>	14	16	Mocky	12	QA	5500.00

Logout Function

Welcome User [Log Out](#)

Choose an action:

[Add Employee](#) [Find Employee](#) [Edit Existing Employee Details](#) [Delete Employee](#)

Employee Database

Username:

Password:

Login

Clicking of Logout Button

Return User to Logout Page

Moving Forwards

A stylized illustration of a landscape. In the background, a bright yellow sun is partially obscured by a light blue sky with soft, white clouds. A winding grey road with a yellow center line leads from the bottom center towards the horizon. The foreground is a green field. The entire illustration is set within a light blue, cloud-like shape.

- ▶ To utilize Auth0 to facilitate users access.
- ▶ To utilize render to deploy the web application on cloud.
- ▶ To implement dashboard and charts for better data visualization.
- ▶ To provide additional functions via CRUD operations
 - ▶ E.g. More filter parameters (e.g. get-all, get-by-username)

Github Repository

<https://github.com/jerico88/fintech-backend.git>