



# ConTender

MINOR PROJECT DOCUMENTATION

BY:

RAHIL POLADIYA 20B060  
TYBCA DIV-B  
MKICS





**Project Report on**  
**"CONTENDER"**  
**Submitted For Partial Fulfil Towards the Degree Of**  
**BACHELOR OF COMPUTER APPLICATION [BCA]**  
**YEAR: 2022-2023**

**Submitted To:**  
**M.K. INSTITUE OF COMPUTER STUDIES, BHARUCH**



**Submitted By:**  
**Poladiya Rahil Tilak**

**Exam Seat No:**

**1498**

**INTERNAL GUIDE:**  
**PARESH PRAJAPATI**



Shri Sad Vidya Mandal's  
**M.K. INSTITUTE OF COMPUTER STUDIES**

(a BCA College Affiliated to Veer Narmad South Gujarat University, Surat)

SVM College Campus, Old N.H.No.8, Bharuch - 392001 Phone : 02642 - 225637

✉ adm@mkics.in, mkics.bharuch@gmail.com Ⓛ http://www.mkics.in/ Ⓛ http://facebook.com/mkics.bca.96

## Certificate

This is to certify that following students of TYBCA (Semester-5)

1. **POLADIYA RAHIL TILAK** SP Id **2020023025**

has satisfactorily completed the minor project entitled  
" **ConTender** " in **Paper-506** under  
our supervision, for consideration in Partial Fulfillment for the Vth  
Semester of Bachelor of Computer Application, Veer Narmad South  
Gujarat University, Surat (VNSGU), during the academic year 2022-  
23.

Date: **19-09-2022**

Internal Guide  
(Mr./Ms.)

I/C Principal  
(Dr. Jagin Patel)



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## 1. PROJECT INTRODUCTION

### 1.1 PROJECT PROFILE

Project Name:	ConTender : E-Tender and bidding Solution
Developer:	Rahil Tilak Poladiya (20B060)
College:	M.K Institute Of Computer Studies
Guide:	Paresh Prajapati
Code Length	4318 lines of React and PHP code

### 1.2 PROJECT DESCRIPTION

ConTender is One Stop solution to All online Tendering and Bids Management System. It is an Web App developed to ease the process of tender and bids online. With an mediocre front-end but an highly efficient back-end as well as countless functionalities helping in to provide an efficient solution to users as well as moderators.

Users can Upload Tenders, file their bids for tenders, communicate with other companies as well as moderation panel, just as easy as using a social media with no complex process.

Moderator authorities have several basic as well as extended functionalities that help moderators to perform several task like managing tenders, users, bid, databases, and extended dashboard features that would make managing the website easy.

## **2. SCOPE AND OBJECTIVE**

### **2.1 SCOPE FOR USERS**

- Register / Login
- Upload Tenders
- Upload Bid
- Look through tenders
- Complete Tender Bidding Cycle
- One-way Messaging using Notification Stream

### **2.2 SCOPE FOR MODERATORS**

- Login
- Test all insert functionalities
- Execute Custom insert SQL queries
- Update or Delete data using basic function
- Update / Delete Data using Custom SQL queries
- Interactive Dashboard for moderator
- Address the Complaints Filed by users
- Monitor Database tables
- Create Backups for database (down time : 24 hours)
- Execute Custom Select Queries to Retrieve Any Required data
- Create Custom Pie, Bar or Scatter-Line Graphs to visualize data
- One-way messaging using notification stream

### **2.3 OBJECTIVE**

Cardinal Objective of this Web Application is to provide a social media like platform to users for exchanging tenders and bids to ease out the enigmatic process cycle of tender bidding. As well as provide a base for companies to set their foot into market and gain recognition.

### **3. TOOLS AND TECHNOLOGIES USED**

#### **1) HTML / CSS**

HTML is used within JSX of REACT JS to design the base of the Webpages of the Web App. Inline CSS is used to style several elements of the Web App to provide a mediocre User Interface.

#### **2) REACT JS**

React Js is used to Create a fluent Front end and split entire web application into smaller components and modules to make the entire application more modular , efficient and easy on memory due to less renders of original DOM

#### **3) REACT-BOOTSTRAP**

React-Bootstrap is another extension library module of React Js that enables Bootstrap functionality into react to make designing easy. Various Components like Navbars, Buttons, Forms, Form-Controls Etc are developed using this.

#### **4) NODE JS**

Node Js is used to create various minimal javascript modules as such for Encryption, and Decryption utilities etc

#### **5) JQUERY**

Jquery is used for making api calls to backend server side php scripts using \$.ajax() function of the jquery library. It has been used to send or retrieve data to and from the php script running at server.

#### **6) JAVASCRIPT**

Javascript is used to perform all necessary client side scripts such as storing necessary data into localStorage , Validation of Form Inputs , display or hide elements accordingly and various other minimal DOM manipulations.

#### **7) PLOTLY.JS**

Plotly.js library of javascript is used to visualize required data in form of graphs as well as create custom graphs by user.

#### **8) PHP**

PHP is used to handle entire server side application tasks such as putting data into database, pre-checking of data before uploading , uploading files to server , creating database dump backups , executing custom sql queries sent by user , deleting useless files of deleted records , Downloading files from server into user database etc.

#### **9) MYSQL DATABASE**

MySQL database is used to store the data sent by user into respective table securely.

#### **10) WAMP SERVER**

WAMP Server is used to Host PHP scripts and database.

#### **11) Notepad++**

Notepad++ is used as the text editor to write all the required code.

## 4. TABLE DESIGN

### 4.1. USERS TABLE

Column	Type	Null	Default	Constraint
uid	int(11)	No	AUTO INCREMENT	PRIMARY KEY
uname	text	No		
company	varchar(100)	No		UNIQUE
email	text	No		
phone	text	No		
pwd	text	No		
city	text	No		
state	text	No		
lastcheck	datetime	No		
notifs	int(11)	No		
role	text	No		

### 4.2. TENDERS TABLE

Column	Type	Null	Default	Constraint
tid	int(11)	No	AUTO INCREMENT	PRIMARY KEY
title	text	No		
descr	text	No		
location	text	No		
catagory	text	No		
tvalue	text	No		
expd	text	No		
tprice	text	No		
tender	text	No		
uname	text	No		

Column	Type	Null	Default	Constraint
company	text	No		FOREIGN KEY
upload_date	datetime	No	CURRENT_TIMESTAMP	
winner	text	No		

#### 4.3. PROBABLE PARTICIPANTS TABLE

Column	Type	Null	Default	Constraint
submid	int(11)	No	AUTO INCREMENT	
tid	int(11)	No		FOREIGN KEY
probprc	text	No		FOREIGN KEY

#### 4.4. PORTFOLIOS TABLE

Column	Type	Null	Default	Constraint
pid	int(11)	No	AUTO INCREMENT	
tid	int(11)	No		FOREIGN KEY
tname	text	No		
stat	text	No		
user	text	No		FOREIGN KEY

#### 4.5. NOTIFICATIONS TABLE

Column	Type	Null	Default	Constraint
nid	int(11)	No	AUTO INCREMENT	PRIMARY KEY
notif	text	No		
tstamp	datetime	No	CURRENT_TIMESTAMP	
concern	text	No		
ico	text	No		

#### 4.6. BIDS TABLE

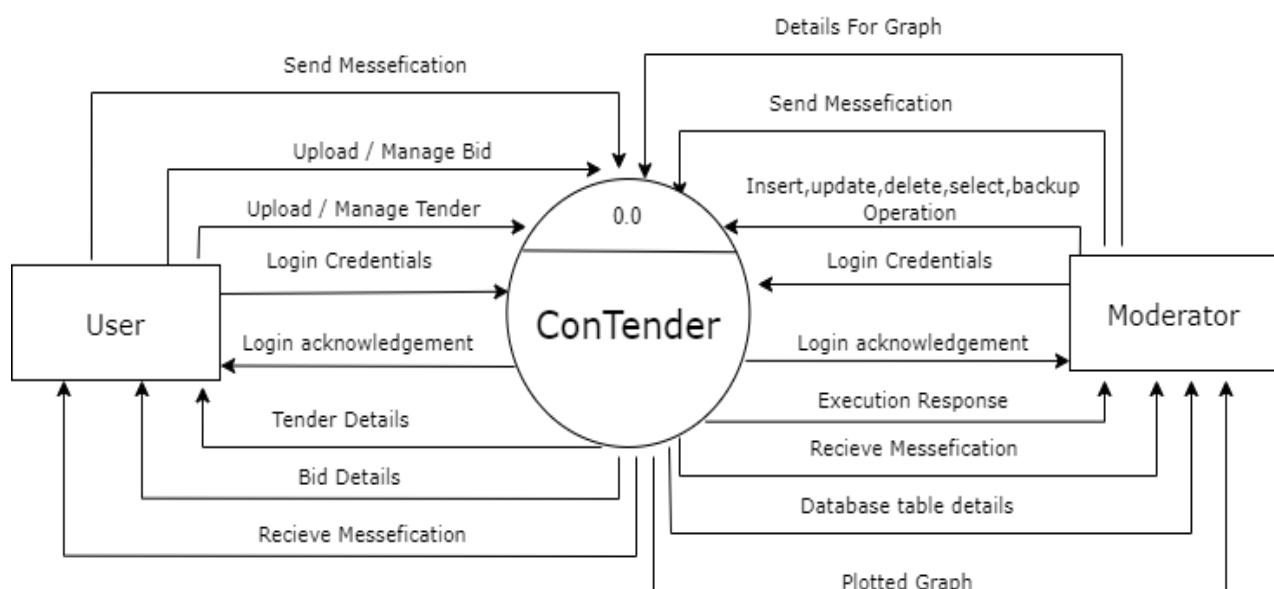
Column	Type	Null	Default	Constraint
bid_id	int(11)	No	AUTO INCREMENT	PRIMARY KEY
tid	int(11)	No		
bidder	text	No		FOREIGN KEY
catagory	text	No		
location	text	No		
bid_doc	text	No		
email	text	No		
phone	text	No		
dob	datetime	No	CURRENT_TIMESTAMP	

#### 4.7. REPORTS TABLE

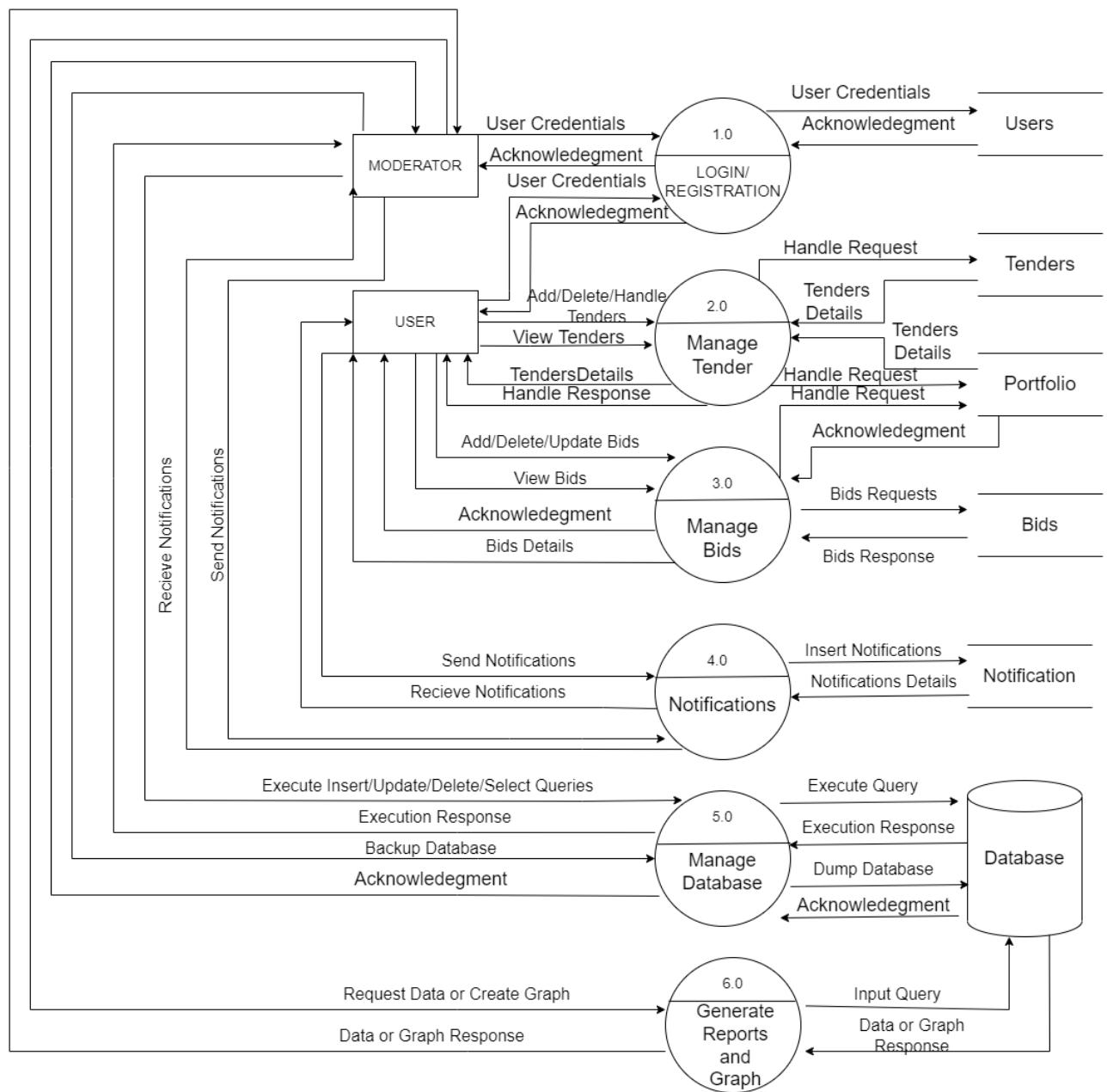
Column	Type	Null	Default	Constraint
rid	int(11)	No	AUTO INCREMENT	PRIMARY KEY
rby	text	No		FOREIGN KEY
rconcern	text	No		
rstatement	text	No		
rdate	datetime	No	CURRENT_TIMESTAMP	

## 5. DATA FLOW DIAGRAMS (DFD)

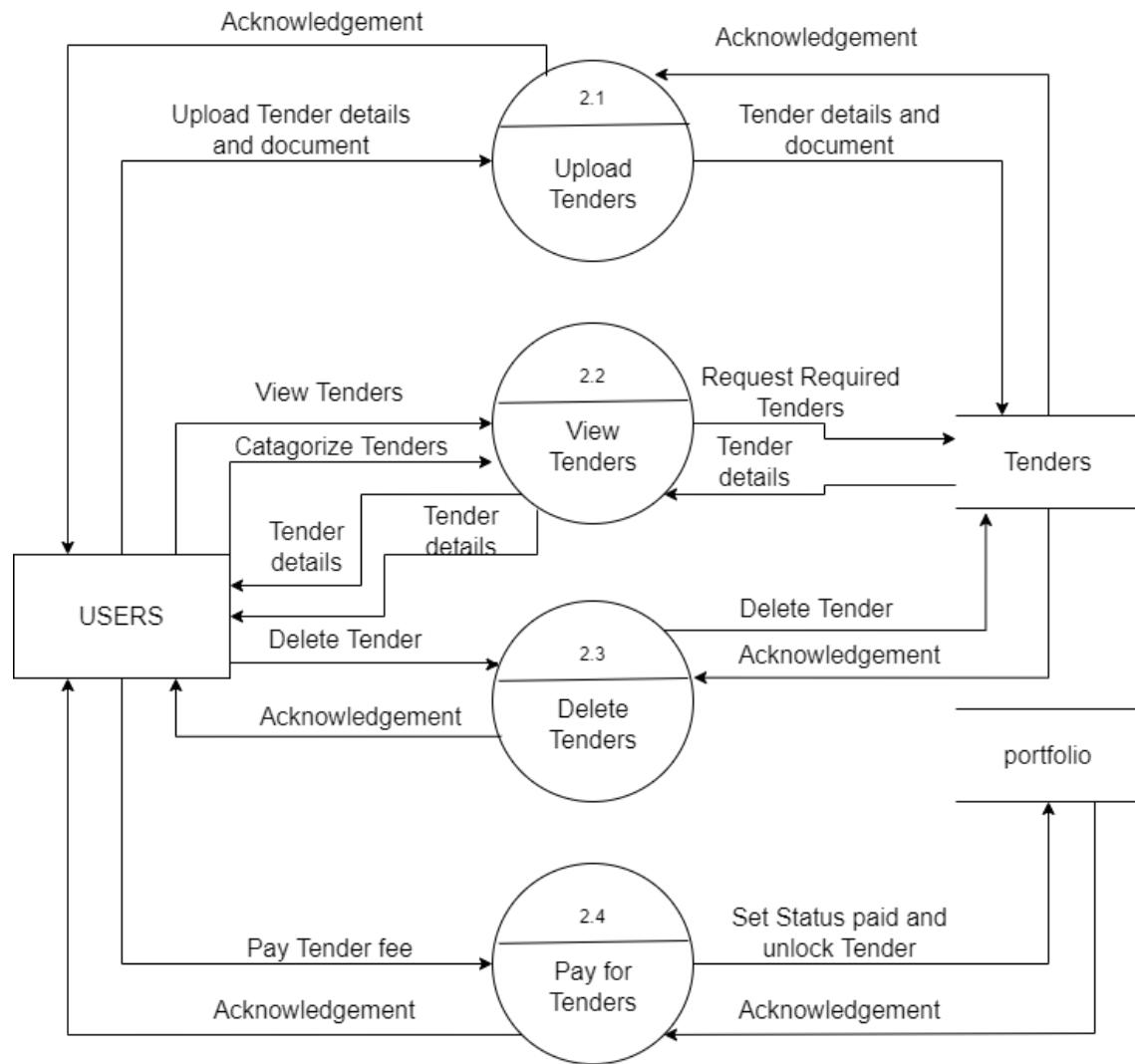
### 1) Context Level :



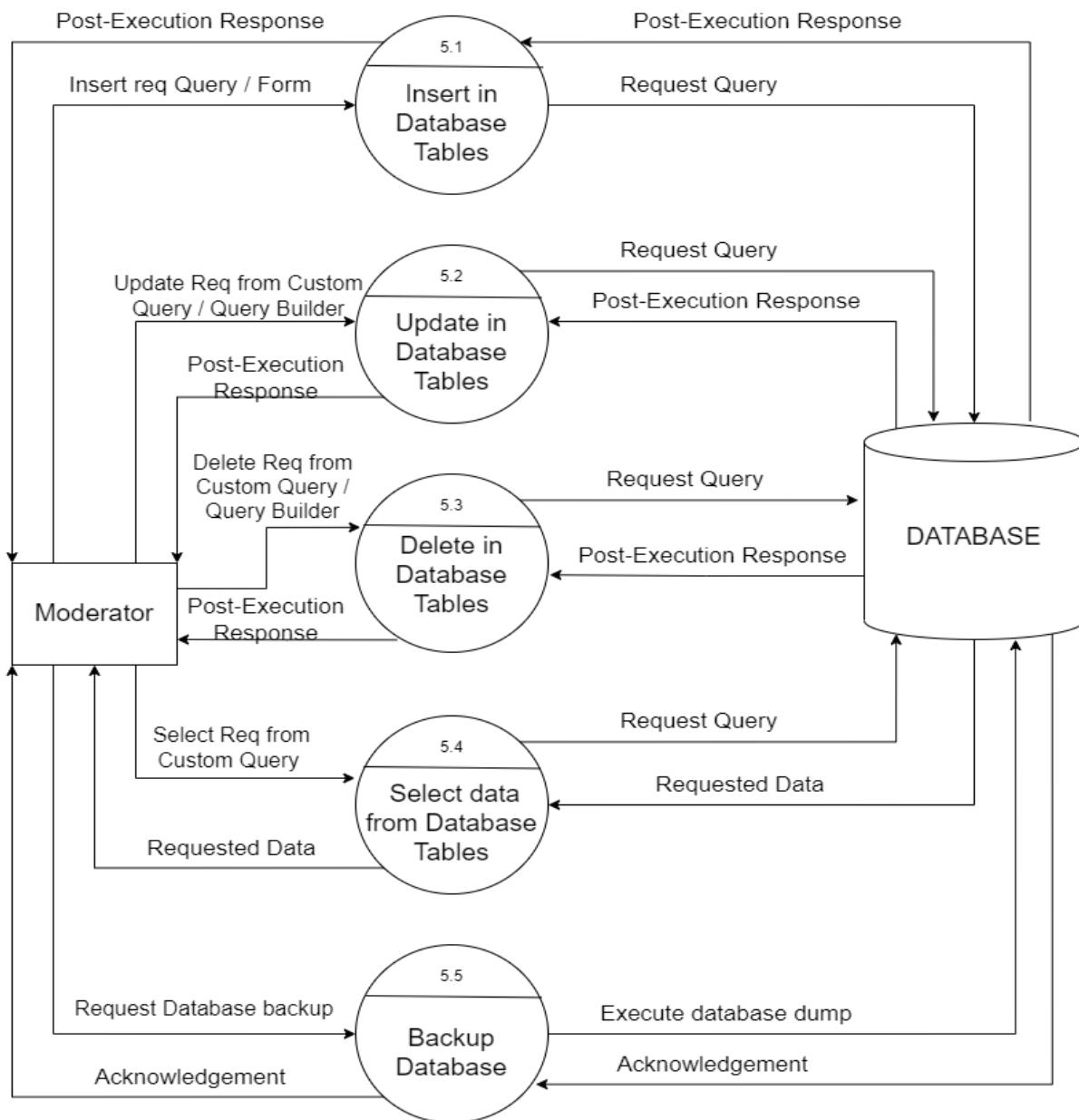
2) 1<sup>st</sup> Level :



3) 2<sup>nd</sup> Level for Manage Tenders:



4) 2<sup>nd</sup> Level For Manage Database:



## **6. MODULES AND THEIR FUNCTIONALITIES:**

### **USER RELEVANT:**

#### **1) LOGIN / LOGOUT MODULE:**

- User authentication via email and password(validation applies)
- Redirection to homepage if authenticated
- If authenticated frequently used User details like email, company name, phone number, user states etc. get saved in the local storage of client browser in Encrypted Format.
- Proper Maintaining of User Login in Browser. User login doesn't get disrupted if browser is closed. Login is maintained until logged out explicitly.
- Multiple Users can be logged into the server simultaneously and each one's state is maintained differently in their browser.
- If User Logs out his pre-logout state remains same, so when user returns, his state is back to what it was prior to logout. Example: if user had 3 notifications pending to be seen before logging out, when he logs back in he has his 3 pending notifications waiting as it is. Unaffected of other user ids that logged in mean time.

#### **2) REGISTRATION MODULE:**

- Registration Module takes in important and required data from user required to register User.
- Proper Validation is provided using Javascript Regular Expressions to each and every input field with interactive Error Messages. ( Precision of Validation : "doesn't allow XSS inputs in any field, Not Null fields checking , Email exact format [example@gmail.com] , Password [ minimum 7 chars ] , Phone numbers [ 10 digits Indian format starting with 6-9 ] ")

### **3) TENDER UPLOAD MODULE:**

- Uploads Tenders into Tenders table.
- Foreign Key (i.e Company name) and other required user details are collected from the logged in credentials of current login instead of explicit user input.
- Proper Validation is provided using Javascript Regular Expressions to each and every input field with interactive Error Messages. ( Precision of Validation : “doesn’t allow XSS inputs in any field, Not Null fields checking , Email exact format [example@gmail.com] , Password [ minimum 7 chars ] , Phone numbers [ 10 digits Indian format starting with 6-9 ] ”)
- Document Uploading to Server is also provided.
- Uploaded File gets saved into server/Tenders/.
- Uploaded File naming convention automatically maintained to prevent issues like two users uploading same named file to prevent overwriting issue or fetching conflict due to same file name during upload or retrieval of file.(convention used : Renaming file to format : currentdate(prec. date-mon-year-hour-min-sec) + filename . extension )
- Notifies Everyone on the System that a new tender is uploaded in so and so category by @user.

### **4) BID UPLOAD MODULE:**

- Foreign Key (i.e Company name) and other required user details are collected from the logged in credentials of current login instead of explicit user input.
- Tender Details of tender being bided are also pre-initialized into bid upload form (read only) to prevent data tempering and also reduce User efforts.
- Document Uploading to Server is also provided.
- Uploaded File gets saved into server/Bids/.
- Uploaded File naming convention automatically maintained to prevent issues like two users uploading same named file to

prevent overwriting issue or fetching conflict due to same file name during upload or retrieval of file.(convention used : Renaming file to format : currentdate(prec. date-mon-year-hour-min-sec) + filename . extension )

- Notifies Owner of the Tender that @user has bided

## **5) VIEW TENDER DETAILS MODULE:**

- Detailed Description of Tender is provided in an exquisite display panel. All minute details are mollycoddled.
- Different Stages of tender views are maintained :
  - a) Pristine view
  - b) Expressed Interest view
  - c) Post-Payment View
  - d) Owner View
  - e) Expired View
  - f) Post-Result View
  - g) Post-Bided View

Each of these Views Display All details such as category, regularly updating expiry date countdown ( prec : no.of days left / expired ), brief requirements/description uploaded by tender owner, Tender's Title , Location , Value amount , Probable Participants etc. apart from these the specific views provide specific user functions to work over tender as enlisted below:

### **a) Pristine View :**

It is the Primary view when the Tender is First Visited or Expression of Interest is yet to be submitted. It displays a button to Give Expression of interest, a payment option to unlock tender and a locked, non-downloadable view of tender document. User can either submit expression of interest or directly skip to bidding stage by unlocking tender.

Notifies Owner of the tender When Expression of interest is submitted by @user, via notification.

b) Expressed-Interest View :

This view depicts a payment option to unlock tender and locked, non-downloadable view of tender document. This view is for the category of users that are stated as Probable Participants of the tender that may or may not bid into tender but have shown interest into the tender. Notifies Owner When @user makes payment for the tender, via notification.

c) Post-Payment View:

Post payment view is for those users entitled with Paid status. These are the users that have paid the tender fees to be able to participate into the bid. These users get an unlocked View of the tender document that can be downloaded into user's device straight from server at any moment as many times needed. Bid Button is also visible on screen to bid for the tender.

Notifies user when @user submits Bid for the tender, via notification as aforementioned in "Bids Upload Module".

d) Owner View:

Owner view provides master controls of the tender to user. Owner can view and download the tender document (always in open state for owner), view the bidders, contact them via whatsapp, mail or call links provided, Download and view the bid documents uploaded by the bidders, declare the rightful winner at any moment (before expiry), and Lastly delete the tender ( by dragging the tender panel that would trigger a hidden dustbin to be visible on screen and dropping the

tender over that dustbin to delete it ). Also prevents bidding by owner themselves by hiding the bid button.

Notifies everyone when @owner declares a winner as well as personally congratulates winner @user for winning, via notification.

e) Expired View:

Expired view depicts the tender's expiry. i.e last date of filing the bid being exceeded. An Expired State of the Tender is displayed in such case with no buttons or downloadable or unlockable content.

f) Post-Result View:

Post Result view of every user display's the Winner of the Tender bids. And to Owner in addition hides the capabilities to declare winner (preventing multiple winner declarations). Hides Capability to Bid/unlock/download the tender anymore.

g) Post-Bided View:

Post Bided view is provided for bidders to re-consider (update) or back-off (delete) their bids. Re-considering Redirects user to a re-upload page of bid document that updates necessary amendments (previously uploaded document gets deleted and replaced by a new one at the server as well). Back-Off option backs the user from the bidder's list, deletes their bid and the document file stored in the server and then reverts back the user's status to paid category to have a pre-bid i.e post-payment view. Notifies Owner if @user backs-off or re-considers their bid, via notification.

## **6) USER PROFILE MODULE :**

- This module exhibits the User Profile to respective user.
- All Details are pre-initialized with those stored in users table of database apropos of the user that's currently logged in.
- User Can update all fields (excluding username and company[kept read-only]).
- Proper Validation is provided here as well using Javascript Regular Expressions to each and every input field with interactive Error Messages. ( Precision of Validation : “doesn’t allow XSS inputs in any field, Not Null fields checking , Email exact format [example@gmail.com] , Password [ minimum 7 chars ] , Phone numbers [ 10 digits Indian format starting with 6-9 ] ”)

## **7) PORTFOLIO MODULE :**

- This Module Provides a brief view about the tender portfolio of the user i.e those tender that user has either expressed interest, or has Paid fees for, or Bided into.
- User can get an overview of the status or the on-going stage of the Tender-bidding lifecycle at which user is for each particular tender in user’s portfolio.
- User can as-well go into details of the tender by the provided links that redirects them to the aforementioned “view details module”.
- This module Only Accessible to user if logged in.

## **8) MY TENDERS MODULE:**

- My Tenders module enlists the tenders uploaded by the user themselves. This also has the Upload button that is the hearthstone to the forenamed “Tender Uploads Module”.
- This module Only Accessible to user if logged in.

## **9) ALL TENDERS MODULE:**

- All Tenders Module is Expo of the Tenders. All the Tenders are displayed here at one place.
- User gets functionality to filter the Tenders into their category. i.e display only Chemical tenders or only aviation tenders etc to assist the finding of appropriate tenders quicker.
- A reset filter button is also provided to Reset the Applied category filter and display all the tenders again.

## **10) NOTIFICATIONS MODULE:**

- Notifications Module is used to render the notifications on to user's page.
- User can check top six most recent notifications in the Off-canvas that drops in from the right end when user clicks on the notification icon in the navigation bar.
- User can also check all the notification since incipience of user account by clicking the view all link at the bottom of the notification off-canvas.
- Notifications such as new tender upload, new bid upload, submission of EOI, backing off from bid, reconsidering bid, declared results, Congratulating winners, Messefication, and payment OTPs are listed via this module.
- Each notification also has a precise time tag ranging from(second ago to days ago) that keeps updating as the notification gets older.
- User also gets displayed the constantly newfangled number of notifications pending to be seen besides the notif icon.
- These notification numbers are also maintained until next login if user logs out or until user checks them.
- Notifications can be broadcasted to entire ecosystem or dedicated to any particular user on the ecosystem.
- Notifications are exchanged real-time.

## **11) HOME MODULE:**

- Home Module refers the Homepage of the system that is displayed prior to login for all users and to Normal users post login.
- Home page is always up with latest content for the user.
- It has an interactive search bar that also gives auto suggestions according to user's typing for available relevant content or redirects users to search results page for definitive search responses. Each Search suggestion also possesses a link potent to the corresponding content.
- Home Page's next most primary and basic facility is to display 5 latest tenders (by upload date/time).
- After That second comes the panel that displays the tenders that match the user's location (in user details[not to be mistaken for current]).
- Lastly there is a panel that displays the tenders matching to those categories that user prefers the most. (not taken as an preference input but actually an intelligent system that dynamically traces preferences by the bids made or EOIs submitted by the user that keeps changing over time according to user's interactions without user's involvement).

## **12) PAYMENTS MODULE:**

- Payments Module is an effective way to make dummy payments to depict the process of paying tender fee to being eligible for viewing tender document and participating in bids.
- It pre-sets Sending party, receiving party and amount to be transferred on-load without user involvement. Also these properties are read-only and prevent tempering of data.
- Firstly user has to click Send- Transaction pin button to receive a 4-digit generated one-time Transaction pin.
- On click aforementioned pin is sent to user via the in-built notification stream. And an input box and payment button get

enabled. Once user inputs the pin and clicks pay button, Transaction pin is matched. If entered accurately, the payment is proceeded and status for the tender pertaining turns paid so user can view and download document as well as participate in the bid. User is redirected to the apparent tender's detailed view panel with freshly updated Post-payment view. Successful payment also sends a notification to @owner about @user paying tender fee for their respective tender, via notification.

### **13) SEARCHES MODULE:**

- Searches module is a search result drop-by. Here all the responses and contents relevant to the searches made are visible as an aggregate result.
- User can also search for more from this Module via a search bar of its own.
- Similar to one on the home module, the search suggestions are provided here as well that likely work the same as there. With links to apparent content or search result. Search suggestions at both of these modules get loaded dynamically for each character that user types into the search bar.

### **14) HELP DESK MODULE:**

- Help Desk Module is a way to provide user with flagging capabilities to highlight issues that might have been unobtrusive from the developer or moderators handling the Contender Ecosystem.
- It provides a Reporting functionality through which one user can report another user , a tender or even some bug that might have occurred on the web application so that it reaches the rightful authority that can address the issue(with notification)

## **MODERATOR RELEVANT:**

### **15) DASHBOARD MODULE:**

- This is the Default Home Page when logged in as a moderator.
- Dashboard is where miracles happen. The Dashboard helps to visualize all relevant information in form of graphs to assist the moderators to conclude useful insights and reports.
- The dashboard consists of a few pre-initialized graphs as a primary aid.
- First, a Line graph depicting the number of tenders uploaded for each month.(dynamically updates)
- Second, Pie chart exhibiting the number of tenders uploaded into each category. (dynamically updates)
- Third, a Bar chart that delineates the number of tenders uploaded for each location. (dynamically updates)
- Next is a panel that displays the top 3 contenders of current week, i.e the top 3 most bided/interacted tenders of the week that keep dynamically updating as the weeks change by.
- If all that is unsatisfactory and not enough, CustomGraph Engine is the fountainhead of all the possibilities infinity and beyond. CustomGraph Engine is for Moderators that are sound in SQL language. Mods can write a custom Select query to fetch required data and visualize it in form of pie,bar or scatter-line charts as well as flexible indexing to select any set of value and lables retrieved from the select query like suppose I have retrieved uname and company along with number of tender , I can set the graph according to uname as labels or company as label, same applies to values. Apart from that mods can also choose their color of choice to colorize the graph the way they want. The User also gets interactive messages if the query doesn't suit graph type or graph isn't generated or SQL formatted Error messages to let user know about the SQL errors in their queries.

## **16) REPORTS MODULE:**

- Reports Module has nothing much to say about. It is a basic view page to enlist all the issues reported by the user.
- Those Issues reported by the users at the help desk, can be addressed by the moderators at the Reports module so they can take relevant actions explicitly.

## **17) ACTION MODULE:**

- Action Module is the Jack of all trades for the Moderators. It is the Ultimate Authority provided to the Moderators.
- It Contains Several Sub-modules integrated within to help the mods manage the database with ease. Those are :
  - a) Insert
  - b) Update
  - c) Delete
  - d) Select
  - e) Notify
  - f) Backup
- A) Insert :

Insert Section has a drop-down list that encapsulates pre -made forms like registration, bid upload or tender upload. Mods can perform insert operations into those respective tables via those forms as a readymade template. If that isn't enough to quench the thirst, we have a final resort, The CustomQuery Engine (configured and confined to accept custom user defined "insert queries only"). That takes in Insert Queries from the User and executes it over server in database. Also Prompts Acknowledgement on successful run or SQL formatted Error just like an SQL engine does to let user know where or how exactly their query need to be corrected.

➤ B) Update :

Update Section is split into two halves. A ready-made Template and a Custom Query Engine.

The Ready-made Template is the QueryBuilder Engine that automatically generates an update Query to update a single value into any defined tables. It has a dropdown to select which table to update, second defines which field to update in that particular table (field list is dynamically retrieved apparent to the table selected). Next is the new value to be replaced. The conditioning column is automatically selected as the primary/unique key of that particular table upon selection of the table and cannot be changed. Finally is the condition value of for which record to update the value.

Upon pressing the execute button the query gets build up automatically and provides user with Prompts Acknowledgement on successful run or SQL formatted Error just like an SQL engine does to let user know where or how exactly their query need to be corrected.

The CustomQuery Engine (configured and confined to accept custom user defined “Update queries only”). That takes in Update Queries from the User and executes it over server in database. Also Prompts Acknowledgement on successful run or SQL formatted Error just like an SQL engine does to let user know where or how exactly their query need to be corrected.

➤ C) Delete:

Delete Section is also split into two halves. A ready-made Template and a Custom Query Engine.

The Ready-made Template is the QueryBuilder Engine that automatically generates an Delete Query to Delete records from any defined tables. It has a dropdown to select which table to delete from, The conditioning column is automatically selected as the primary/unique key of that particular table upon selection of the table and cannot be changed. Finally is the condition value of for which record to Delete.

Upon pressing the execute button the query gets build up automatically and provides user with Prompts Acknowledgement on successful run or SQL formatted Error just like an SQL engine does to let user know where or how exactly their query need to be corrected.

The CustomQuery Engine (configured and confined to accept custom user defined “Delete queries only”). That takes in Delete Queries from the User and executes it over server in database. Also Prompts Acknowledgement on successful run or SQL formatted Error just like an SQL engine does to let user know where or how exactly their query need to be corrected.

➤ D) Select:

Select section is made available to mods in-case they want to generate custom datasets out of the database table to fetch all the required data they want to see that could not be provided by the Pre-Displayed Data from the Database Module. It is sponsored by the CustomQuery Engine (configured and confined to accept custom user defined “Select queries only”). That takes in Select Queries from the User and executes it over server in database. And Fetches Records just like an sql database system with defined column names and proper format on successful run or SQL formatted Error just like an SQL engine does to let user know where or how exactly their query need to be corrected.

➤ E) Notify :

Notify section is a small component used to notify something to relevant users or all of them about something via notification stream using Custom Notification Message. It uses the Messefication Functionality discussed later in documentation.

➤ F) Backup Database :

Backup is an important feature of any system. In times of data-loss instead of making the web app handicap, these backups can be used to retrieve back data that was lost. Also database can be rolled back to a particular date before some changes were made.

Backup database is a function provided to Mods to create backups and sql dumps of the database.

Mods can create sql dumps or backups of the database that get saved in server/backups/ for each date named according to that date. Mods can also see when the previous backup was done. The Backup section has a down-time of 24 hours and next backup can only be created after 24 hours of previous one to prevent unnecessary backups being created.

#### **18) DATABASE MODULE:**

- The database module displays all the data from all relevant the database tables ( users , tenders , bids , portfolio , probs )
- Portfolios can be checked for each individual user , similarly probable participants can be checked for each individual tender.
- If Data feels insufficient to the moderator he can always call for custom data in previous module's CustomQuery facility in select section.

#### **MISCELLENOUS RELEVENCE:**

#### **19) MESSEFICATION MODULE:**

- Messefication is a small facility for users of contender or our moderators to hold one-way communication with each other within the system.

- You can use this utility to send a small noticeable message to any specific user or broadcast it to all users via the notification stream.
- This Functionality allows users to message each other unlike a proper chat, instead via notifications. This maintains formality of the platform and also provides an substitution method to contact other users.

## **20) NAVBAR MODULE:**

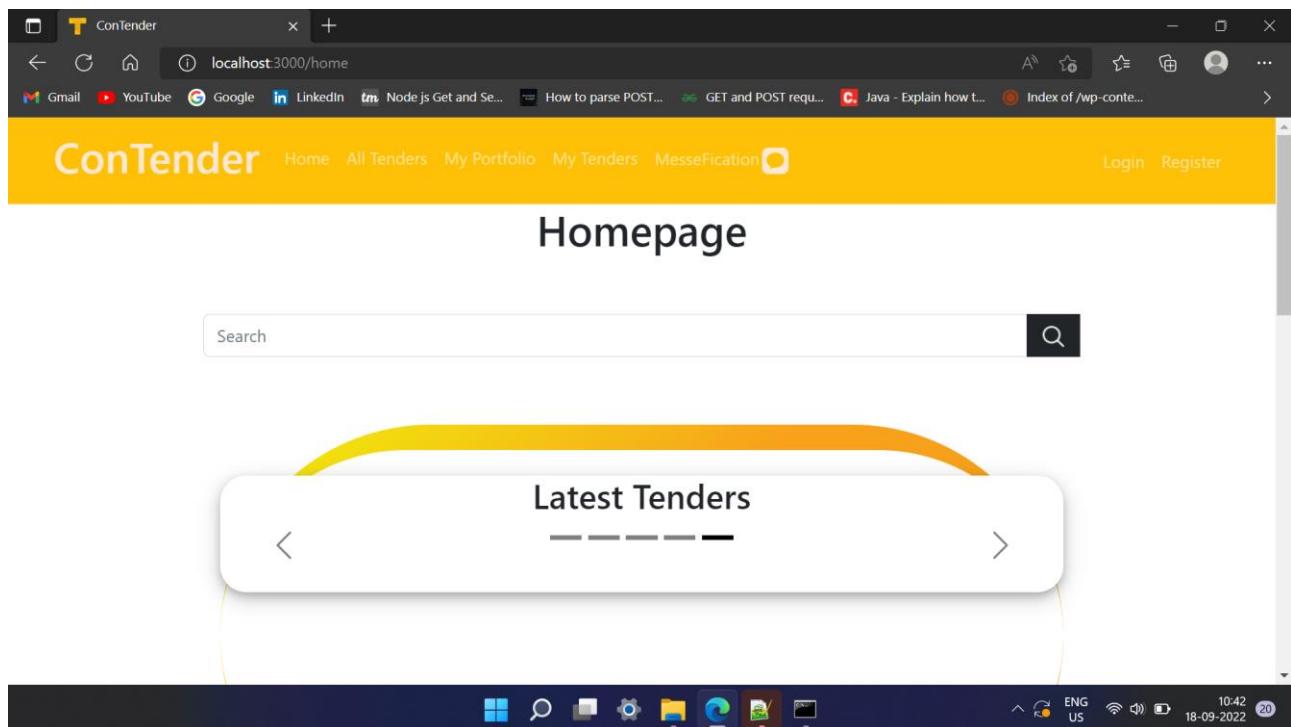
- Navbar module is a dynamically updating module that adjusts the navbar according to users and increasing or reduces features according to the user type.
- If the user is normal user they get the navbar tabs and links to pages of their relevance.(home, portfolio, all tenders, my - tenders)
- If the user is moderator they get the navbar tabs and links accordingly (dashboard, Reports, actions, database)
- If user hasn't logged in login and register buttons are shown , where as on login they get hidded and user dropdown and notification button take its place.
- Unread-notification counts are real-time updated here.

## **21) ENCRYPTION-DECRYPTION MODULE:**

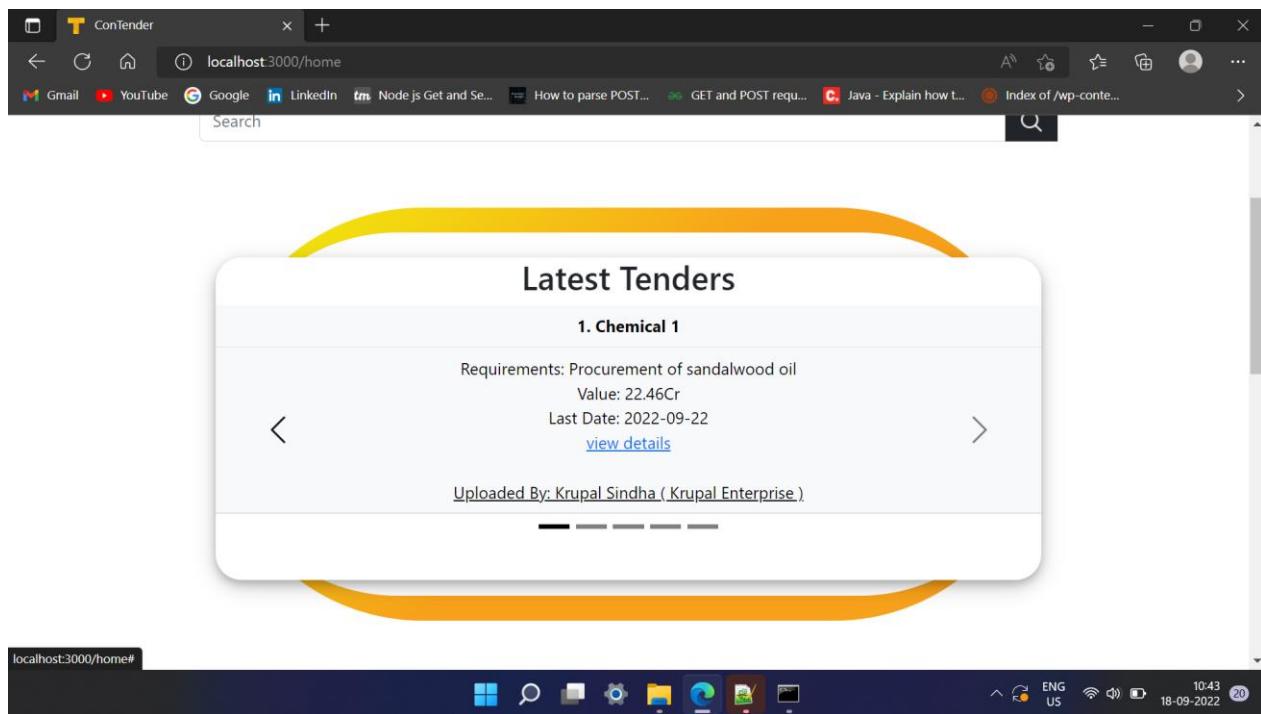
- This ain't much but is honest work. This is a separate module created from scratch with my custom defined functions to encrypt and decrypt the data that is being stored or retrieved from the local storage to maintain the security of the Data.

## 7. SCREENSHOTS:

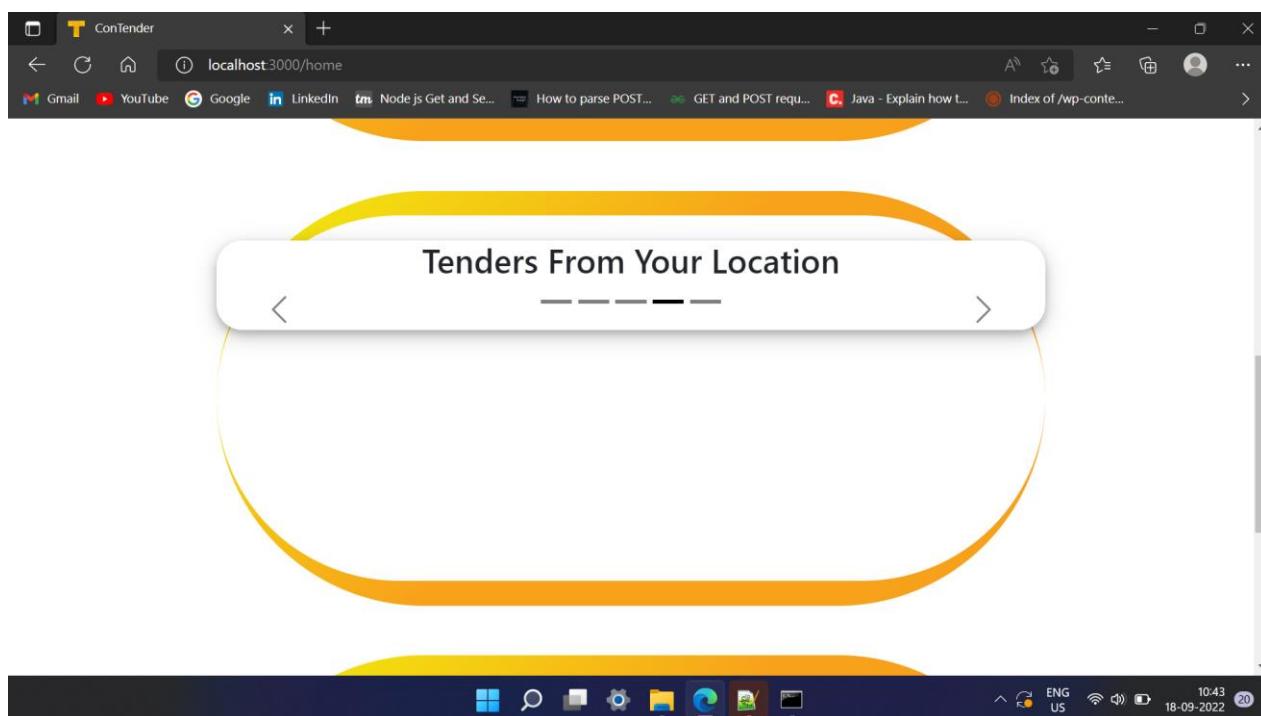
### 1. Anonymous state( Not Logged In ) :



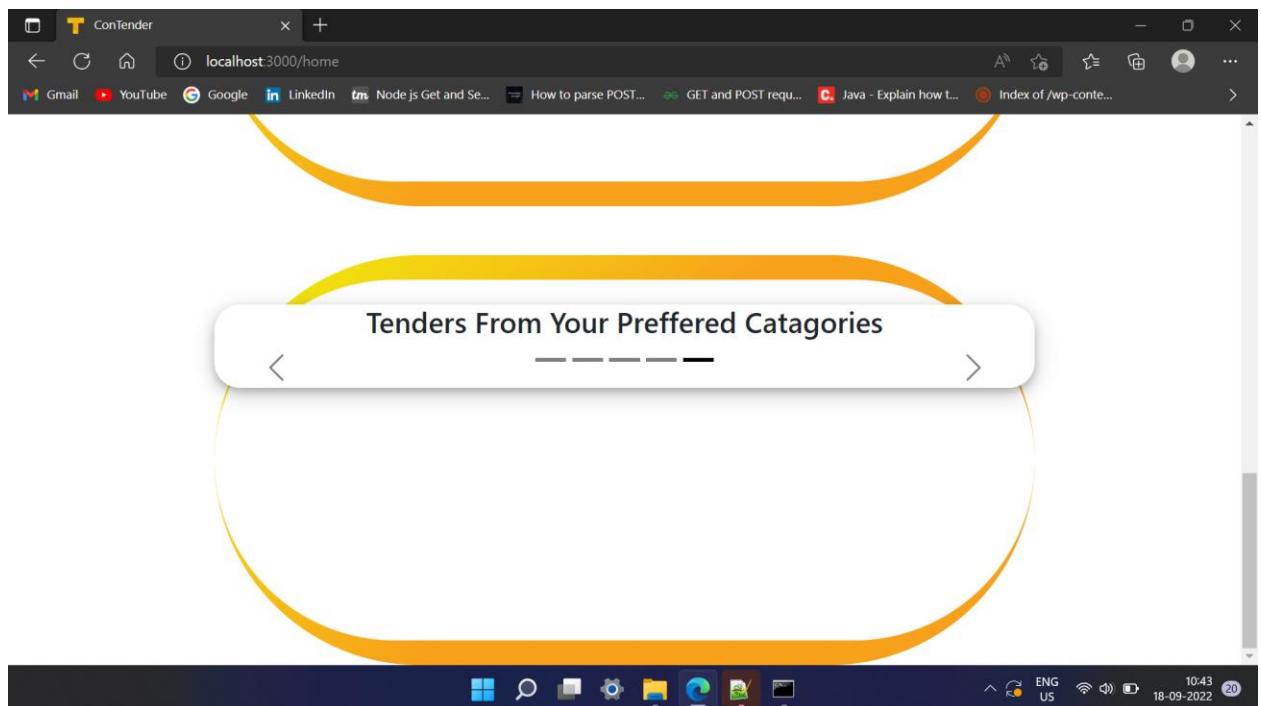
1.1 Anonymous Home Page



## 1.2 Latest Tenders (Anonymous)



## 1.3 Tenders From Your Location(Anonymous)



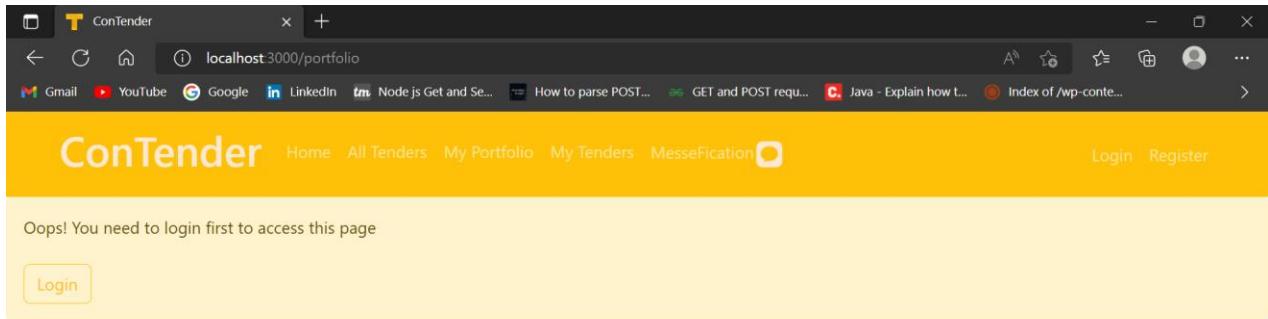
#### 1.4 Preferred Tenders (Anonymous)

A screenshot of a web browser window titled "ConTender" at "localhost:3000/home". The page features a yellow header with the "ConTender" logo and navigation links for Home, All Tenders, My Portfolio, My Tenders, MesseFication, Login, and Register. Below the header, the word "Homepage" is centered. A search bar is located on the left. The main content area shows a section titled "Latest Tenders" with a single item: "1. Chemical 1". Below it, details are listed: Requirements: Procurement of sandalwood oil, Value: 22.46Cr, and Last Date: 2022-09-22, with a "view details" link. A yellow curved arrow points from the top of the page down to the "Latest Tenders" section. On the right side of the browser, the developer tools' storage panel is open, showing Local Storage data for the domain "http://localhost:3000":

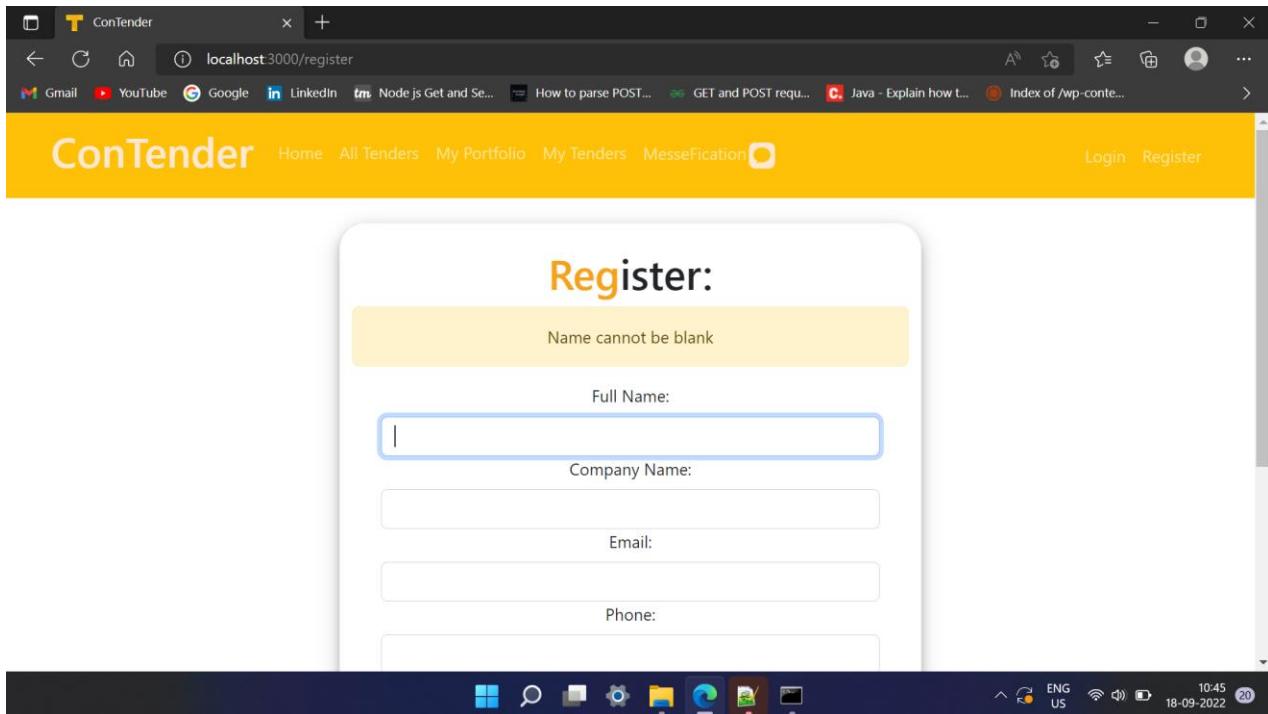
Key	Value
response	success
notifs	4
logstatus	false

The status bar at the bottom of the browser shows "10:44" and "18-09-2022".

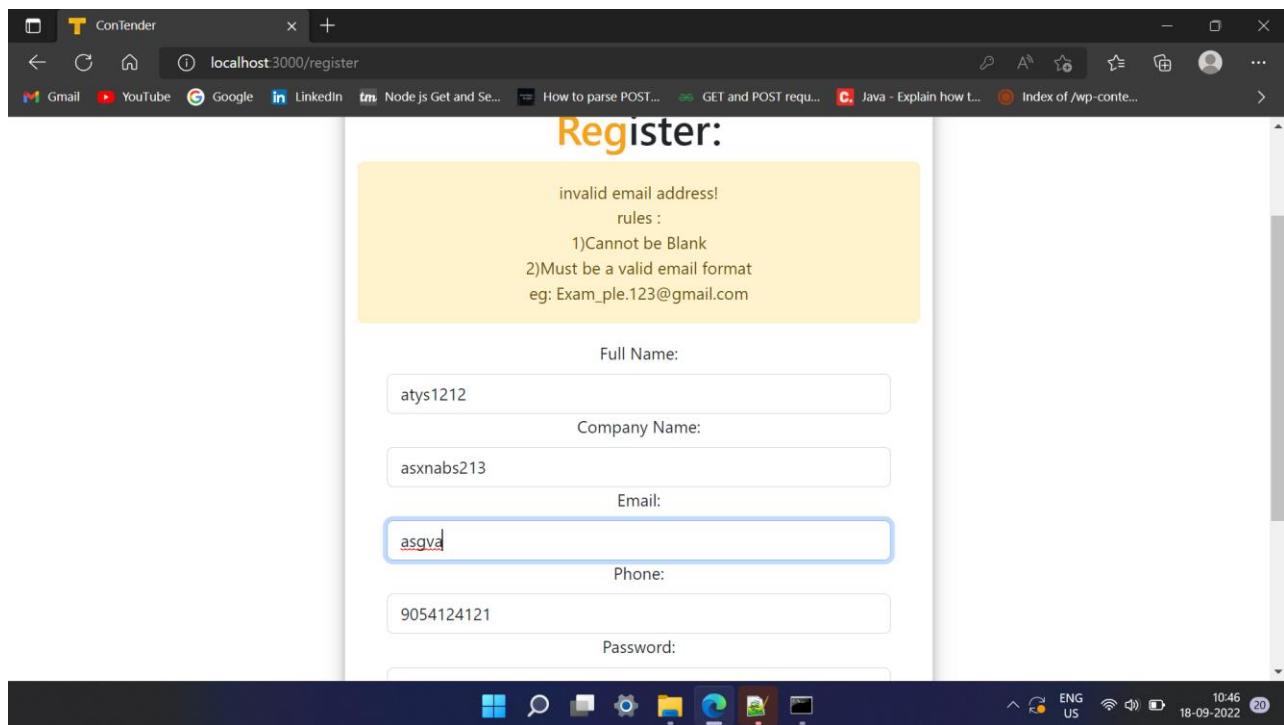
#### 1.5 Local Storage ( Anonymous )



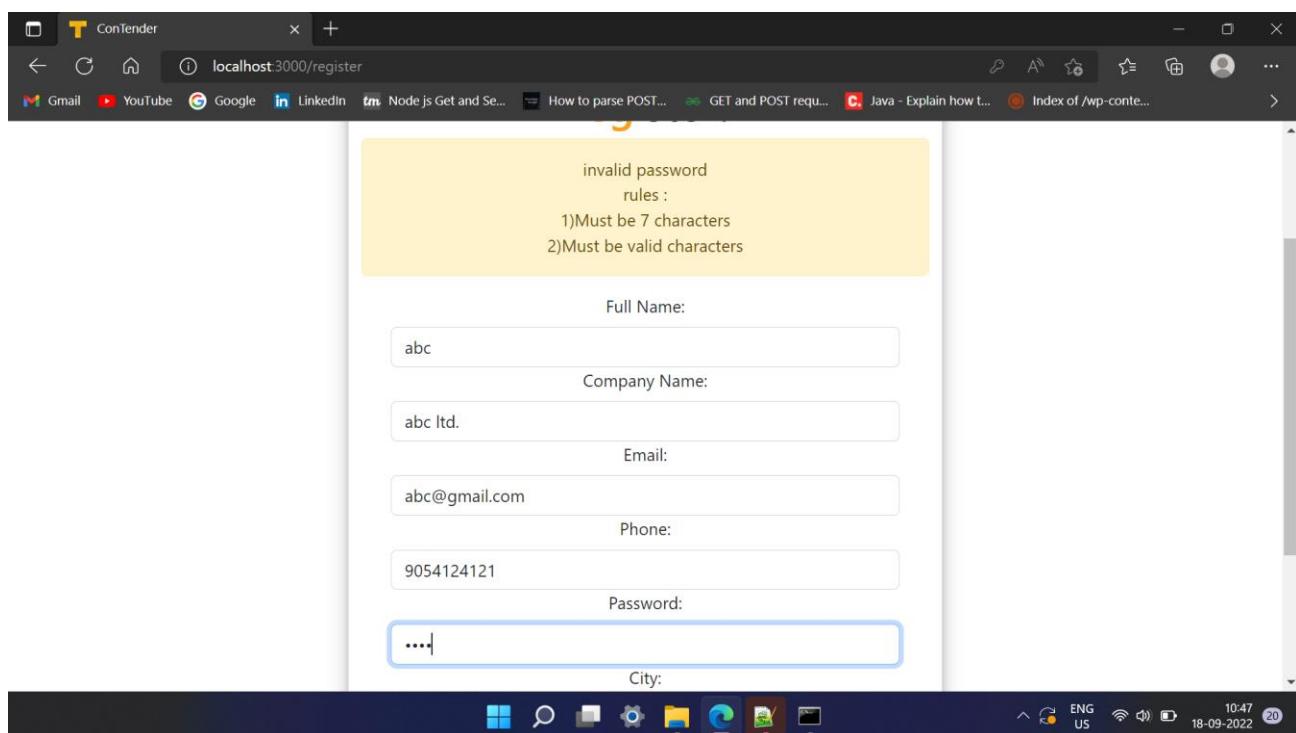
## 1.6 Portfolio (Anonymous )



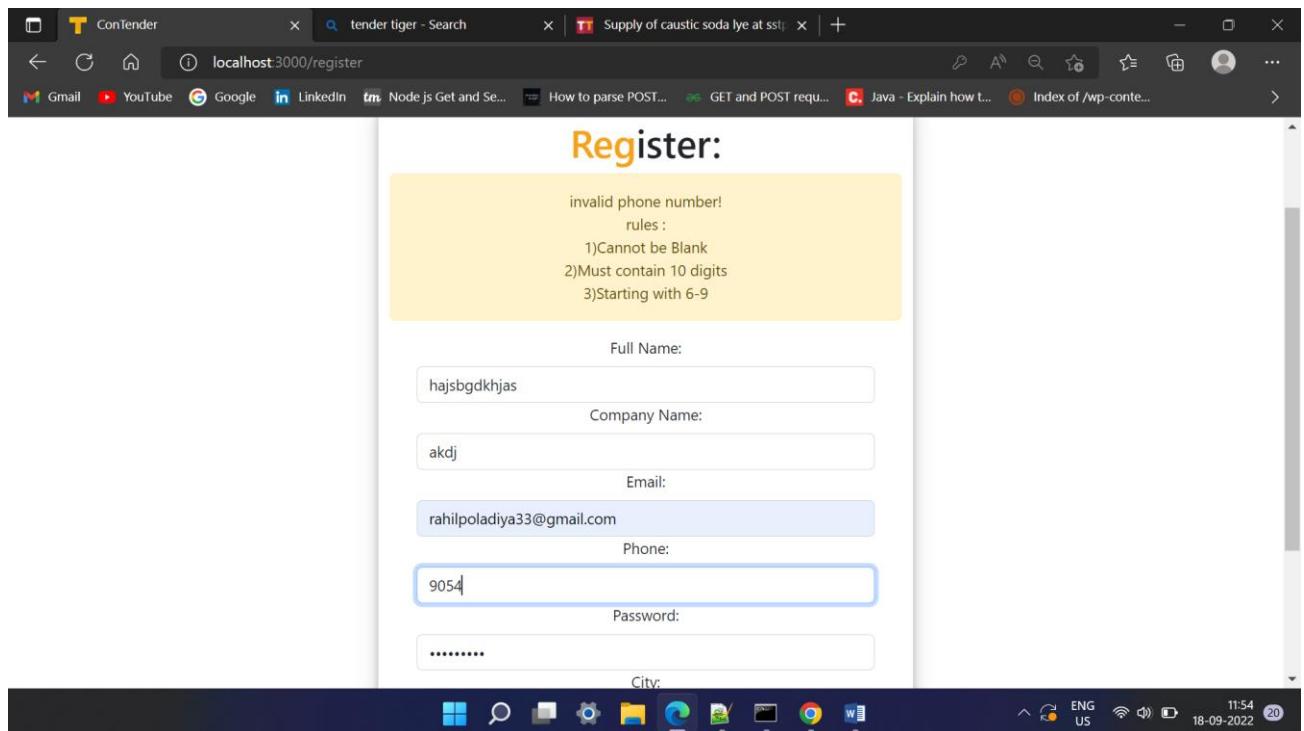
## 1.7 Registration Page with Validation



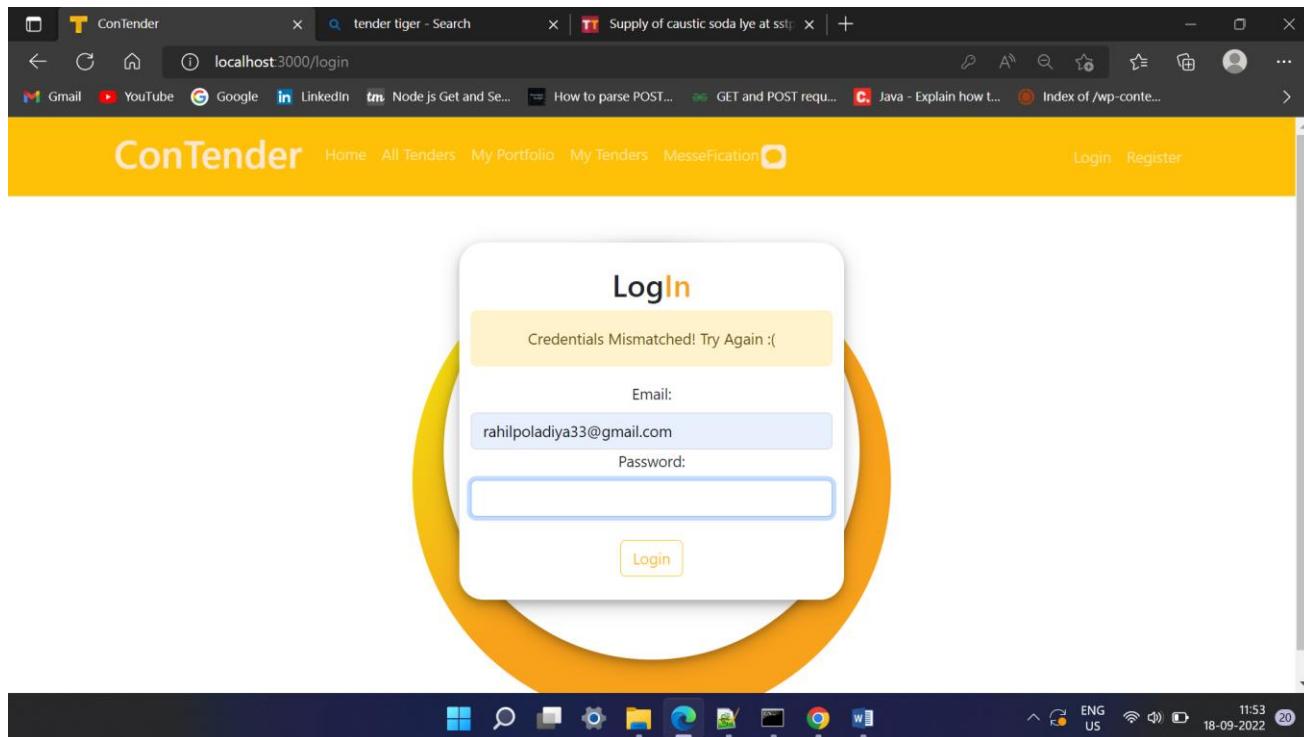
## 1.8 Email Validation (Registration Page)



## 1.9 Password Validation (Registration Page)



## 1.10 Phone Number Validation (Registration page)



## 1.11 Login Page with Credentials Authentication

## 2) LoggedIn State (after user login) :

The screenshot shows a browser window for the 'ConTender' application at localhost:3000/searches?q=Aviation%201. The page title is 'Search'. A search bar contains the query 'Aviation 1'. Below it, the text 'Showing Results For: Aviation 1' is displayed. A card titled '1. Aviation 1' lists requirements: 'Expansion of apron for 10 nos . code 4c type aircraft at sgrdji airport. provision of advance visual docking guidance systems (avdgs) for 10 nos. parking bays.', 'Value: 35.5Mn', and 'Last Date: 2022-09-17'. A link 'view details' is provided. At the bottom of the card, it says 'Uploaded By: Rahil Poladiya ( truemaverick .inc )'. The browser's address bar shows the URL 'localhost:3000/searches?q=Aviation%201'. The taskbar at the bottom includes icons for File Explorer, Task View, Control Panel, and others.

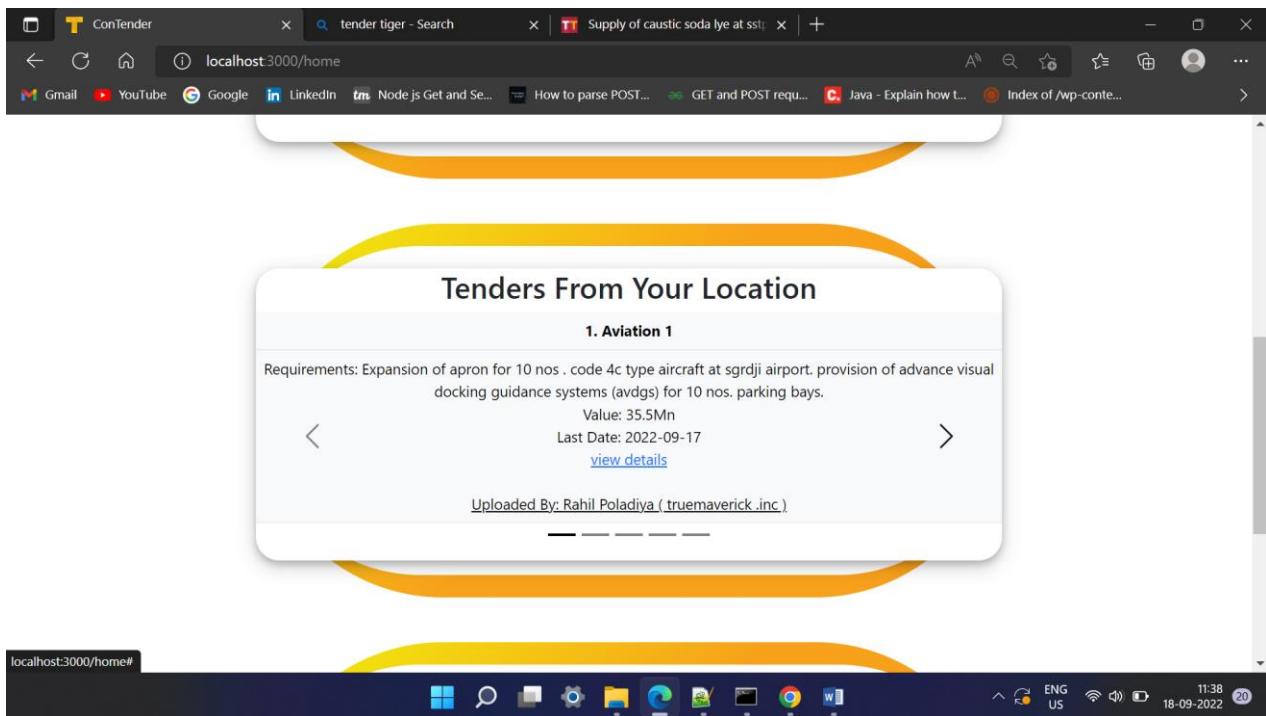
2.1 HomePage (after login)

The screenshot shows the 'ConTender' application homepage at localhost:3000/home. The page title is 'Homepage'. A search bar is present. A large callout box highlights the 'Latest Tenders' section, which displays a card for '1. Chemical 1' with requirements: 'Procurement of sandalwood oil', 'Value: 22.46Cr', and 'Last Date: 2022-09-22'. A link 'view details' is provided. Below the card, it says 'Uploaded By: Krupal Sindhia ( Krupal Enterprise )'. To the right of the main content, a developer tools sidebar is open, specifically the Storage tab under Application. It shows a table of encrypted user data:

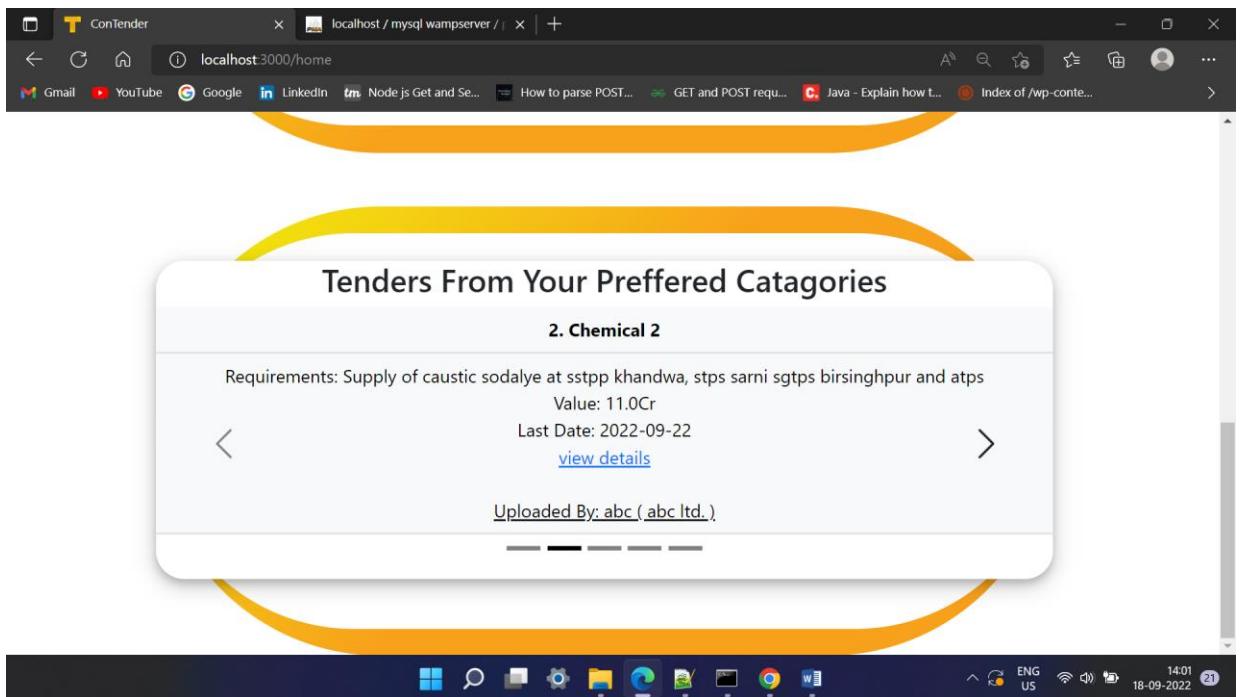
Key	Value
eml	z0i pjqatxswet0i0j+00ikjx...
cty	0jvEsmt0m4(p'00ipz
response	success
role	O4r0i^z0i-
ste	2022-09-18 10:54:15
lastcheck	2022-09-18 10:54:15
notifs	0
logstatus	true
uid	19
un	0Z0i pjqatX0Xswet0i0j+00i
cny	-jPzOmYu0i@~0m^zjq0kEsX(f...
pne	qAh8m-l<ijjd-ijji9

The browser's address bar shows 'localhost:3000/home#'. The taskbar at the bottom includes icons for File Explorer, Task View, Control Panel, and others.

2.2 Encrypted User Data In LocalStorage (after login)



## 2.3 Tenders From My Location ( after login )



## 2.4 My Preferred tenders (after login)

[traces and displays suggestions of tenders that are similar to catagories I bid frequently in]

The screenshot shows a web browser window titled "ConTender" at the URL "localhost:3000/alltend". The main title is "Tenders". Below it is a section titled "Select Catagory:" with four categories: "Electricals" (yellow lightning bolt icon), "Solar" (sun and solar panel icon), "HydroPower" (water wheel and lightning bolt icon), and "Mining" (mine cart icon). A "Reset Filter" button is located below the categories. Navigation arrows (left and right) are positioned on either side of the category icons. The status bar at the bottom shows system information like battery level, signal strength, and date/time.

**1. Aviation 1**

Requirements: Expansion of apron for 10 nos . code 4c type aircraft at sgrdji airport. provision of advance visual docking guidance systems (avdgs) for 10 nos. parking bays.  
Value: 35.5Mn  
Last Date: 2022-09-17  
[view details](#)

## 2.5 All Tenders Page

The screenshot shows a web browser window titled "ConTender" at the URL "localhost:3000/alltend". The main title is "Tenders". Below it is a section titled "Select Catagory:" with four categories: "Military" (tank icon), "Chemicals" (flask icon), "Construction" (construction worker icon), and "Bio" (green leaf icon). A "Reset Filter" button is located below the categories. Navigation arrows (left and right) are positioned on either side of the category icons. The status bar at the bottom shows system information like battery level, signal strength, and date/time.

**Showing results for Catagory : Chemicals**

**1. Chemical 1**

Requirements: Procurement of sandalwood oil  
Value: 22.46Cr  
Last Date: 2022-09-22  
[view details](#)

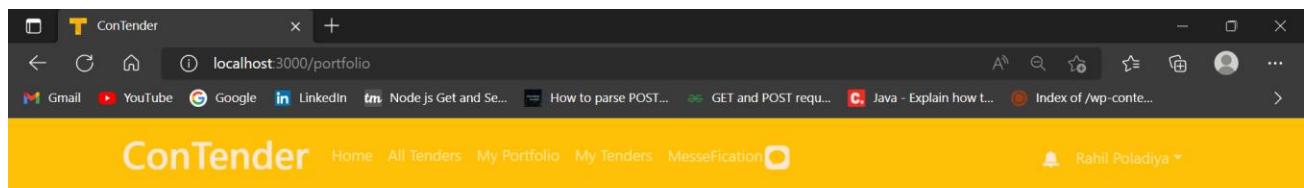
Uploaded By: Krupal Sindha\_( Krupal Enterprise.)

## 2.6 All Tenders ( Sorted By Category : Chemical )

The screenshot shows a web browser window titled 'Contender' with the URL 'localhost:3000/mytenders'. The page has a yellow header with the 'ConTender' logo and navigation links for Home, All Tenders, My Portfolio, My Tenders, and Messefication. A user profile for 'Rahil Poladiya' is visible on the right. The main content area is titled 'My Tenders' and features a button labeled 'Upload +'. Below this, there is a card for a tender titled '1. Aviation 1'. The card contains requirements: 'Expansion of apron for 10 nos . code 4c type aircraft at sgrdji airport. provision of advance visual docking guidance systems (avdgs) for 10 nos. parking bays.', value '35.5Mn', and last date '2022-09-17'. A link 'view details' is provided. At the bottom of the card, it says 'Uploaded By: Rahil Poladiya\_(truemaverick\_inc.)'.

The screenshot shows a web browser window titled 'Contender' with the URL 'localhost:3000/upload'. The page displays a note: 'Username and Company name will be taken from the user credentials of the logged in account'. Below this is a form titled 'Upload:' with fields for 'Tender Title' (a text input), 'Description' (a text area), 'Location' (a dropdown menu with '--Select--'), and 'Category' (another dropdown menu with '--Select--'). The browser's taskbar at the bottom shows various pinned icons and the date '18-09-2022'.

2.8 Upload Tender Form



## Portfolio

Sr.	tid	tender	status	view
1	2	Chemical 1	Bidded	<a href="#">view details</a>



## Homepage

Search bar suggestions: Aviation 1, Chemical 1, Chemical 2

**Latest Tenders**

**1. Chemical 2**

Requirements: Supply of caustic sodalaye at sstpp khandwa, stps sarni sgtps birsinghpur and atps  
Value: 11.0Cr  
Last Date: 2022-09-22  
[view details](#)

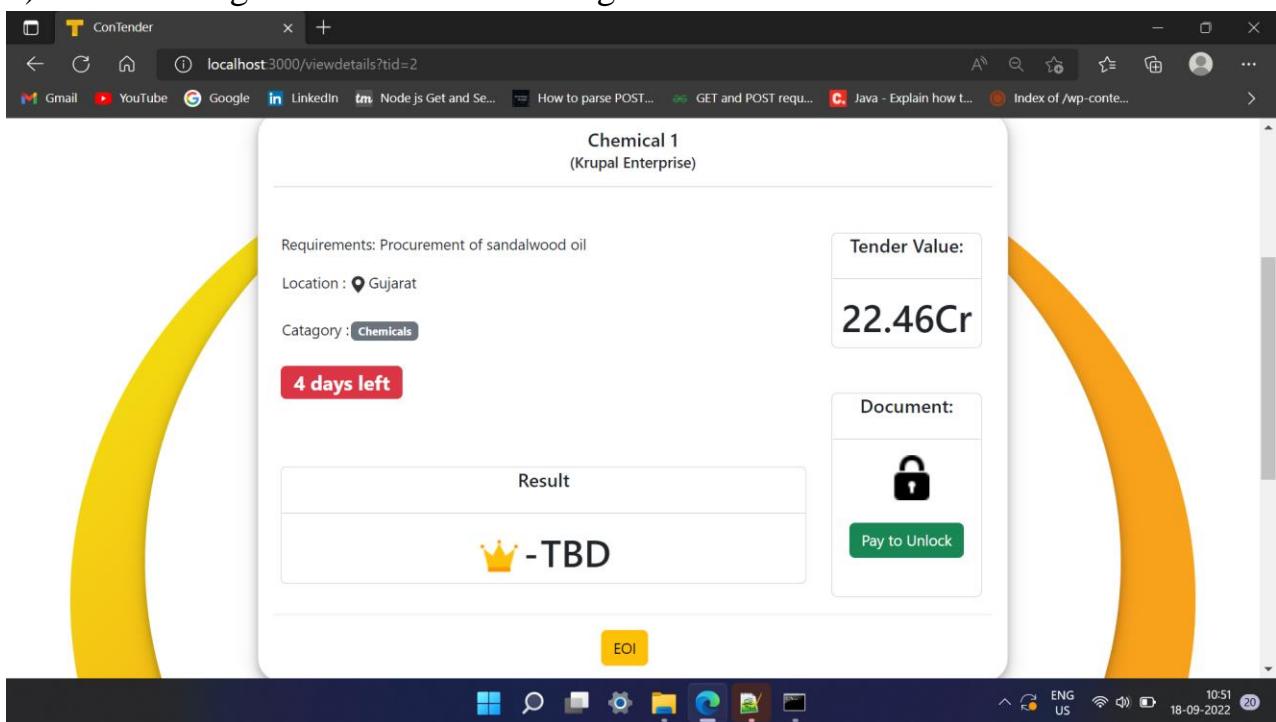
Uploaded By: abc (abc ltd.)

## 2.10 Search bar with search suggestion

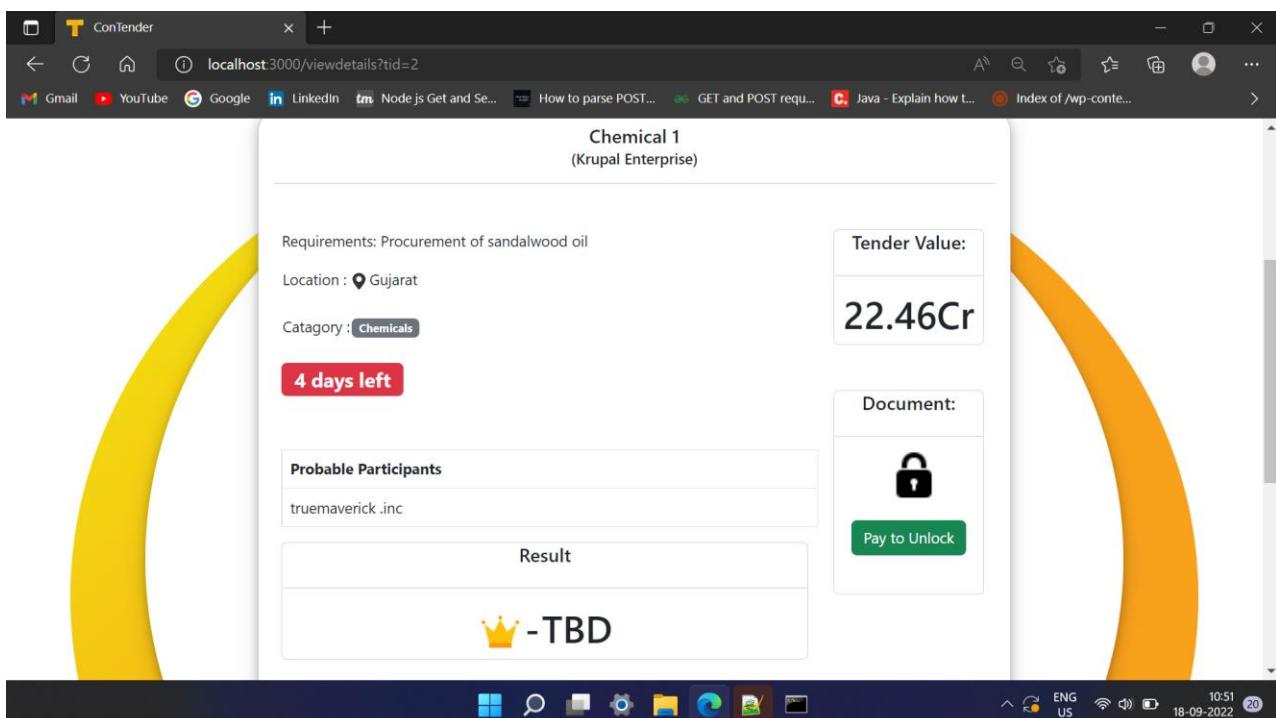
The screenshot shows a web browser window for the 'ConTender' application. The URL in the address bar is 'localhost:3000/searches?sq=Aviation%201'. The page has a yellow header with the 'ConTender' logo and navigation links for Home, All Tenders, My Portfolio, My Tenders, MesseFication, a notification bell, and user profile for 'Rahil Poladiya'. The main content area is titled 'Search' and contains a search bar with the placeholder 'Search' and a magnifying glass icon. Below the search bar, the text 'Showing Results For: Aviation 1' is displayed. A single search result is shown in a card with a grey header '1. Aviation 1'. The result details: Requirements: Expansion of apron for 10 nos . code 4c type aircraft at sgrdji airport. provision of advance visual docking guidance systems (avdgs) for 10 nos. parking bays. Value: 35.5Mn. Last Date: 2022-09-17. A blue 'view details' link is present. At the bottom of the card, it says 'Uploaded By: Rahil Poladiya ( truemaverick .inc )'. The browser's taskbar at the bottom shows various pinned icons and the date/time '18-09-2022 10:48'.

2.11 Search Results Page

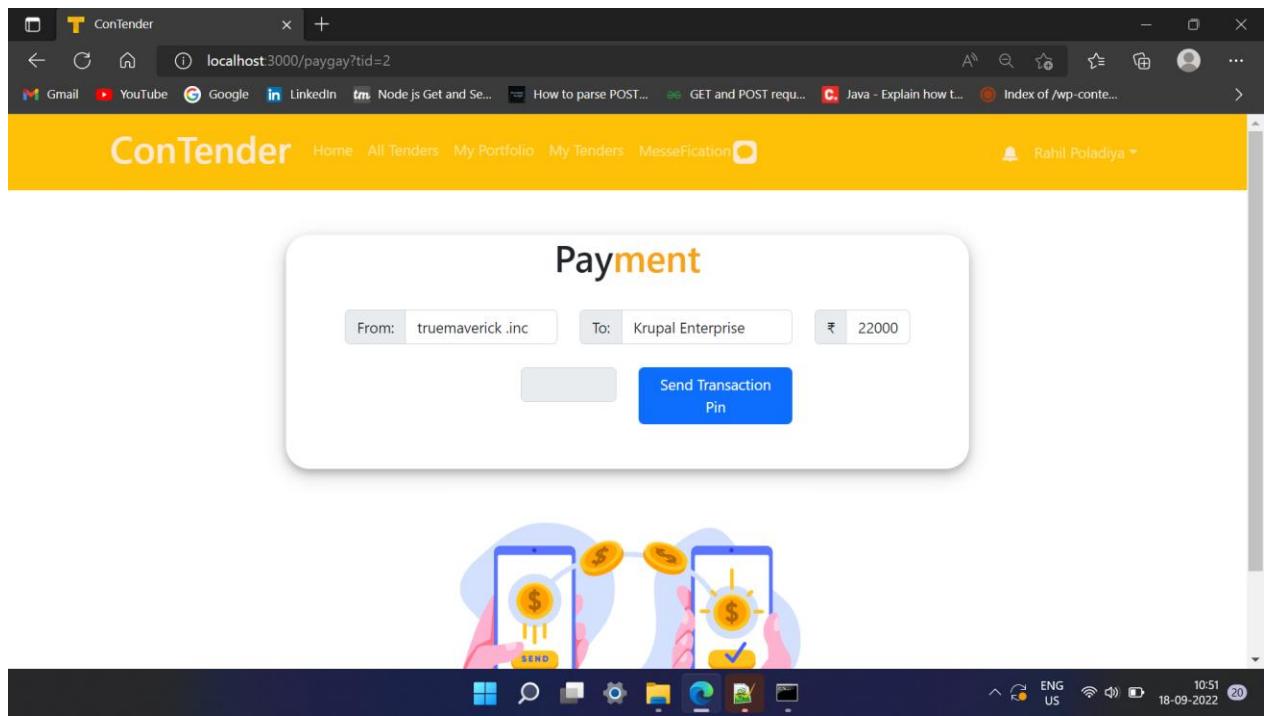
### 3) Detailed Stages of Tender Details Page:



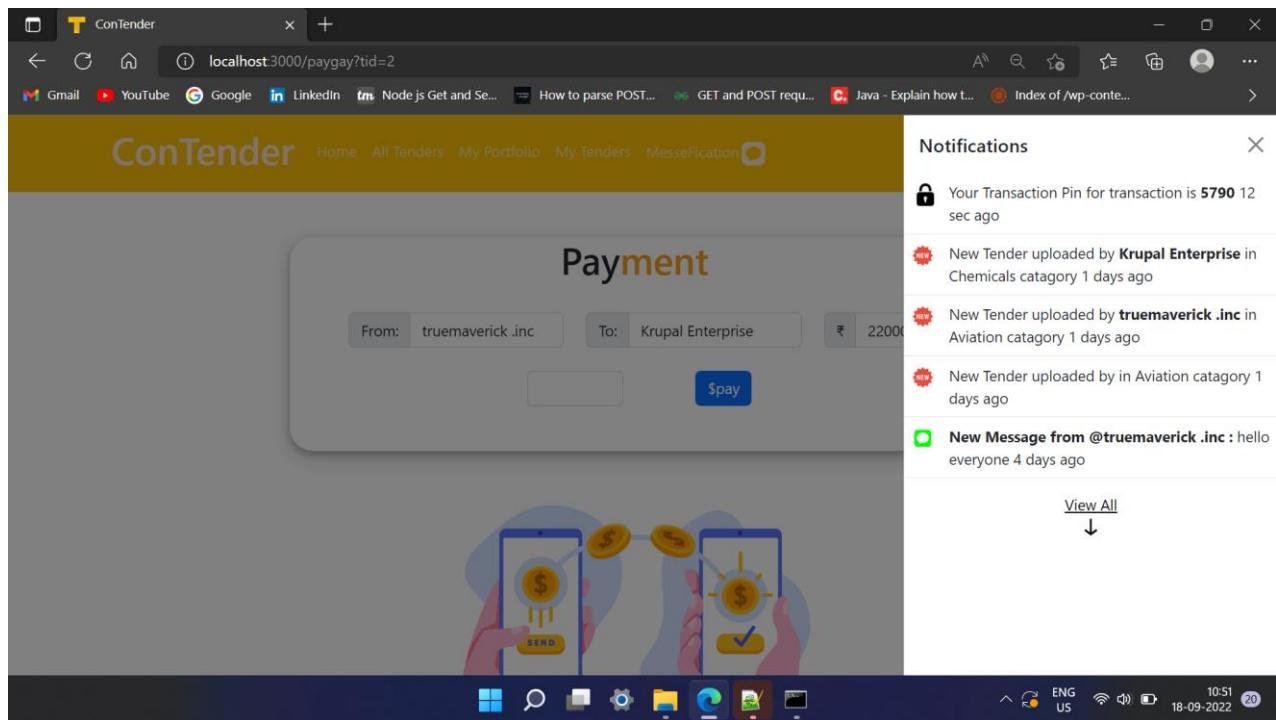
3.1 Pristine Stage View



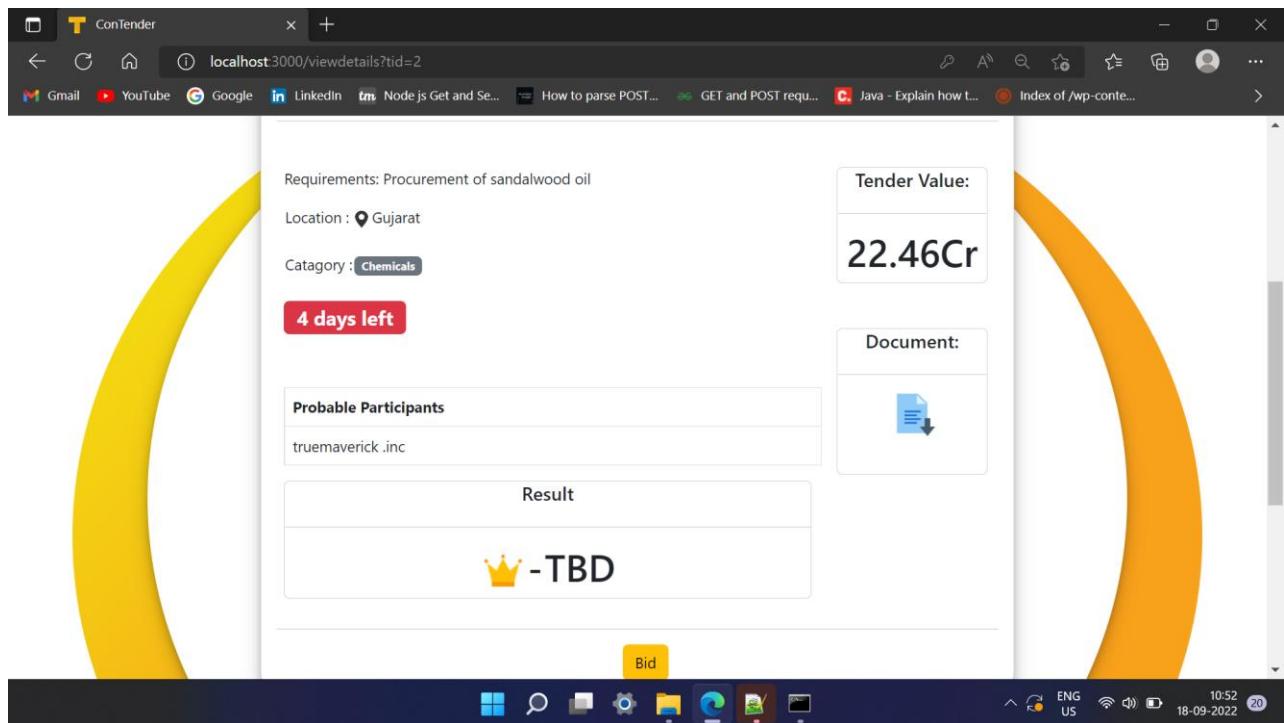
3.2 Expressed Interest Stage View



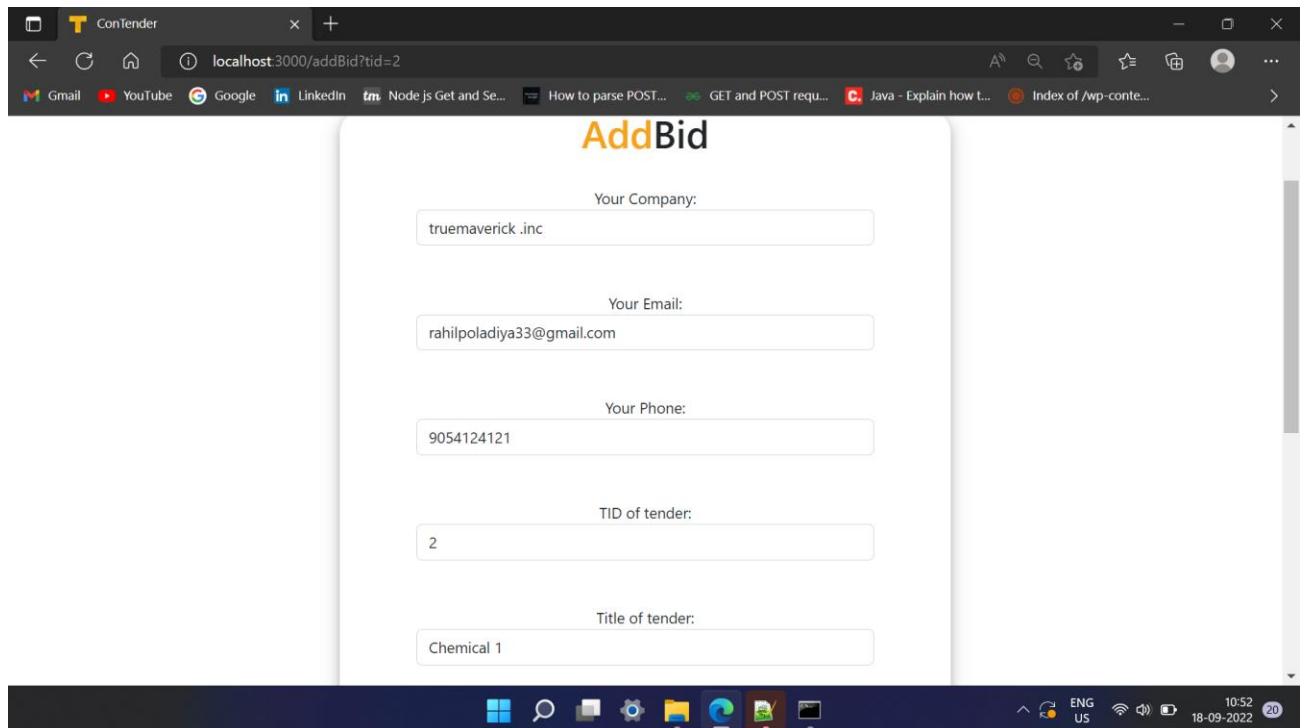
3.3 Payments Page ( onclick of pay-to-unlock )



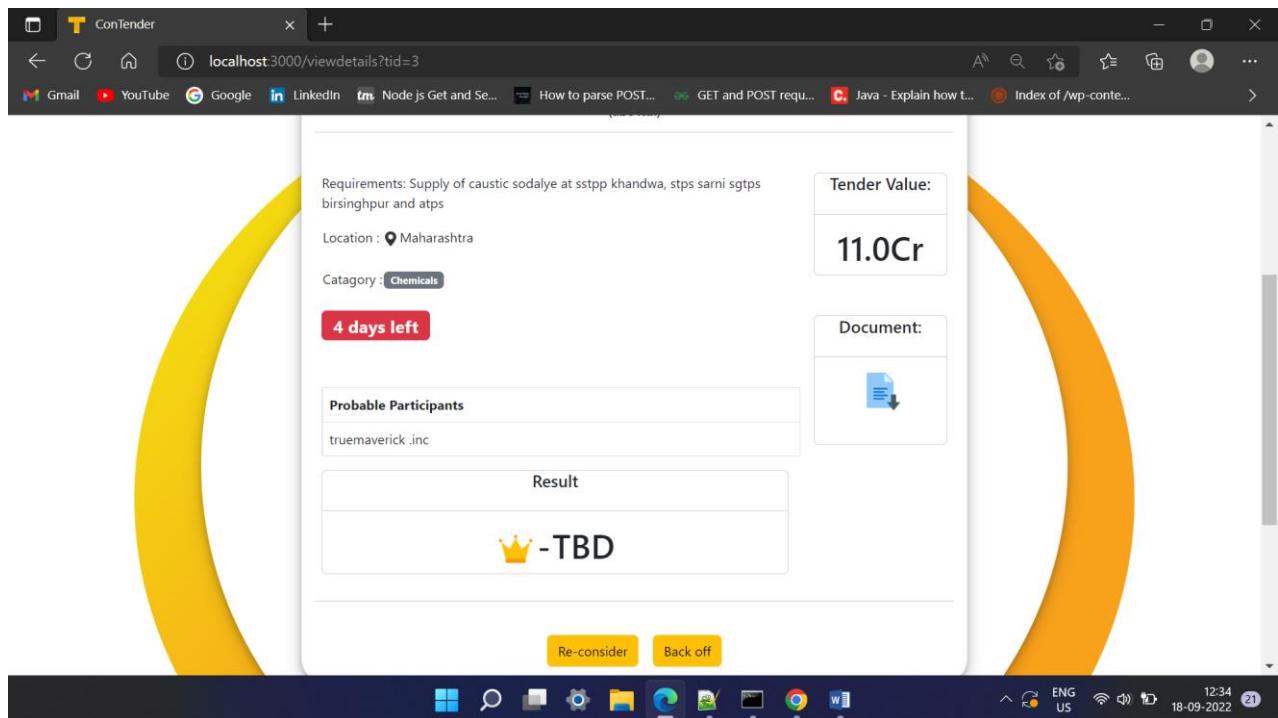
3.4 Receiving Transaction Pin via Notifications to Make Payment



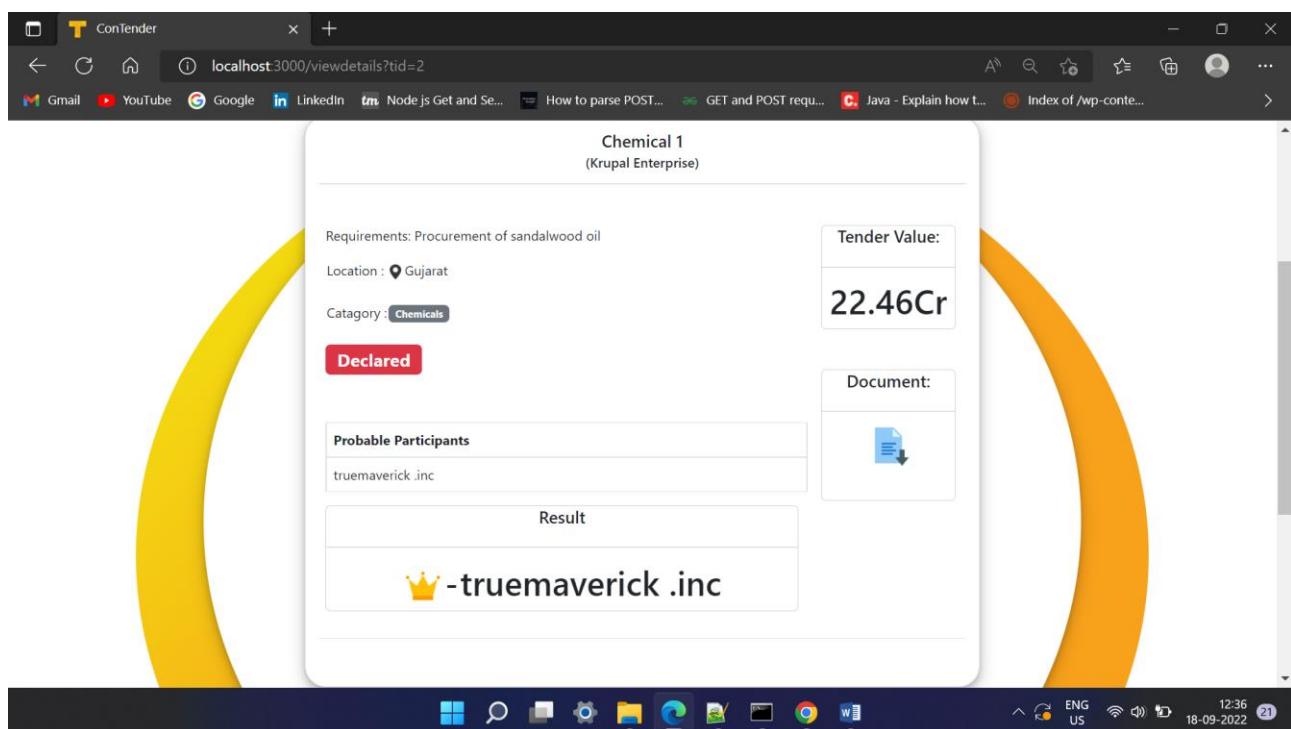
### 3.5 Post-Payment Stage View



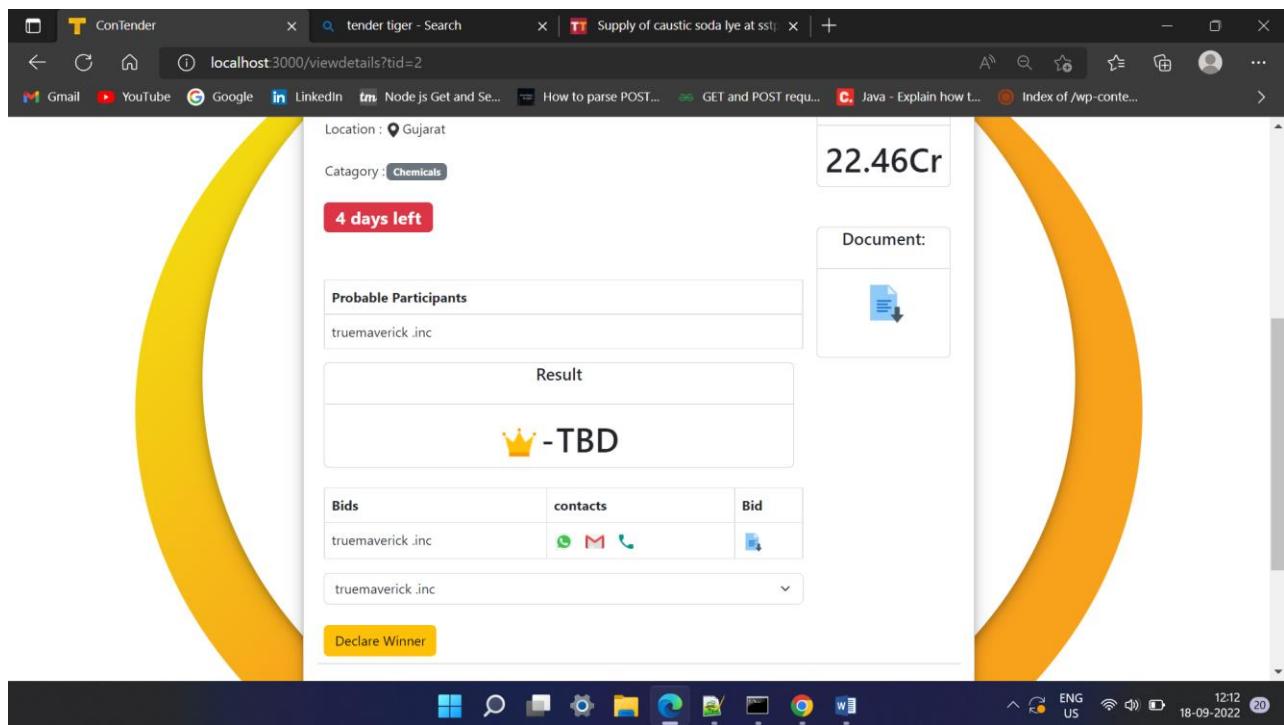
### 3.6 Bid Filing Form



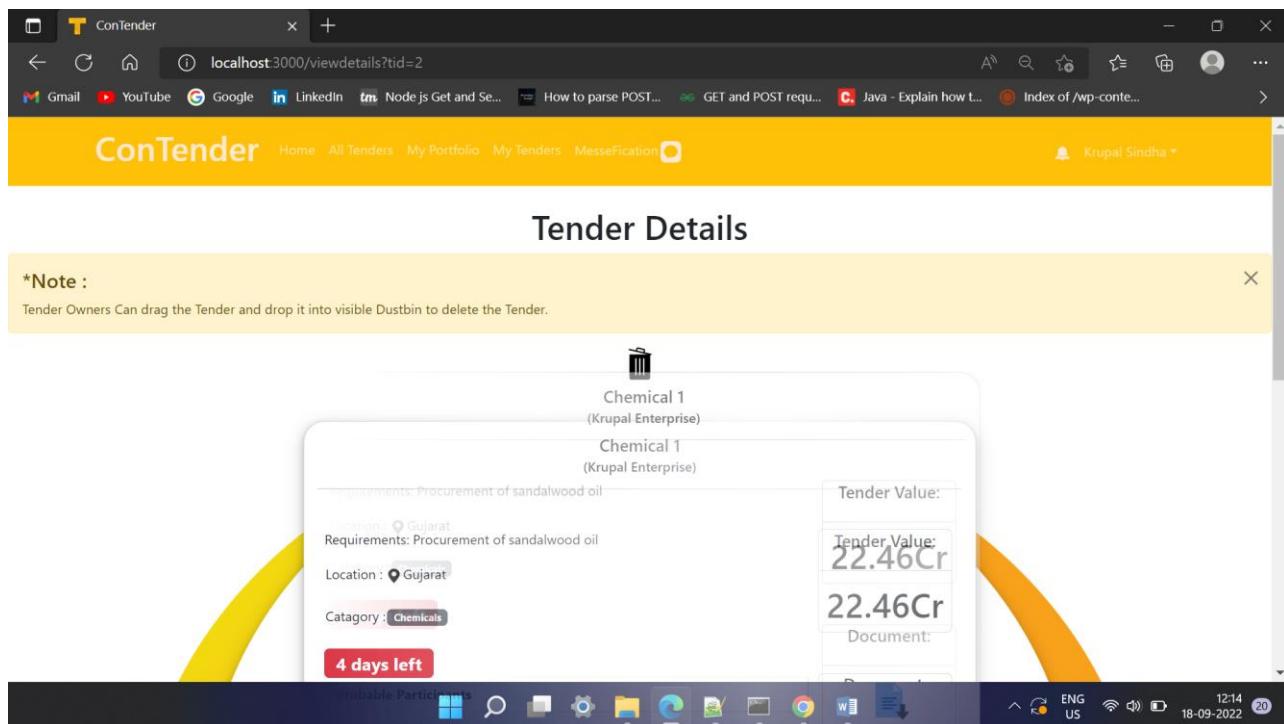
3.7 Post-Bidding Stage View



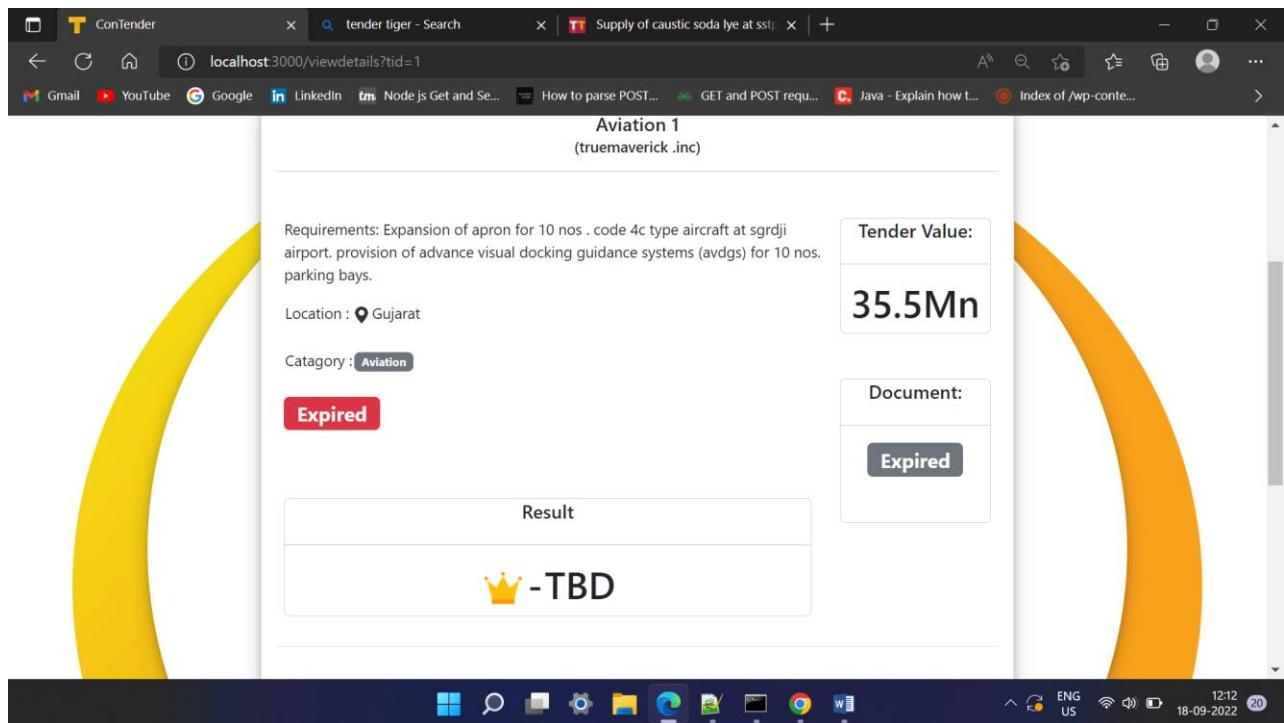
3.8 After Winner Declaration Stage View



### 3.9 Owner View

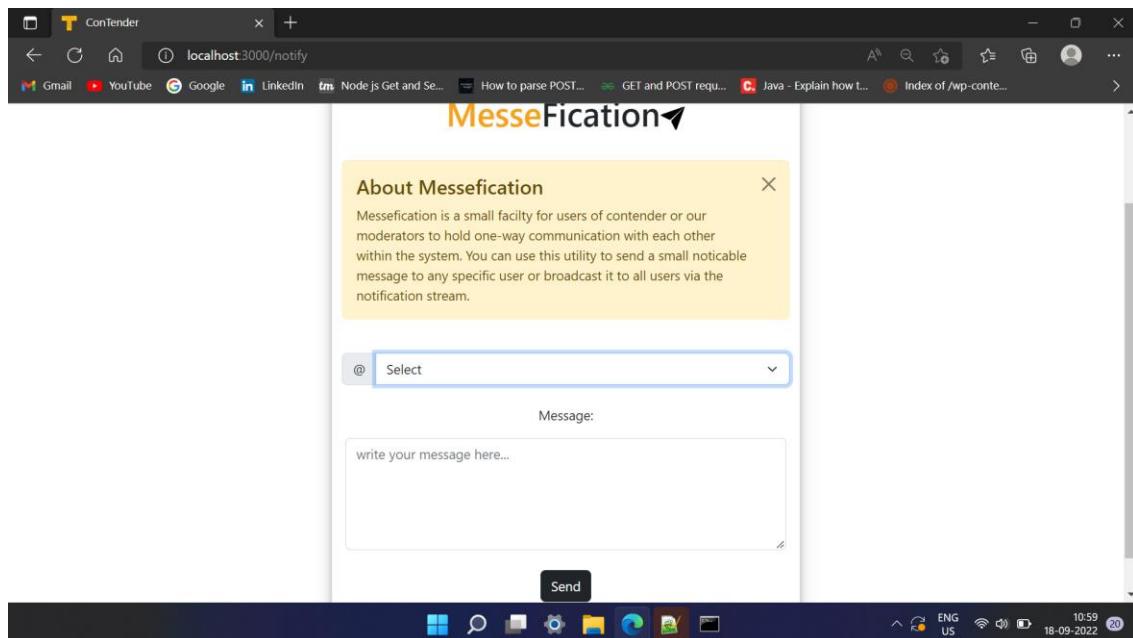


### 3.10 Delete Tender(Drag drop into dustbin \*Only In Owner View\*)

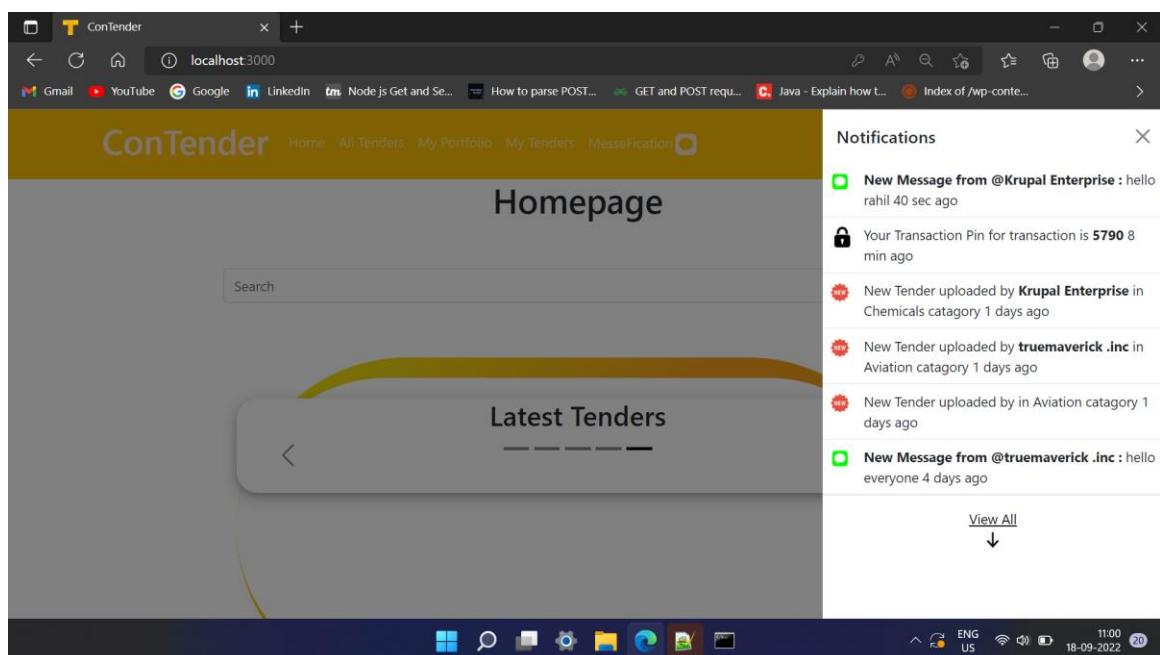


3.11 Expired Tender Stage

#### 4) Messefication And Notifications :

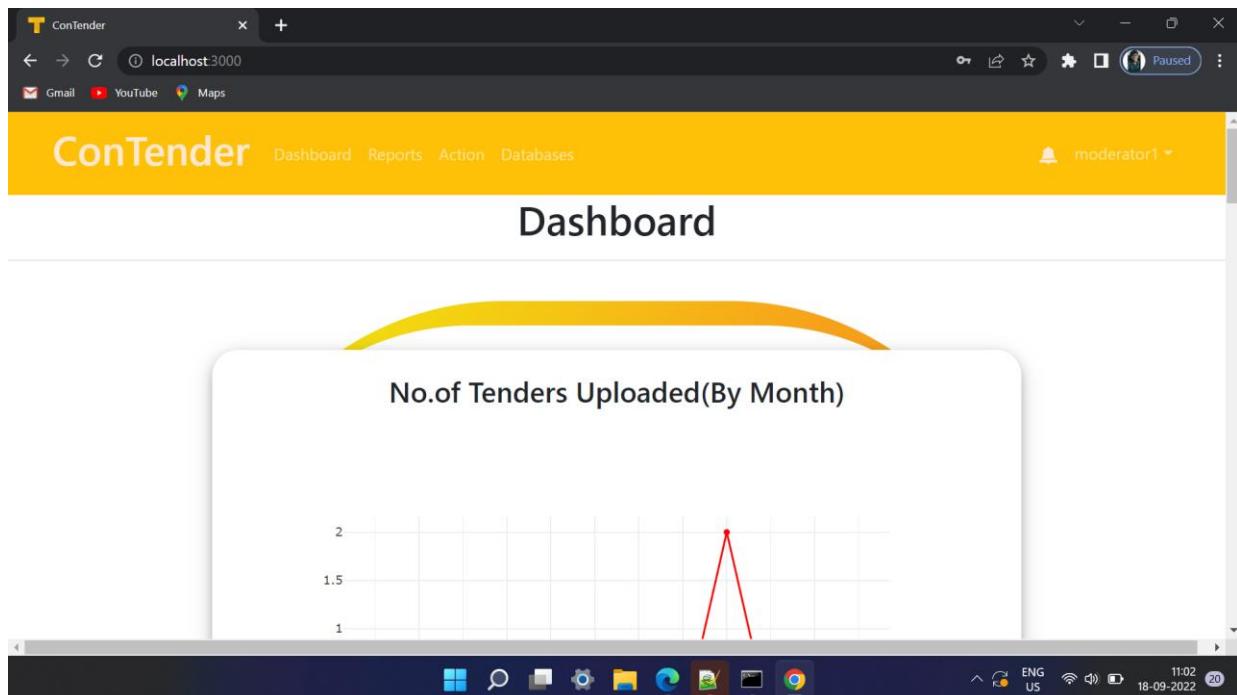


4.1 Messefication Page ( Users Side )

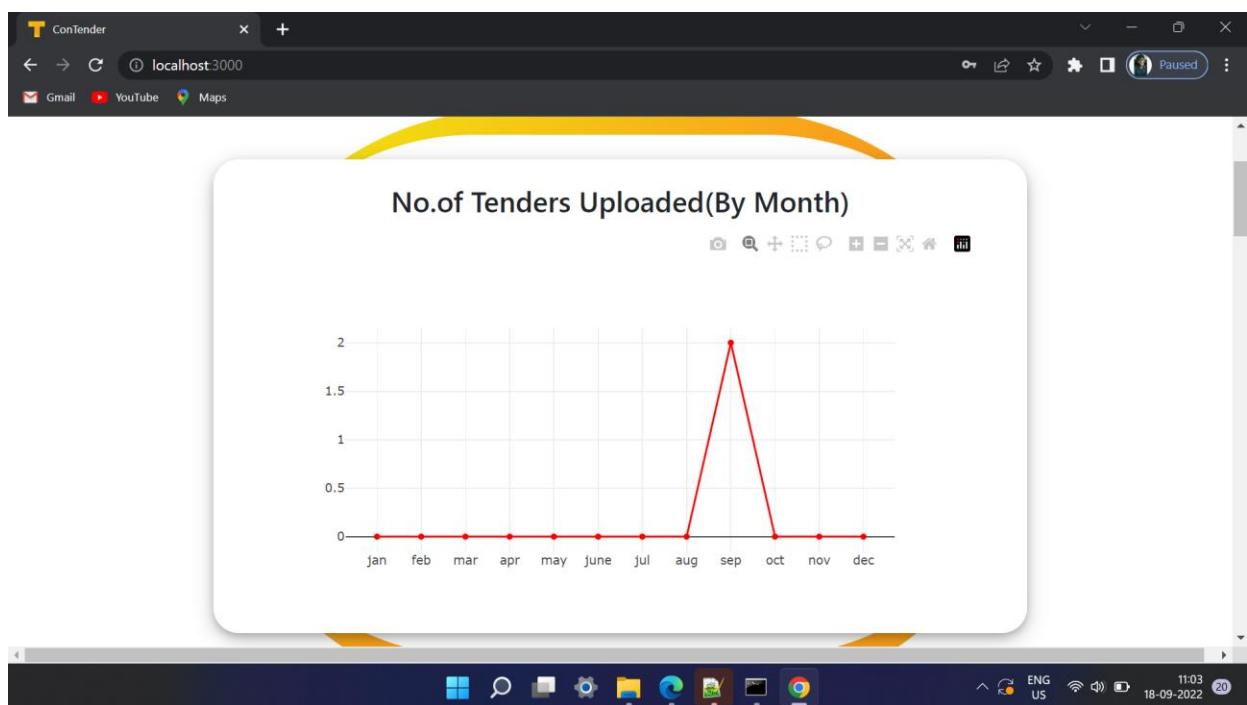


4.2 Receiving Messefication

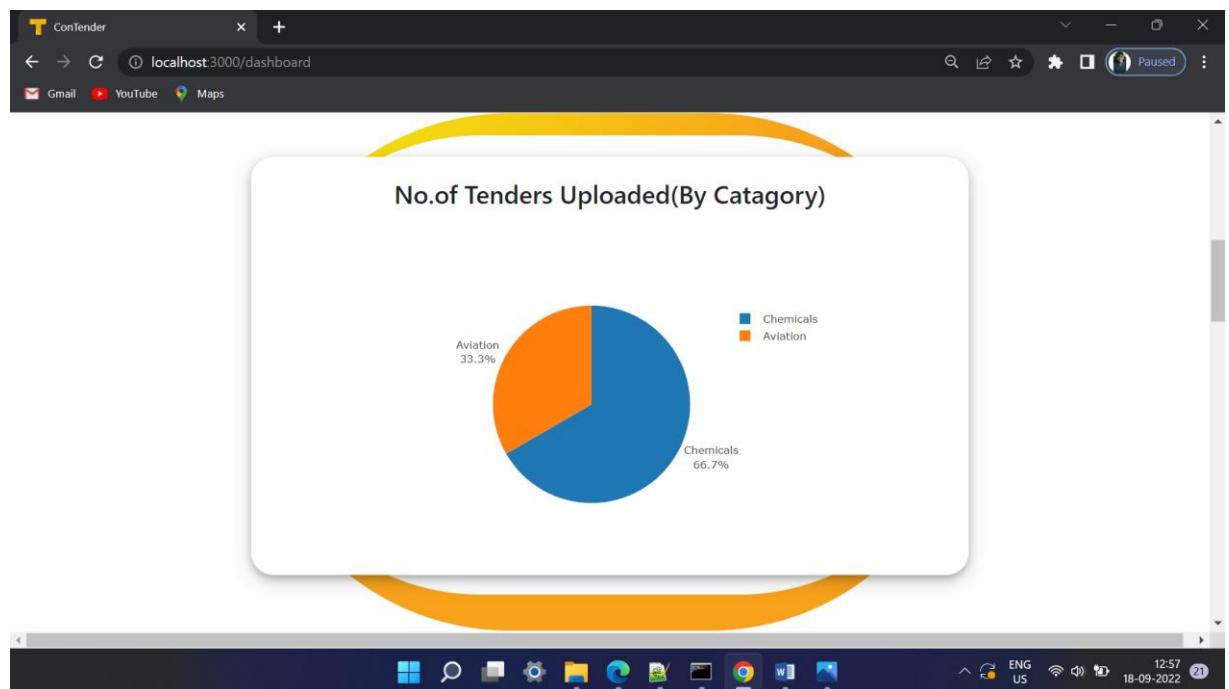
## 5) Login as Moderator View:



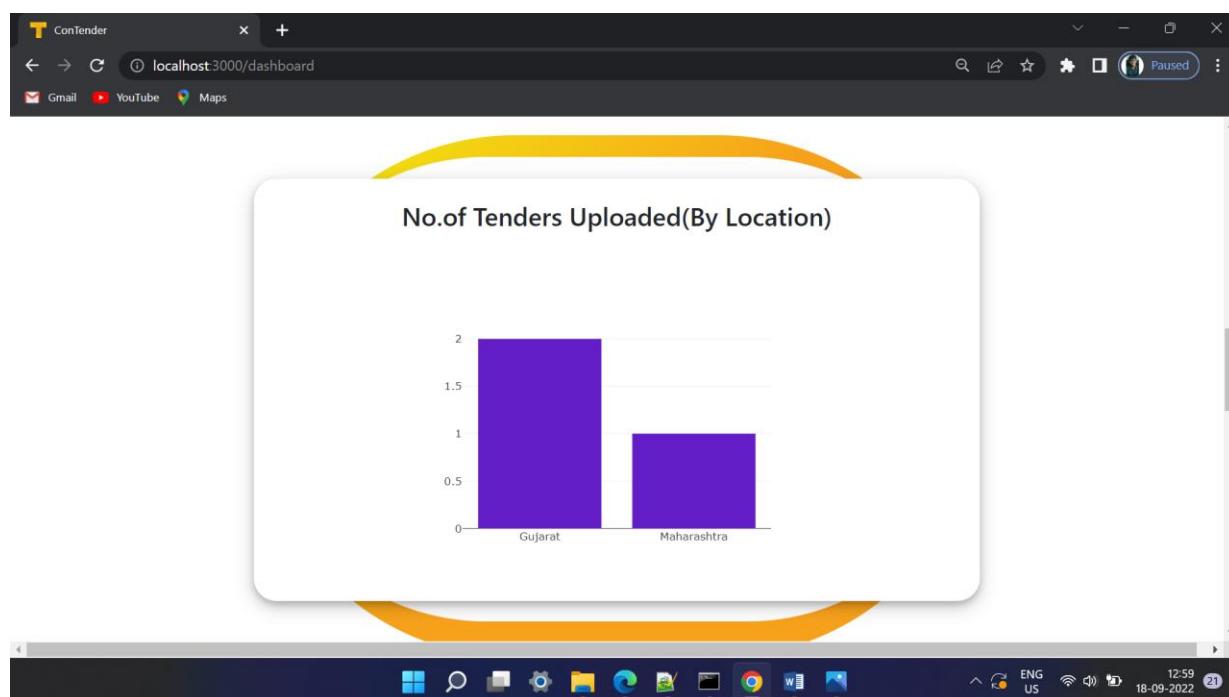
5.1 Dashboard ( Home page ) for Moderators



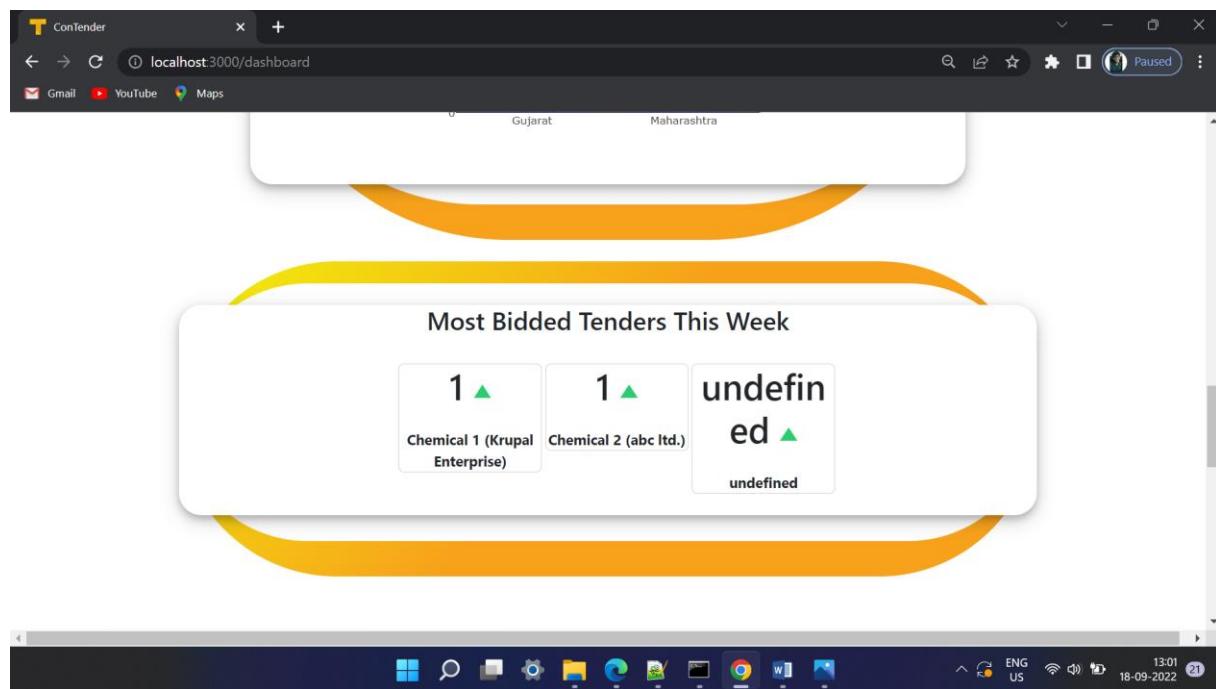
5.2 Number Of Tenders Uploaded By each Month Graph  
(Dashboard)



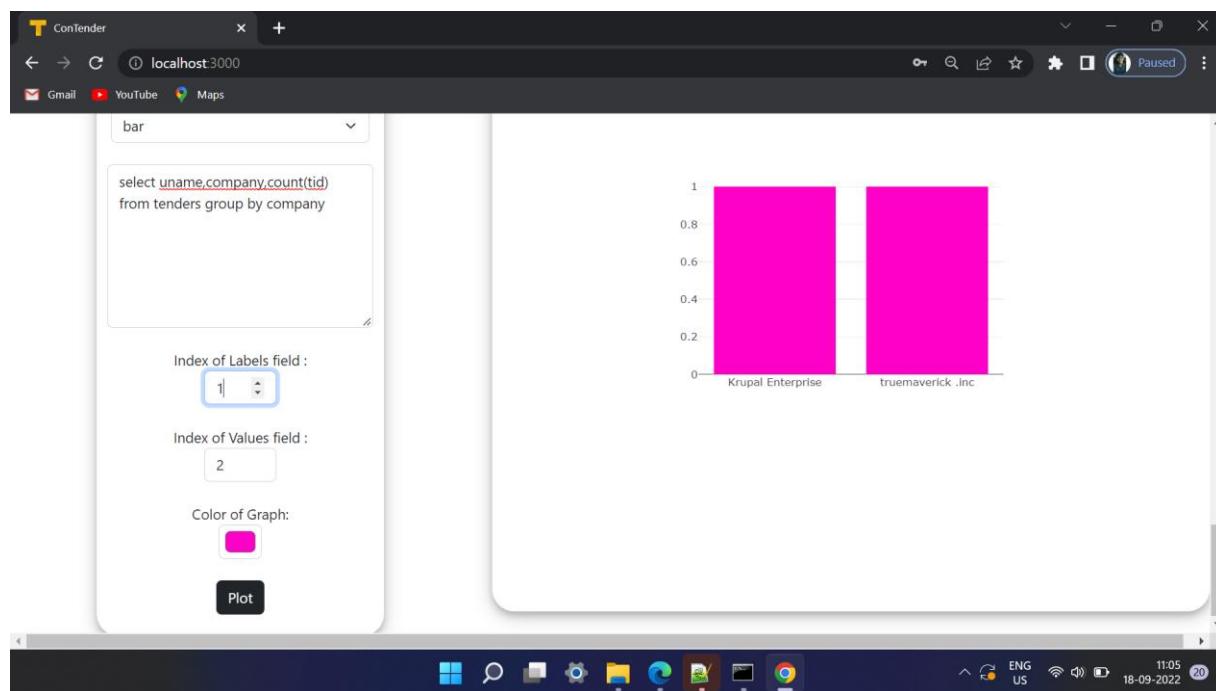
5.3 Number Of Tenders Uploaded in each Catagory  
(Dashboard)



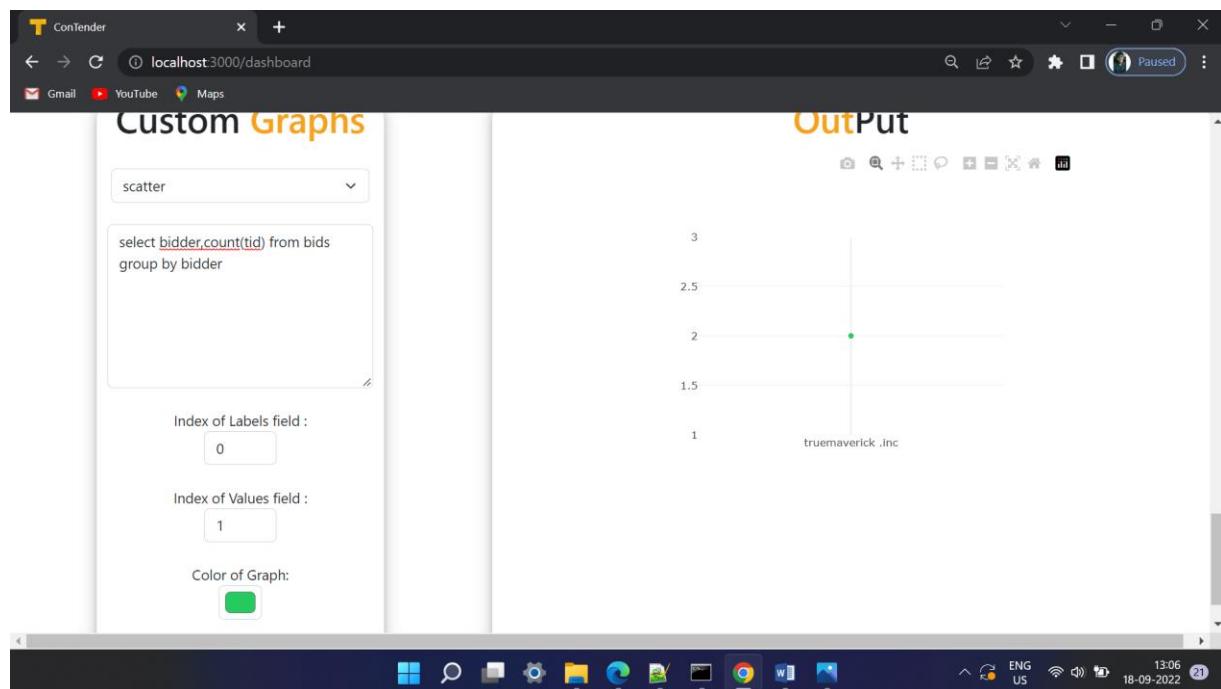
5.4 Number Of Tenders Uploaded from each location  
(Dashboard)



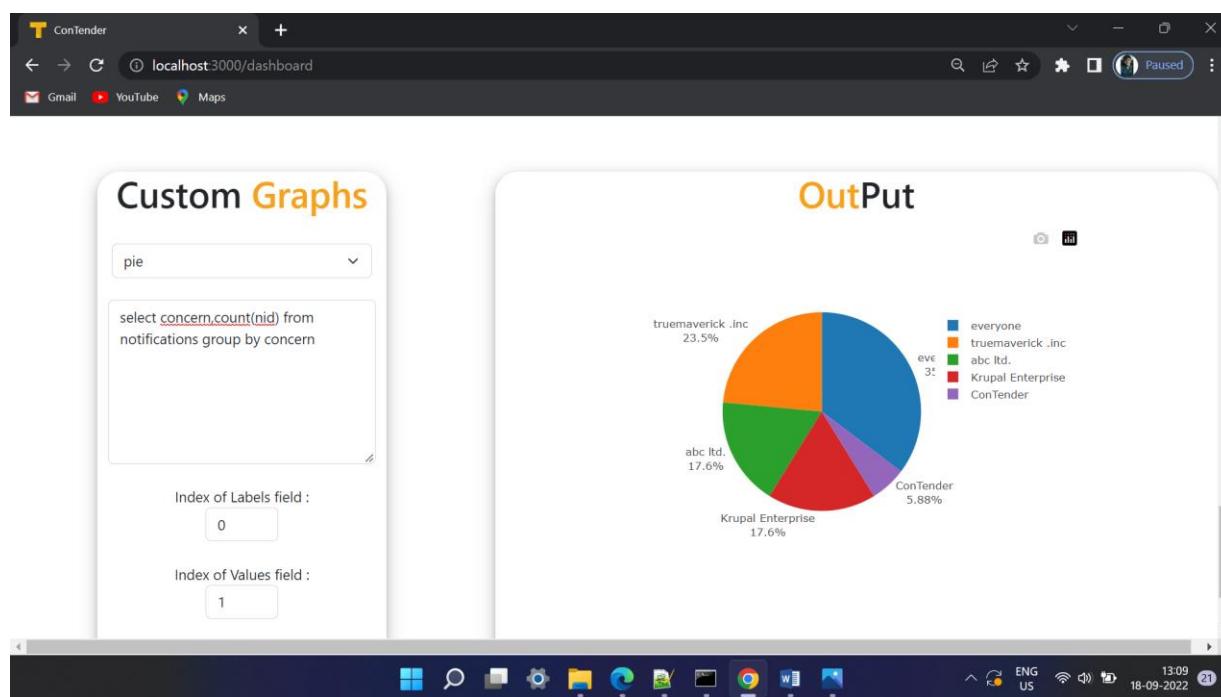
5.5 Top 3 Most Bided Tenders This Week  
(Dashboard)



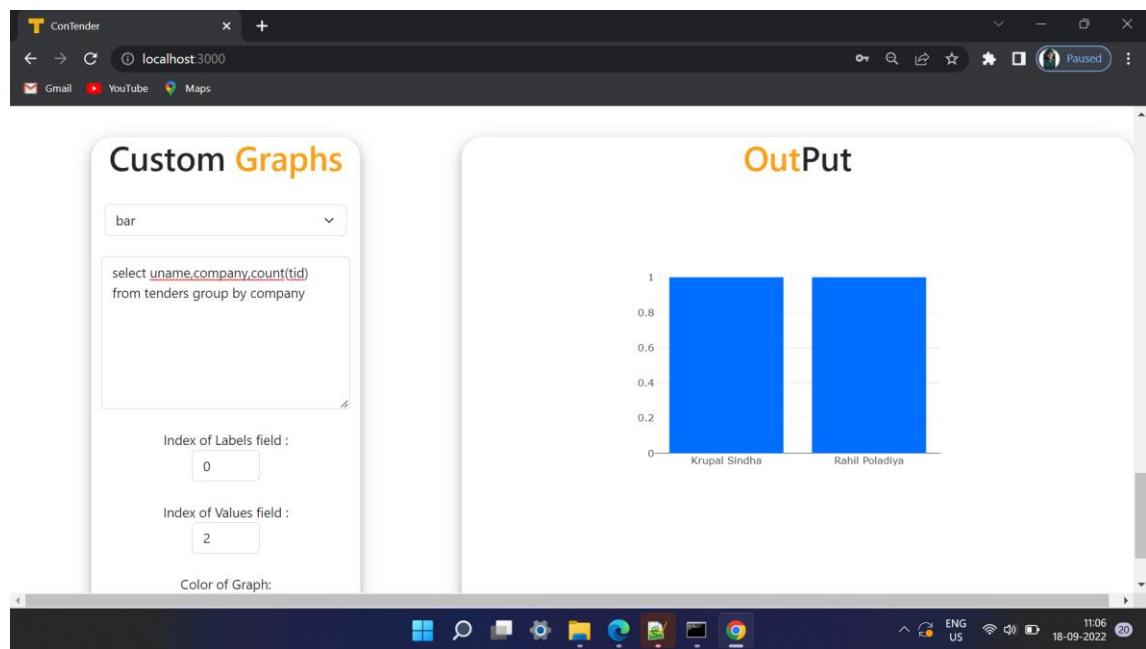
5.6 Custom Graph (Bar for User defined Select Query)  
(Dashboard)



**5.7 Custom Graph (Scatter for User defined Select Query) (Dashboard)**

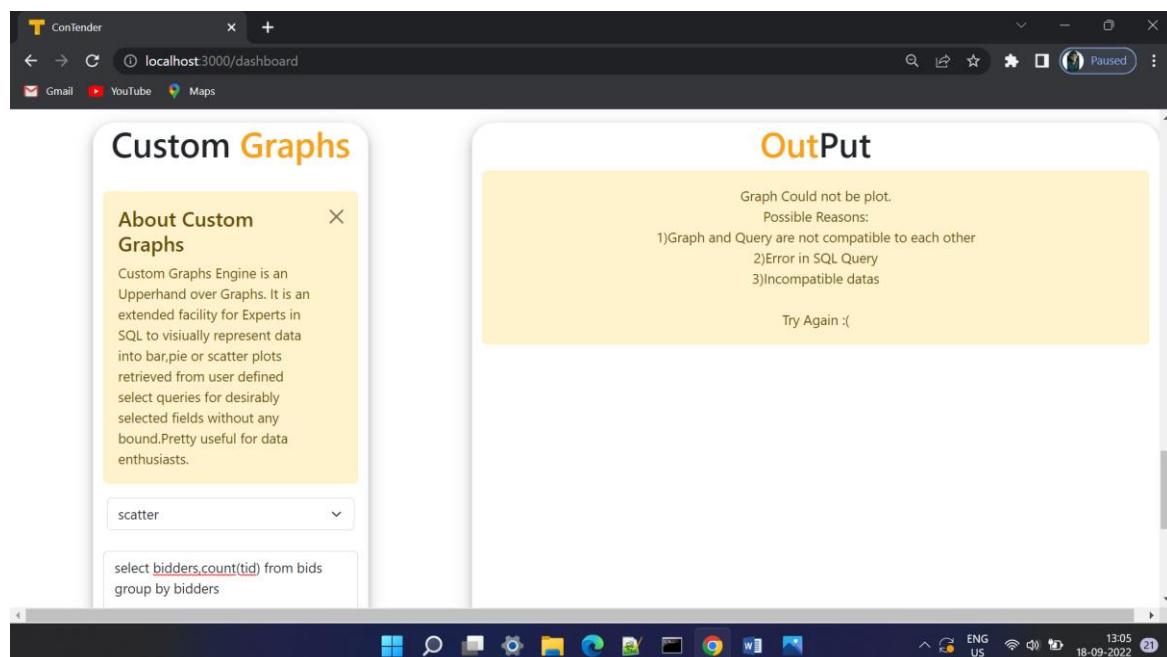


**5.8 Custom Graph (Pie for User defined Select Query) (Dashboard)**

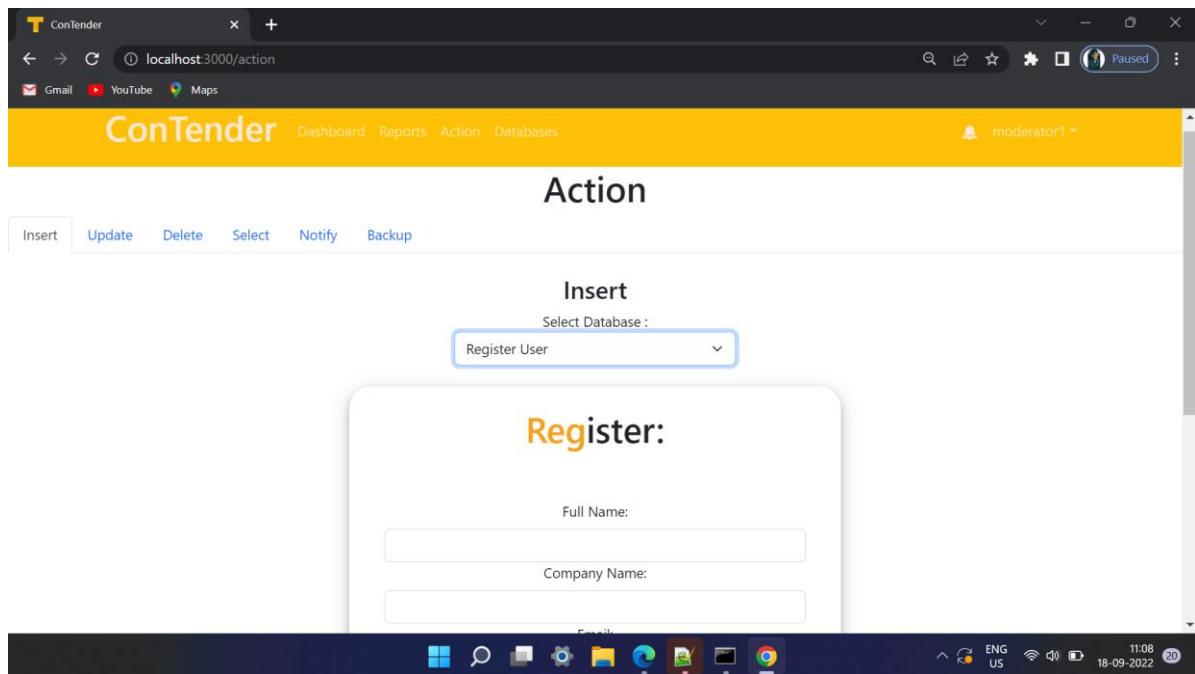


### 5.9 Custom Graph (Bar for User defined Select Query)

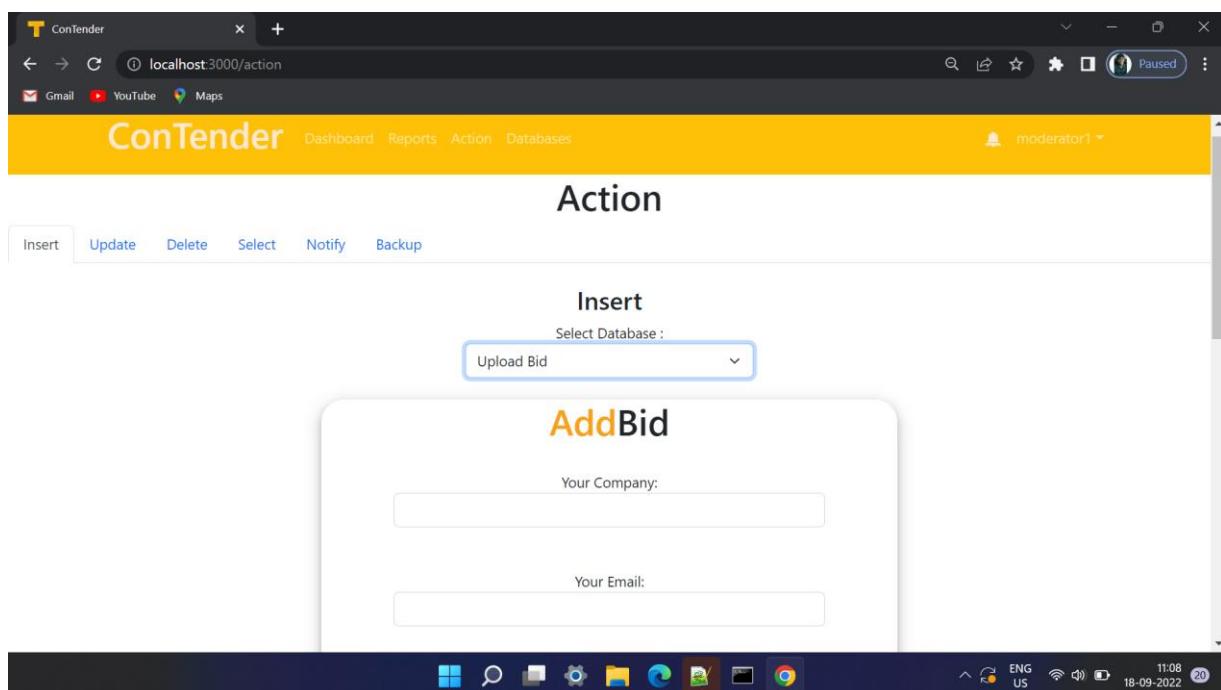
[ To depict that user can choose between different fields in their select Query to generate graph. In 5.6 Company was used as label field for same query, here label field is switched to Uname instead ]  
 (Dashboard)



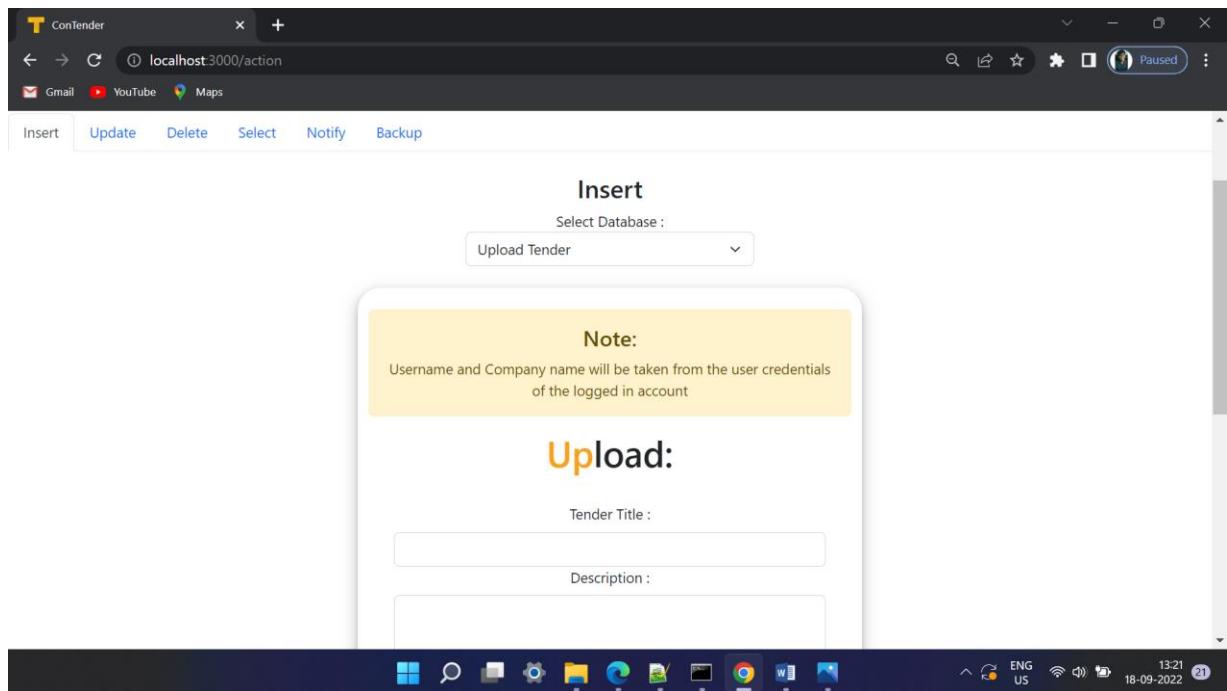
### 5.10 Error Message If Graph could not be generated (Dashboard)



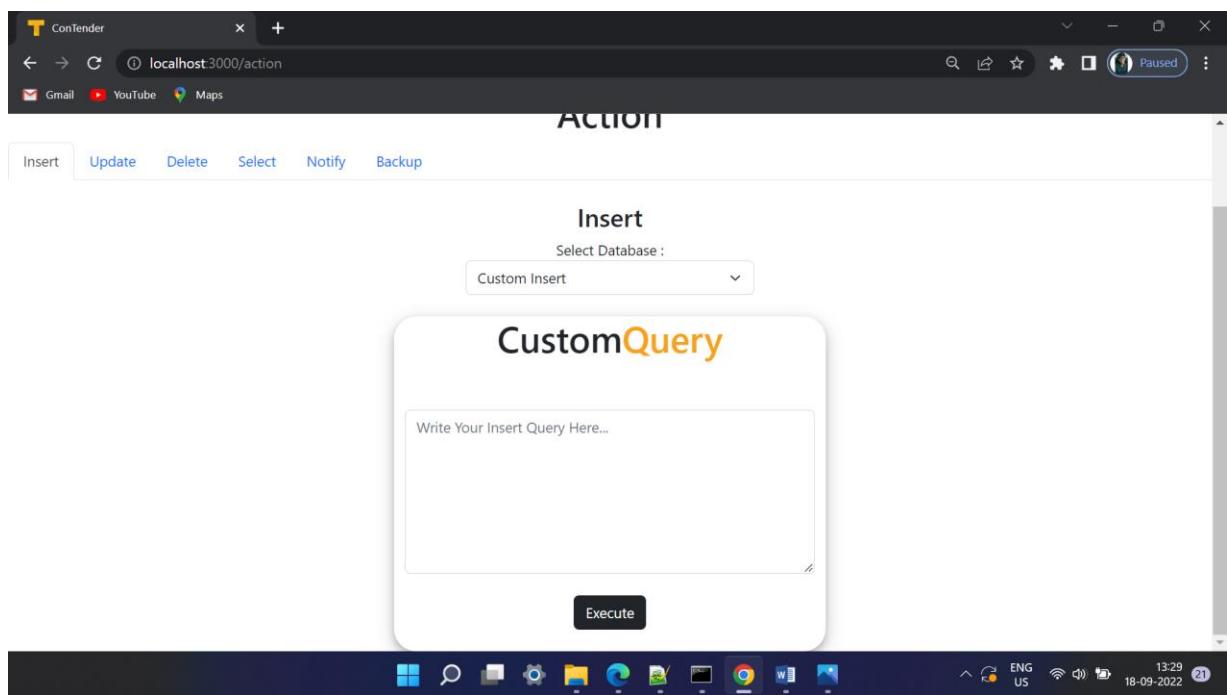
5.11 Insert Section User Registration Template (Action Page)



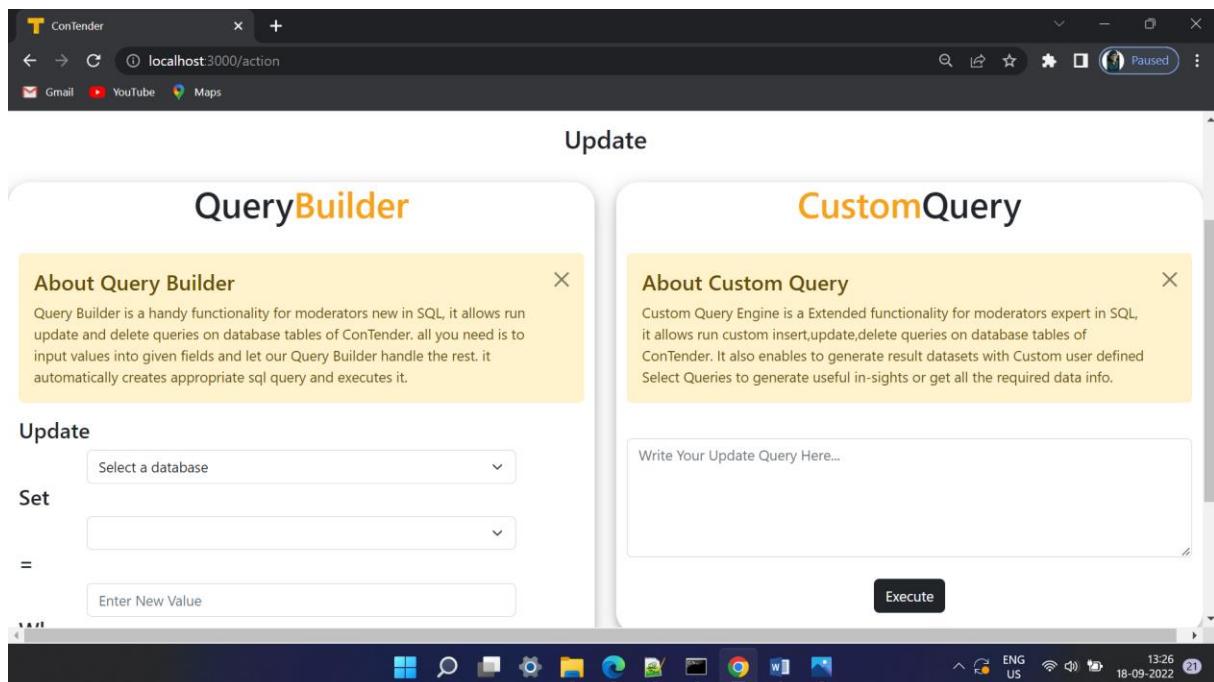
5.12 Insert Section Bid Upload Template (Action Page)



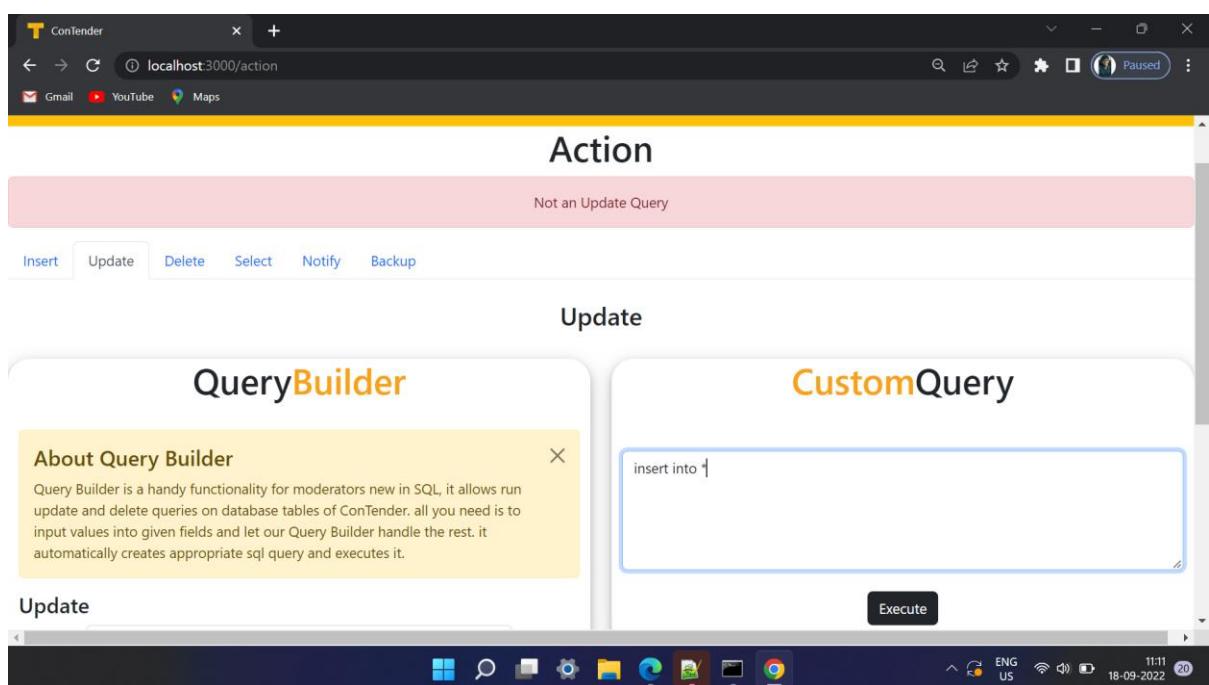
5.13 Insert Section Bid Upload Template (Action Page)



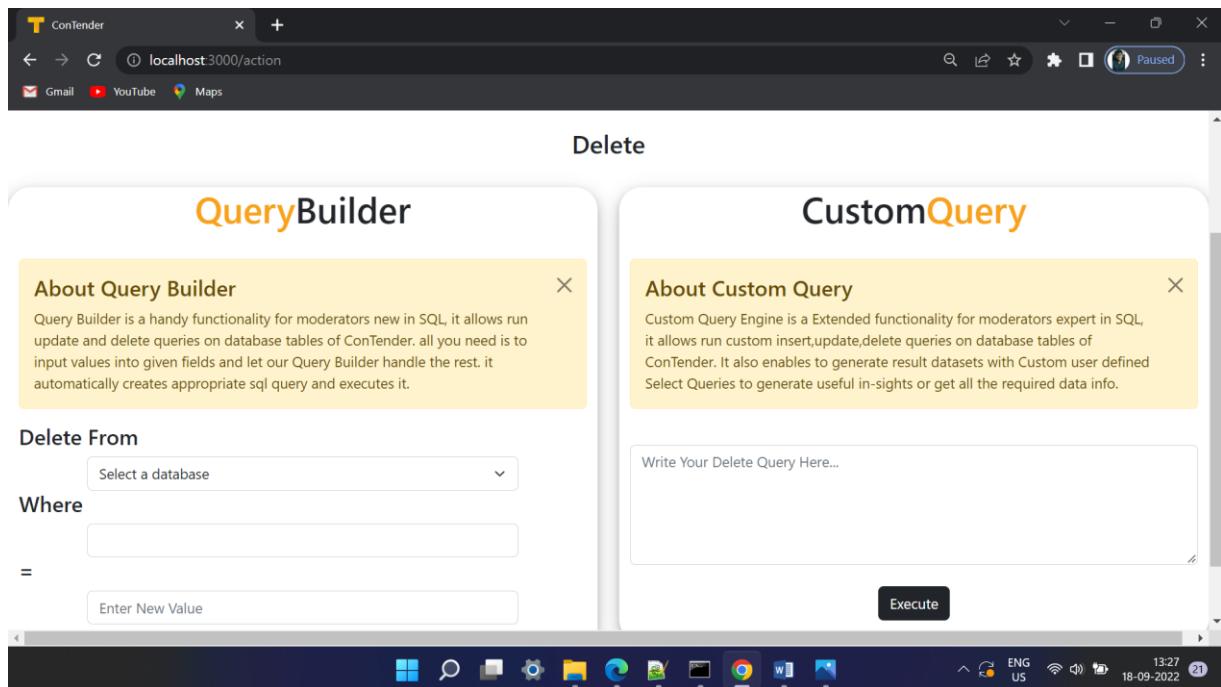
5.14 Insert Section Custom Insert Query (Action Page)



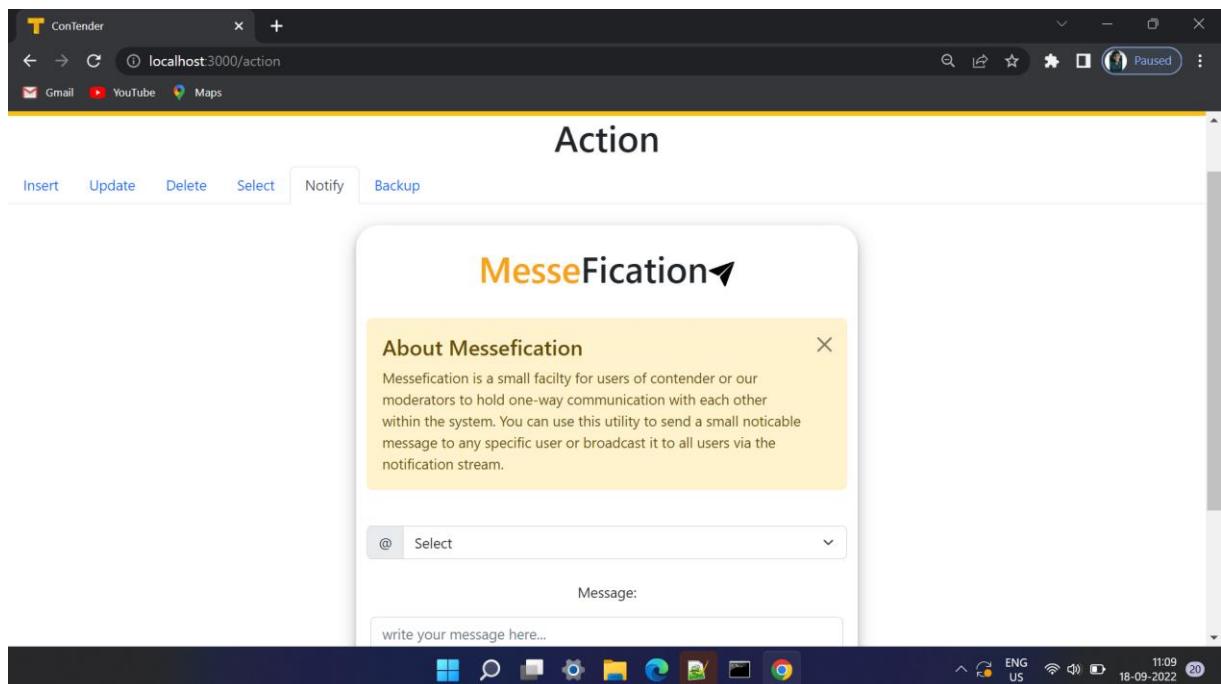
5.15 Update Section (Action Page)



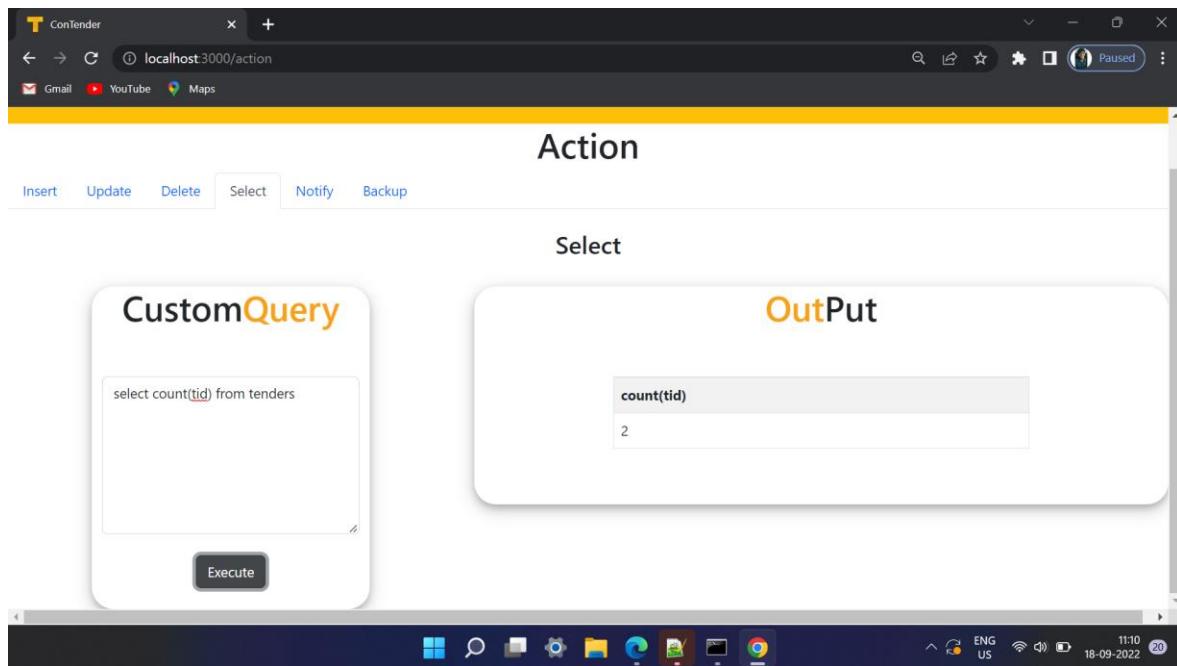
5.16 Update Section Error If Non-Update (Action Page)  
[similar validations are done for delete on delete , insert on insert and  
Selecte on select sections respectively]



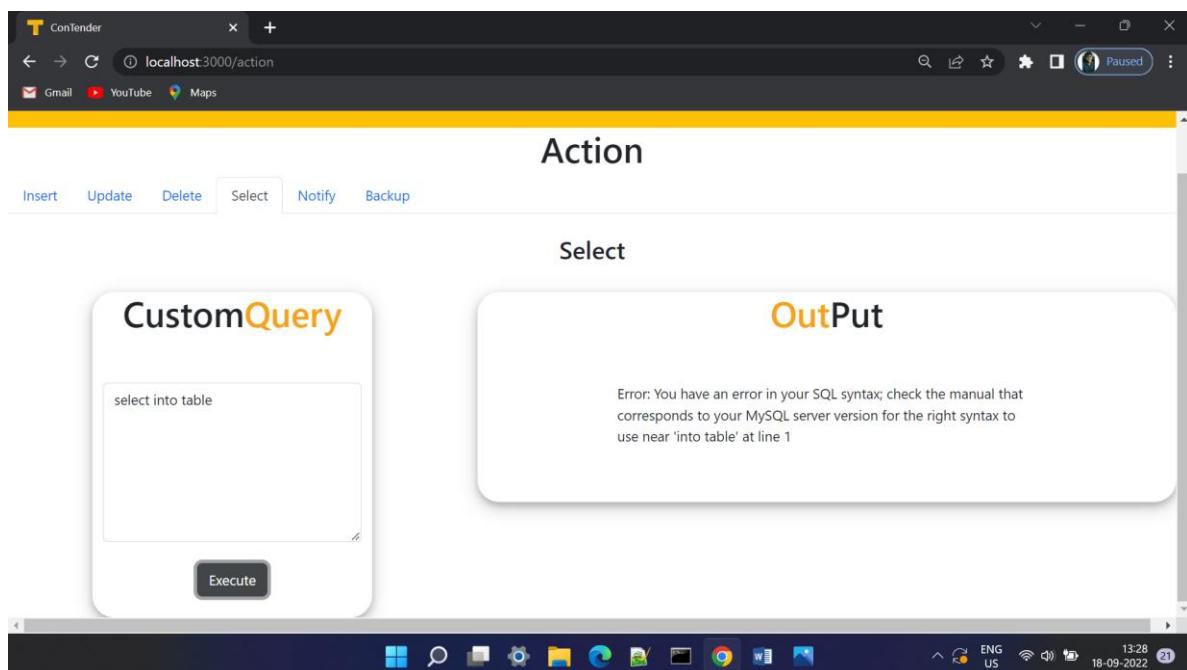
5.17 Delete Section (Action Page)



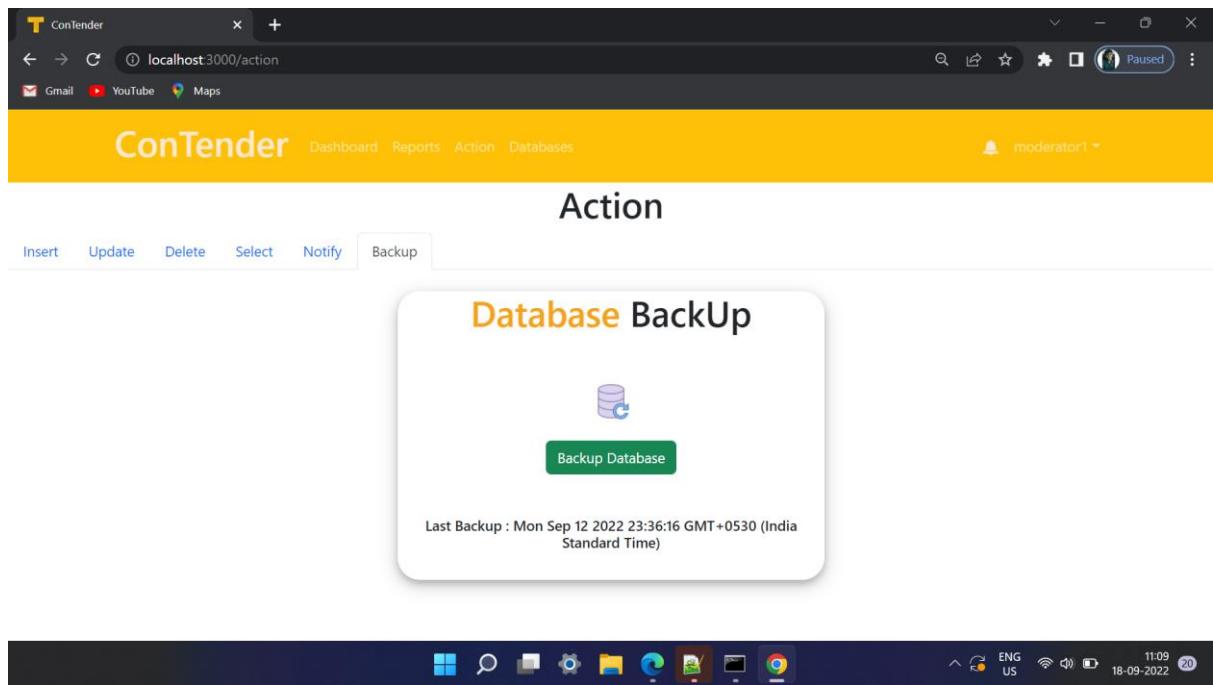
5.18 Notify Section (Action Page)



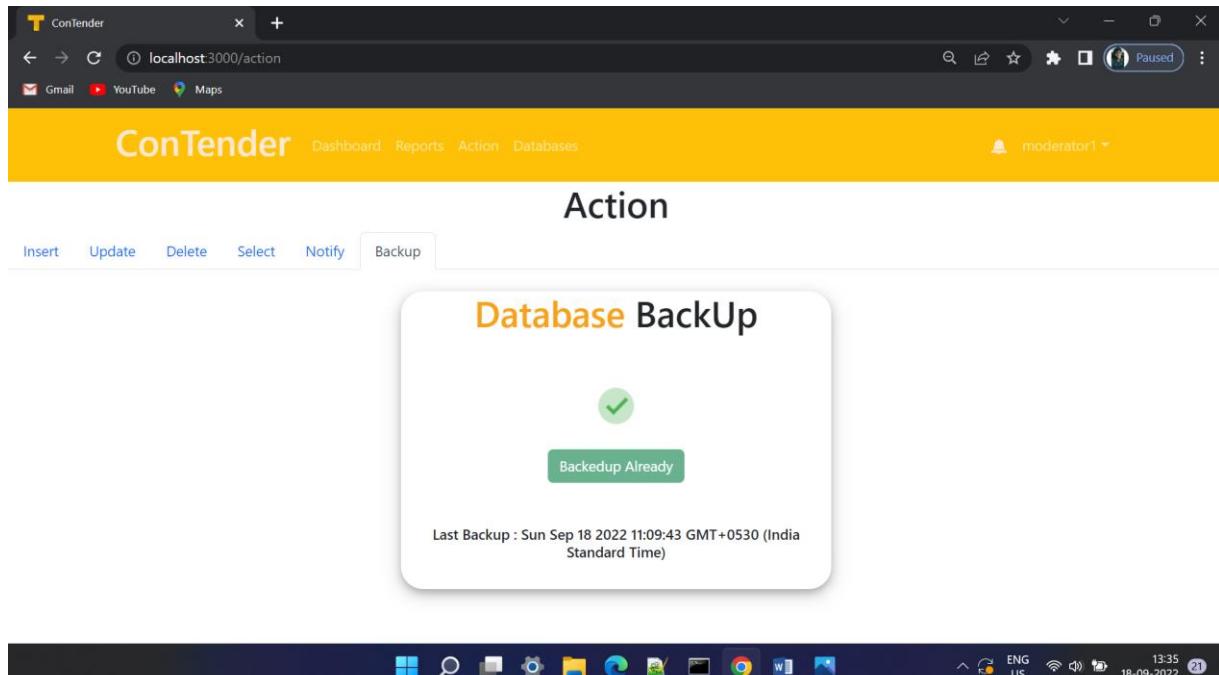
5.19 Select Section Successful run (Action Page)



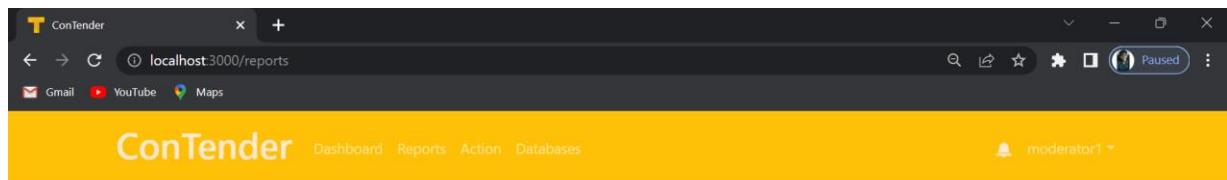
5.20 Select Section Unsuccessful run (Action Page)



5.21 Backup Section Before Backup (Action Page)



5.22 Backup Section After Backup (Action Page)



## Reports

sr	report	type	by
1	There is a bug in the searches page	Report Bug	truemaverick .inc



5.23 Reports Page

A screenshot of a web browser window titled "ConTender". The address bar shows "localhost:3000/dbs". The main content area has a yellow header with the word "Databases". Below the header is a navigation bar with tabs: "Users", "Tenders" (which is selected), "Bids", "Portfolios", and "Participants". The main content area is titled "Tenders table". It contains two sections: "1. Aviation 1" and "2. Chemical 1". Each section provides requirements, value, last date, a "view details" link, and a result. Both sections mention "Uploaded By: Rahil Poladiya ( truemaverick .inc )".

1. Aviation 1

Requirements: Expansion of apron for 10 nos . code 4c type aircraft at sgrdji airport. provision of advance visual docking guidance systems (avdgs) for 10 nos. parking bays.  
Value: 35.5Mn  
Last Date: 2022-09-17  
[view details](#)  
Result : TBD

Uploaded By: Rahil Poladiya ( truemaverick .inc )

2. Chemical 1

Requirements: Procurement of sandalwood oil  
Value: 22.46Cr  
Last Date: 2022-09-22  
[view details](#)  
Result : Won By - truemaverick .inc

5.24 Tenders Table (Database Page)

## Databases

Users   Tenders   Bids   Portfolios   Participants

Users table

uid	uname	company	email	phone	city	state	role
1	Rahil Poladiya	truemaverick .inc	rahilpoladiya33@gmail.com	9054124121	ankleshwar	Gujarat	
2	moderator1	moderator1	mod1@gmail.com	9054124121	ankleshwar	Gujarat	mod
3	Krupal Sindha	Krupal Enterprise	kms75@gmail.com	7878965412	bharuch	Gujarat	
4	abc	abc ltd.	abc@gmail.com	9054124121	ankleshwar	Gujarat	



5.25 Users Table (Database Page)

## Databases

Users   Tenders   Bids   Portfolios   Participants

Bids table

Bid Id	Tender Id	Bidder	email	phone	catagory	location	bid doc	dob
1	2	truemaverick .inc	rahilpoladiya33@gmail.com	9054124121	Chemicals	Gujarat	Bids/18922072322501ADVANCEWEBNotes(self).pdf	2022-09-18 10:53:22
2	3	truemaverick .inc	rahilpoladiya33@gmail.com	9054124121	Chemicals	Maharashtra	Bids/18922090406airbending.gif	2022-09-18 12:34:06



5.26 BidsTable (Database Page)

**Databases**

**Portfolios table**

Select User:

Sr.	tid	tender	status	user	view
1	2	Chemical 1	Bidded	truemaverick .inc	<a href="#">view details</a>
2	3	Chemical 2	Bidded	truemaverick .inc	<a href="#">view details</a>



5.27 Individual User Portfolio Table (Database Page)

**Databases**

**Participants table**

Select Tender:

Tender Id	Probable Participants
2	truemaverick .inc



5.28 Individual Tender Probable Participants Table  
(Database Page)

## **8. FUTURE ENHANCEMENTS:**

- Certain Future Enhancements that could be done into this project :
  - 1) Integration Of Actual Payments Gateway
  - 2) Smarter Search Engine Optimization for Search Results.
  - 3) More attention to even minute details.
  - 4) Adding more kinds of graphs and graphing facilities
  - 5) Improving and Optimizing All codes and Modules to work Faster and effective
  - 6) Better tracing of User preferences and providing more functionalities and content according to it.
  - 7) A proper Chatting stream for users to communicate within

Other such unobtrusive features for future enhancement might be highlighted or suggested later by users of this system using the help desk functionality.