**Tasks for Trainee Frontend Developer**

**HTML / CSS**

TASK. Create desired layout using Flexbox

Given the following HTML code write CSS that will display it as at the picture below.

<div class=”container”>

<div class=”item”></div>

<div class=”item”></div>

<div class=”item”></div>

<div class=”item”></div>

<div class=”item”></div>

<div class=”item”></div>

<div class=”item”></div>

<div class=”item”></div>

<div class=”item”></div>

<div class=”item”></div>

</div>

A picture containing PowerPoint

Description automatically generated

**JavaScript**

Task 1.

Write implementation of function *createAdd().* This function should be used as following:

var addTen = createAdd(10);

console.log(addTen(10)); // outputs 20

console.log(addTen(5)); // outputs 15

Task 2.

Write a function that will receive an input array of integers and return array of squares of input:

Input [1, 2, 3] should be converted to [1, 4, 9]

Task 3.

Write a function that will receive an array of integers and return its product using Array.*reduce*

**Database**

TASK 1.

Create database ‘MyShop’ with 3 tables: ‘Products’, ‘Categories’(will include info about categories of Products) and ‘Suppliers’ and populate them with data from images below.

Products table:

Table

Description automatically generated

Suppliers table:

Graphical user interface, application, table

Description automatically generated

Categories table:

Graphical user interface, text, application, email

Description automatically generated

Create the next queries:

* Select product with product name that begins with ‘C’.
* Select product name with the smallest price.
* Select cost(sum) of all products from the USA.
* Select unique suppliers that supply Condiments.
* Select supplier (SupplierName, TotalPrice) with highest cost(sum) of all products
* Add to database new supplier with name: ‘Norske Meierier’, city: ‘Lviv’, country: ‘Ukraine’ which will supply new product with name: ‘Green tea’, price: 10, and related to category with name: ‘Beverages’.

Data for Database

Products table:

1;Chais;1;1;18.00

2;Chang;1;1;19.00

3;Aniseed Syrup;1;2;10.00

4;Chef Anton’s Cajun Seasoning;2;2;22.00

5;Chef Anton’s Gumbo Mix;2;2;21.35

Suppliers table:

1;Exotic Liquid;London;UK

2;New Orleans Cajun Delights;New Orleans;USA

3;Grandma Kelly’s Homestead;Ann Arbor;USA

4;Tokyo Traders;Tokyo;Japan

5;Cooperativa de Quesos ‘Las Cabras’;Oviedo;Spain

Categories table:

1;Beverages;Soft drinks, coffees, teas, beers, and ales

2;Condiments;Sweet and savory sauces, relishes, spreads, and seasonings

3;Confections;Desserts, candies, and sweet breads

4;Dairy Products;Cheeses

5;Grains/Cereals;Breads, crackers, pasta, and cereal

**Products React App**

1. Create react app that shows information about all products in table that has columns: *ProductName, CategoryName, Country, Price*.
2. Create simple **Express.js** REST API that supports basic CRUD operations and is connected to db from previous task
3. Implement **Add** **button** with form that sends request to API and creates new product. After new product was created table should be updated with new record
4. Implement **Delete button** that sends request to API and removes product from db. After product was removed table should be updated

Code should be written in **ES6.** Please use **React hooks**