

**Group name:** KEYY Maker

**Team Members:**

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**Project:** Safe Chain

**Description:**

A Decentralized Application for Supply Chain Management is being developed in this project. Our Supply Chain Management is based on blockchain technology. To deploy our smart contracts, we use the polygon Mumbai test net.

Frontend: It allows users to enter product details such as the name of the product, the name of the manufacturer, the required temperature, humidity, location, and destination.

Using the status tab, one can find real-time data about a particular product and track the product.

**Implementation:**

Frontend

Frontend is build using HTML,CSS,JS  
Webpages build to get user input.

Backend:

In Backend we have used Solidity.

Solidity contract is compiled on Remix IDE

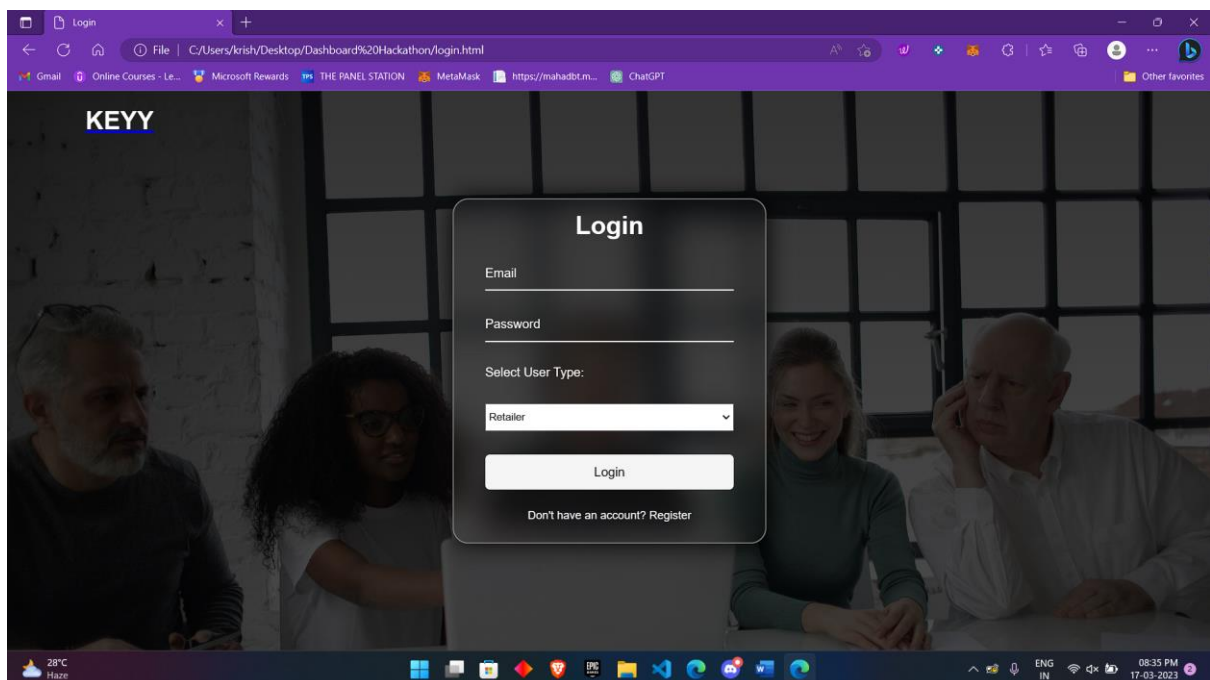
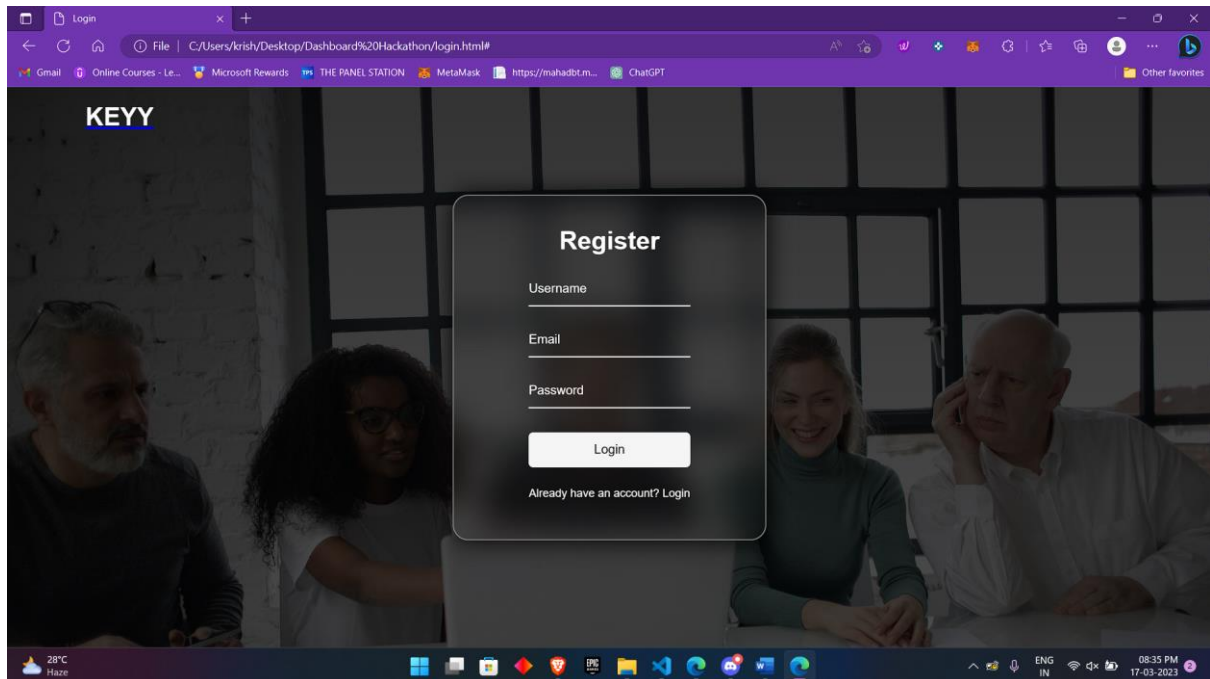
Deployed on **POLYGON** mumbai testnet

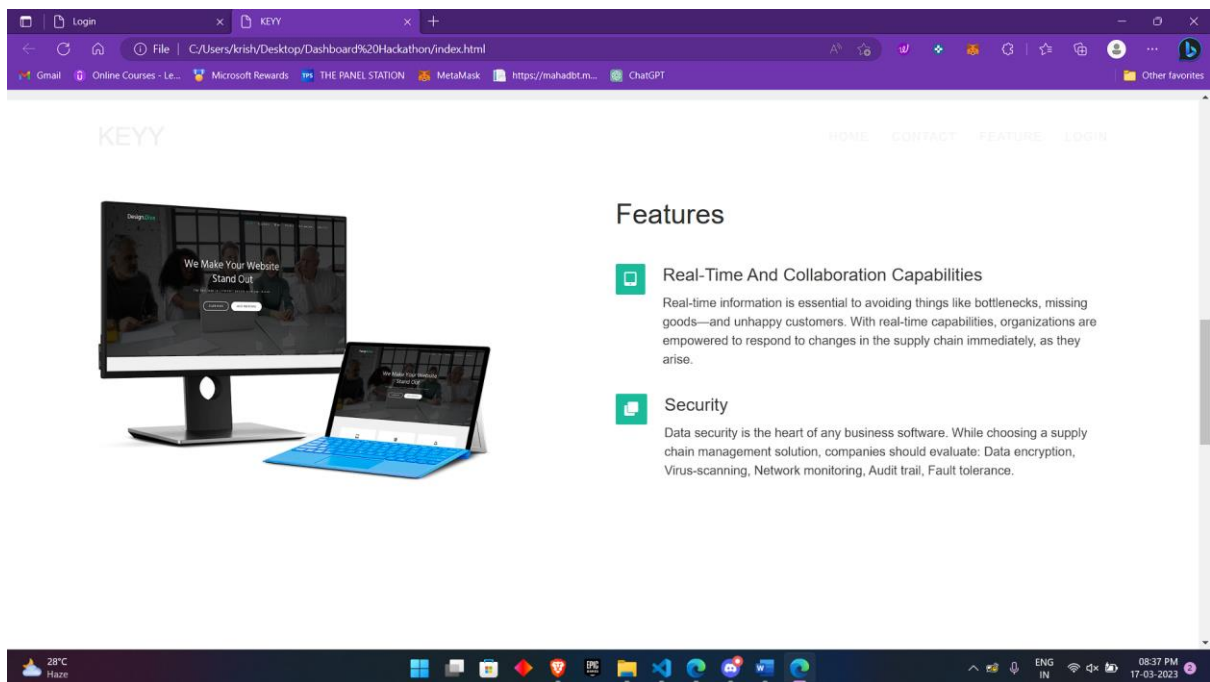
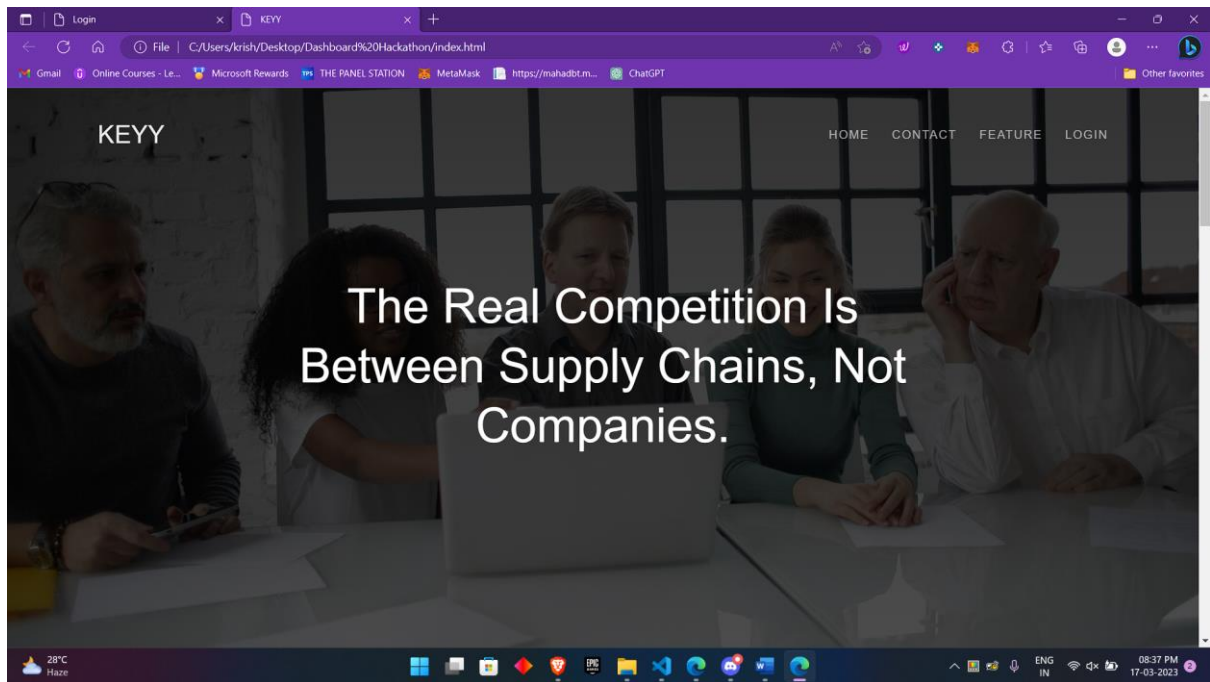
Connected to Frontend using ABI.json and Web3.js

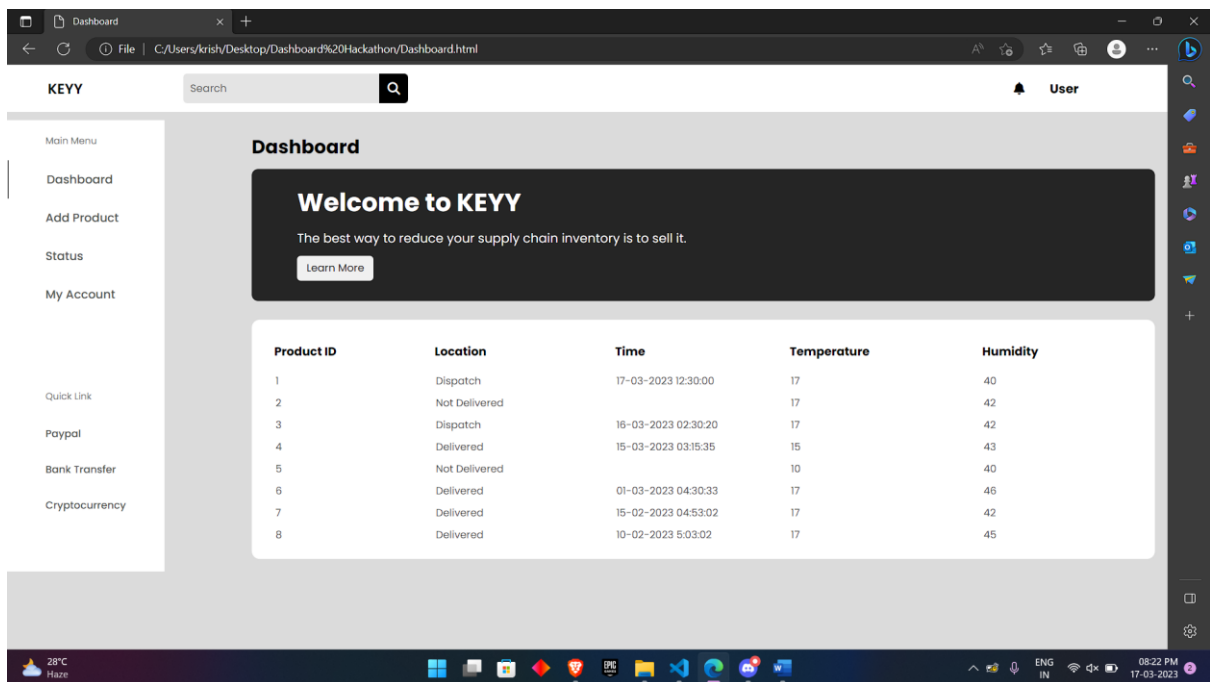
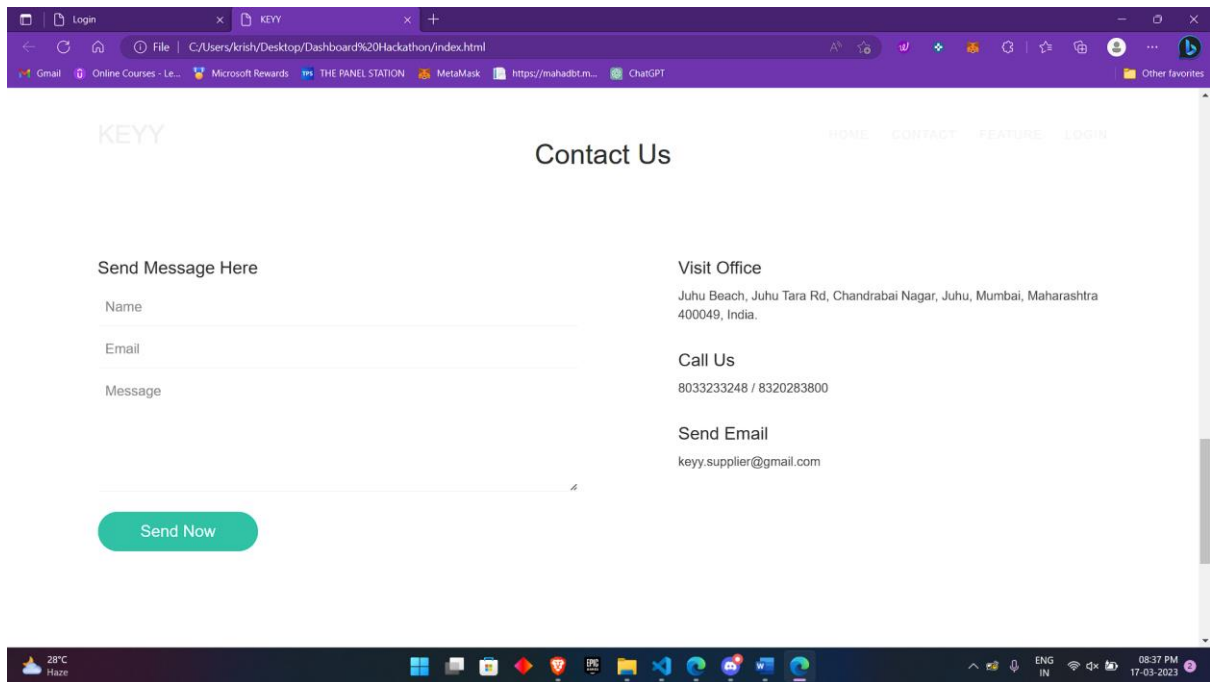
After that Contract is deployed on Polygon mumbai testnet.

From there we get Contract Address and deployed bytecode.

## Screenshots:







DashboardProduct

FileC:/Users/krish/Desktop/Dashboard%20Hackathon/addproduct.html

KEYYSearchUser

Main Menu

Dashboard

Add Product

Status

My Account

Quick Link

Paypal

Bank Transfer

Cryptocurrency

Add Product

Product NameAten-25mg

ManuFacterer NameCipla

Total Qunatity1000

Temperature Required16

Humidity Required40

LocationMumbai

DestinationNagpur

Add Product

28°C Haze

ENG IN08:23 PM17-03-2023

DashboardProductStatus

FileC:/Users/krish/Desktop/Dashboard%20Hackathon/status.html

KEYYSearchUser

Main Menu

Dashboard

Add Product

Status

My Account

Quick Link

Paypal

Bank Transfer

Cryptocurrency

Status

Product ID	Location	Time	Temperature	Humidity
2	Dispatch	17-03-2023 9:30:00	17	40
2	Intransist	17-03-2023 20:00:30	17	42
2	Intransist	17-03-2023 20:30:20	17	42
2	Intransist	17-03-2023 20:55:35	15	43
2	Intransist	17-03-2023 22:25:25	16	40
2	Intransist	17-03-2023 22:30:33	17	46
2	Intransist	17-03-2023 22:53:02	17	42
2	Delivered	17-03-2023 22:03:02	17	45

Product ID	Location	Time	Temperature	Humidity
2	Dispatch	15-03-2023 12:30:00	17	40
2	Intransist	15-03-2023 01:30:30	17	42
2	Intransist	15-03-2023 02:30:20	17	42
2	Intransist	15-03-2023 03:15:35	25	43
2	Intransist	15-03-2023 03:55:25	26	40
2	Intransist	15-03-2023 04:30:33	17	46
2	Intransist	15-03-2023 04:53:02	17	42
2	Delivered	15-03-2023 5:03:02	17	45

28°C Haze

ENG IN08:23 PM17-03-2023

## **Folder Structure:**

### **Backend**

|---SupplyChain.sol

|---ABI.json

### **Frontend**

|---dashboard.html

|---Addproduct.js

|---addproduct.html

|---status.html

|---style.css

### **Login**

|---login.html

|---index.html

|---css

|---main.css

|---style.css

### **Folder Structure Explanation:**

**Backend:** Backend consists of Solidity contract. Solidity Contract consists two functions Product Data and Live Data of the Medicines being transported. In Product data function, there are 7 variables Name, manufacturer, required temperature, required humidity, Source, Destination & total quantity. After Solidity contract is compiled on remix ide ABI file and byte code is generated which is stored in json file.

**Frontend:** This folder contain code for frontend i.e. user interface with the Safe Chain Web app

|--- Addproduct.js : Contain logic for Adding product by manufacturer to be tracked by authorised user

|---dashboard.html: Contain html code to User dashboard where user can see his product history

**Login:** This folder contains code for login and register for new user to engage to Safe Chain Web app.