

## Final Project: Enhanced Budget Allocation Application



### Estimated Time: 120 minutes

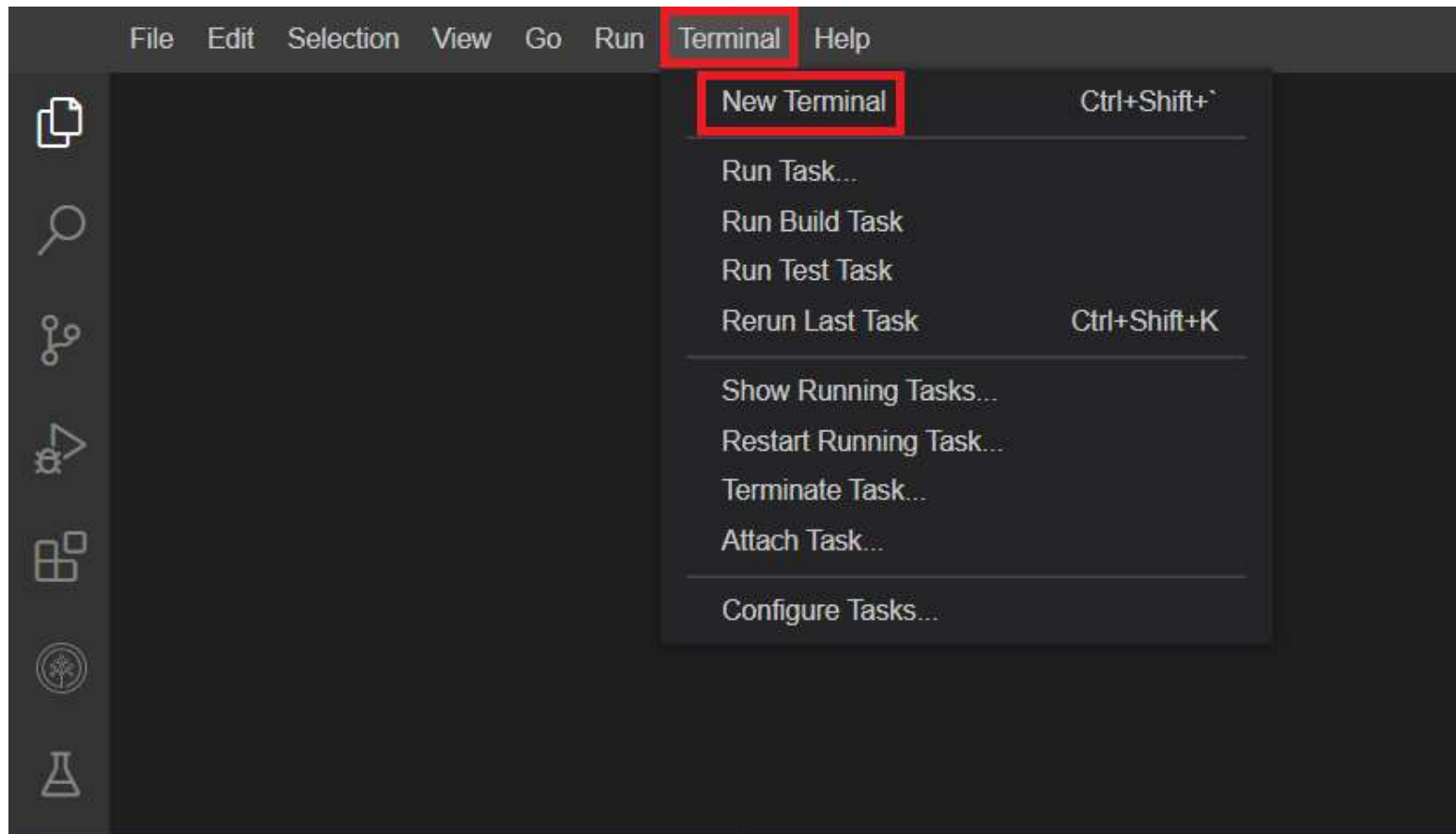
Note: Though this lab is split into multiple parts, it is highly recommended it is all completed in one sitting as the project environment may not be persisted. If for any reason that is not possible, please push your changes to git so that the changes are copied to your remote repository and you can start where you left.

### Pre-requisite:

You need to complete Practice project before you start with the final project. That will be the base code on which you will build this React application.

### Part A: Git clone the Git repository to have the react code you need to start

1. Open a terminal window by using the menu in the editor: Terminal > New Terminal.



2. Clone the repository you cloned, edited and git pushed in the practice project with all the components added by running the command given below:

```
1. 1
1. git clone <your_repo_name>
```

Copied!

3. This will clone the repository with budget allocation app files in your home directory in the lab environment. Check the same with the following command.

```
1. 1
1. 1s
```

Copied!

4. Change to the project directory and check its contents.

```
1. 1
1. cd ejtos-react_budget_app && ls
```

Copied!

Note: Remove the 'node\_modules' folder in the main project and directories before running npm install command to install the packages. This is necessary to ensure that all package installation commands run correctly.

5. All packages are needed to be installed are listed in package.json. Run npm install -s, to install and save those packages.

```
1. 1
1. npm install -s
```

Copied!

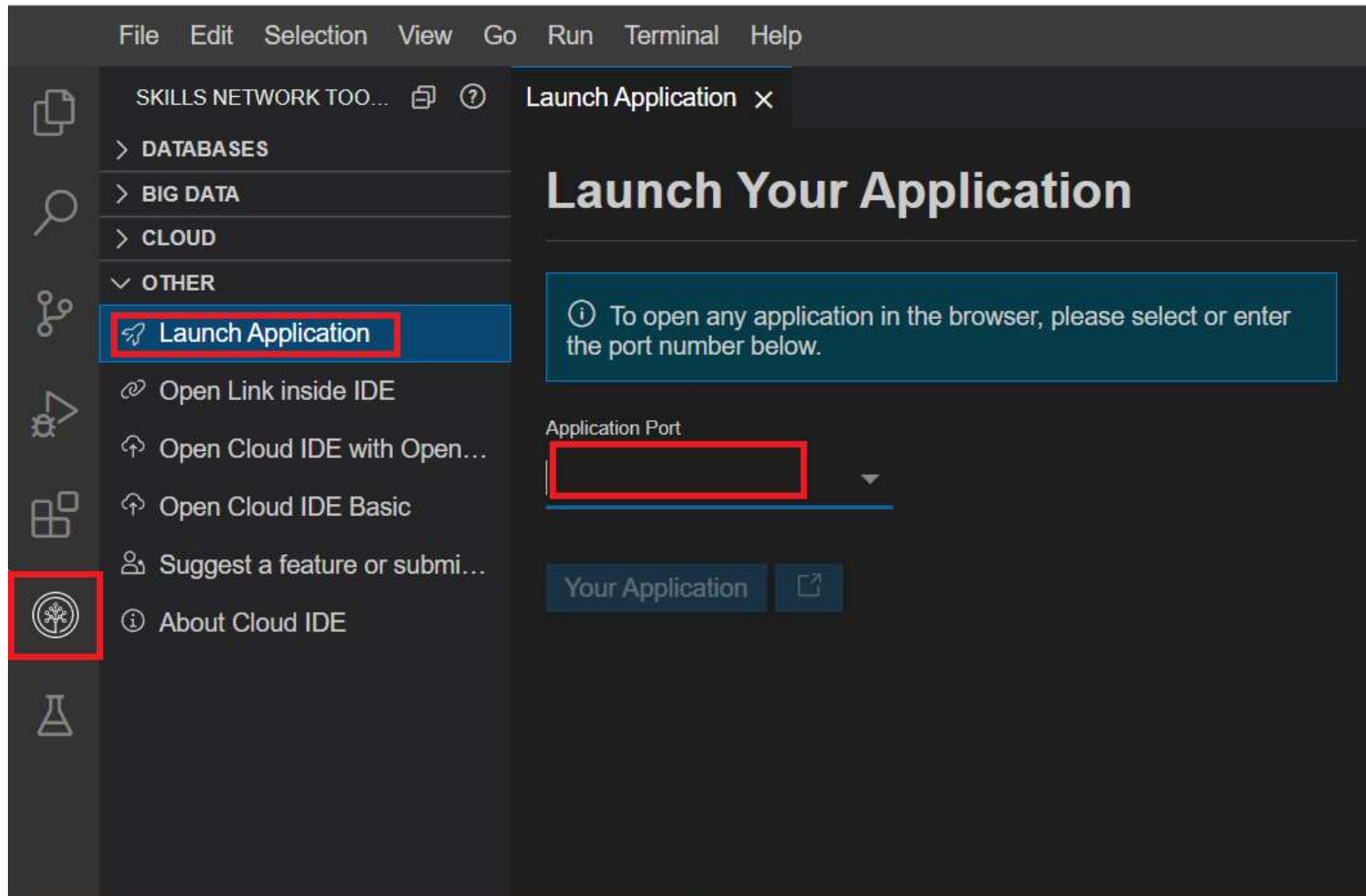
## Part B: Launch and view your react app on the browser

1. Make sure you are in the ejtos-react\_budget\_app directory and run the server using the following command.

```
1. 1
1. npm start
```

Copied!

2. Click on the Skills Network button on the left, it will open the “**Skills Network Toolbox**”. Then click the **Other** then **Launch Application**. From there you should be able to enter the port 3000.



## Part C: Enhancement of the Budget Allocation Application

### Task 1: Budget allocation Validation

Add validation to the existing budget allocation component.

- It should accept only number value. Take a screenshot and save it as **budget\_allocation.png**.

# Company's Budget Allocation

Budget:£2000

Remaining: £1040

Spent so far: £960

## Allocation

| Department     | Allocated Budget | Increase by 10 | Decrease by 10 |
|----------------|------------------|----------------|----------------|
| Marketing      | £50              | +              | -              |
| Finance        | £300             | +              | -              |
| Sales          | £70              | +              | -              |
| Human Resource | £40              | +              | -              |
| IT             | £500             | +              | -              |

## Change allocation

Department

Marketing

Allocation

Add

£500

Save

- The value should not exceed the remaining budget. Take a screenshot and save it as `budget_allocation_error message.png`.

# Company's Budget Allo

Budget:£2000

Remaining: £40

Spent so far: £1960

...ker-2-labs-prod-theiak8s-4-tor01.proxy.cognitiveclass.ai says  
The value cannot exceed remaining funds £40

OK

## Allocation

| Department     | Allocated Budget | Increase by 10 | Decrease by |
|----------------|------------------|----------------|-------------|
| Marketing      | £1050            | +              | -           |
| Finance        | £300             | +              | -           |
| Sales          | £70              | +              | -           |
| Human Resource | £40              | +              | -           |
| IT             | £500             | +              | -           |

## Change allocation

Department

Marketing

Allocation

Add

£500

Save

### Task 2: Editable budget value

Update the code to make **Budget** editable with option to increase and decrease its value by 10. Take a screenshot and save it as `budget_value.png`.

Budget:£ 2000

Remaining: £1040

Set the upper limit value to 20,000. Take a screenshot of error message when it is more than 20000 and save it as **budget\_not\_exceeding.png**.

Company's Budget Allocation

Budget:£ 20000

Remaining: £30

The value cannot exceed remaining funds £30

OK

Allocation

| Department     | Allocated Budget | Increase by 10 | Decrease by 10 |
|----------------|------------------|----------------|----------------|
| Marketing      | £19060           | +              | -              |
| Finance        | £300             | +              | -              |
| Sales          | £70              | +              | -              |
| Human Resource | £40              | +              | -              |
| IT             | £500             | +              | -              |

Change allocation

Department

Marketing

Allocation

Add

£ 100

Save

It should not allow for the budget to be lower than the spending, as that is already allocated. Take a screenshot of error message when it is lower than spending and save it as **budget\_morethan\_spending.png**.

# Company's Budget Allocation

Budget:£1660

Remaining:

...ker-2-labs-prod-theiak8s-4-tor01.proxy.cognitiveclass.ai says  
You cannot reduce the budget value lower than the spending  
OK

## Allocation

| Department     | Allocated Budget | Increase by 10 | Decrease by 10 |
|----------------|------------------|----------------|----------------|
| Marketing      | £750             | +              | -              |
| Finance        | £300             | +              | -              |
| Sales          | £70              | +              | -              |
| Human Resource | £40              | +              | -              |
| IT             | £500             | +              | -              |

## Change allocation

DepartmentMarketing

AllocationAdd

£700

Save

### Task 3: Dropdown to change currency

Update the code to change the currency along with the drop-down option. Add these four currencies: \$ Dollar,£ Pound,€ Euro,₹ Ruppee. Take a screenshot and save it as **currency\_dropdown.png**.

- Add a **Currency** label in the appropriate place.
- Stylize the dropdown (Use image provided for reference).



### Task 4: Currency prefix to the Change allocation textbox.

Add a currency prefix to the **Change allocation** textbox. Take a screenshot and save it as **budget\_allocation\_with\_currency.png**.

## Change allocation

Department

Choose... ▾

Allocation

Add ▾

£

Save

**Task 5: Currency prefix to the Budget value textbox.**

Add a currency prefix to the **Budget Value** textbox. Take a screenshot and save it as **budget\_value\_with\_currency.png**.

Budget: £2000

**Task 6: Change event of the currency dropdown**

Add event handler to the dropdown for Currency component change event. On change of the dropdown value, all the currency representation on the screen changes, in the following places.

- Budget
- Remaining
- Spent so far
- Allocated Budget
- Change Allocation

Change the currency in the dropdown from £ to another symbol and take a screenshot of the whole page reflecting the changes and save it as **currency\_change.png**.

# Company's Budget Allocation

Budget: \$2000

Remaining: \$1040

Spent so far: \$960

Currency(\$ Dollar) ▾

## Allocation

| Department     | Allocated Budget | Increase by 10 | Decrease by 10 | Delete |
|----------------|------------------|----------------|----------------|--------|
| Marketing      | \$30             |                |                |        |
| Finance        | \$100            |                |                |        |
| Sales          | \$70             |                |                |        |
| Human Resource | \$40             |                |                |        |
| IT             | \$100            |                |                |        |

## Change allocation

Department

Choose... ▾

Allocation

Add ▾

\$

Save





Task 7: Decrease and Increase Buttons

Add a decrease button, like the increase button you added in the practice project, to all the departments in the allocation, beside increase by 10 as shown in the screenshot. Style the button using these images. Styling of button should be done according to the reference provided.

- Click the plus button next to **Marketing** department and show that the value increases by 10. Take a screenshot and save it as **mktgplus10.png**













# Allocation

| Department     | Allocated Budget | Increase by 10  |
|----------------|------------------|---|
| Marketing      | £60              |  |
| Finance        | £300             |  |
| Sales          | £70              |  |
| Human Resource | £40              |  |
| IT             | £500             |  |

- Click the minus button next to **IT** and show that the value decreases by 10. Take a screenshot and save it as **itminus10.png**

## Allocation

| Department     | Allocated Budget | Increase by 10   | Decrease by 10  |
|----------------|------------------|--|---|
| Marketing      | £60              |    |    |
| Finance        | £300             |  |  |
| Sales          | £70              |  |  |
| Human Resource | £40              |  |  |
| IT             | £490             |  |  |

Your final React budget allocation application page should look like this:

# Company's Budget Allocation

Budget: £

Remaining: £1040

Spent so far: £960

Currency (£ Pound) ▾

\$ Dollar  
£ Pound  
€ Euro  
₹ Rupee

## Allocation

| Department     | Allocated Budget | Increase by 10 | Decrease by 1 |   |
|----------------|------------------|----------------|---------------|---|
| Marketing      | £50              | +              | -             | ✕ |
| Finance        | £300             | +              | -             | ✕ |
| Sales          | £70              | +              | -             | ✕ |
| Human Resource | £40              | +              | -             | ✕ |
| IT             | £500             | +              | -             | ✕ |

## Change allocation

Department Choose... ▾

Allocation Add ▾ £

Save

Congratulations! You have completed this Final Project lab and know how to create a budget allocation application.

### Change Log

| Date       | Version | Changed by  | Change Description      |
|------------|---------|-------------|-------------------------|
| 2022-08-31 | 1.0     | Pallavi Rai | Initial version created |

© IBM Corporation 2022. All rights reserved.