

# API project report

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## Project Highlights

The project goal was to develop an e-commerce system affiliated with two more individual organisations entities. An E-commerce organization that showcases products to the users, a supplier supplies the products that are currently available to supplier and lastly a bank organization which will manage and keep the transactions among these three organizations.

## Project structure and information

This API project has total 3 virtual organisations. Each organisation has its own backend and frontend.

Github Repository: [LINK](#)

### Technologies used:

Backend: NodeJS, ExpressJS, MongoDB

Frontend: ReactJS

### E-commerce:

Backend:  $\rightarrow$  *backend\_ecom*, Port  $\rightarrow$  5000

Frontend : $\rightarrow$  *frontend\_ecom*, Port  $\rightarrow$  3000

### Supplier:

Backend : $\rightarrow$  *backend\_seller*, Port  $\rightarrow$  8000

Frontend : $\rightarrow$  *frontend\_seller*, Port  $\rightarrow$  3003

### Bank:

Backend : $\rightarrow$  *backend\_bank*, Port  $\rightarrow$  7000

Frontend : $\rightarrow$  *frontend\_bank*, Port  $\rightarrow$  3002

## Organisation details and working process

**E-commerce:** The E-commerce application name is SUNSHINE GARDEN. The purpose of this application is to sell the indoor plants to it's beloved users. The E-commerce doesn't have its own product, it is connected to a supplier chain to showcase the supplied products and deliver the products of different categories. Any person can register here as an user and and order plants as his wish. There is also an admin panel to monitor the users and the corresponding orders. While registering, the users have to register with his name, email, bank account number (provided by bank) and password. After confirming an order an user have to pay the required amount by calling the bank API and an transaction ID id is returned to user with payment information. If this transaction is made to E-commerce bank account the the admin can mark the order as delivered by delivering it to user address.

**Supplier:** The supplier has its own application, in this application the supplier can log in, log out and can see his available products. The main purpose of the supplier is to add products of different categories along with the product details, so that the E-commerce can fetch these products and show them to it's users by calling an API towards the supplier API. The supplier also has a bank account. This the help of the account number, when the users purchase any product from the E-commerce, the supplier account in the bank is also credited by calling the bank API.

**Bank:** The last organisation to make this project whole is the bank. The bank handles all the three way transactions from the user account to the E-commerce account and from the E-commerce to Supplier account. And lastly generating a transaction number and send it to E-commerce client side. The bank frontend shows two things, firstly the user information which shows their current balance. Secondly, the transaction information page which display the transaction corresponded with the sender, receiver and the transferred amount.

## Project workflow

