

# **Backend Services For Internal Panel-Msupply.com**

**A PROJECT REPORT**

*Submitted by*

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Under the  
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## **Abstract**

MSupply.com is a e-commerce business to customer as well as business to business company that provide a platform for exchange of construction and interior materials between suppliers and customer , where customer can be a homeowner or construction business owner.

At mSupply.com, with extensive knowledge of our in-house industry experts and partners combined with our robust fulfilment & customer care, we ensure to assist customer at every stage of your construction, interior, renovation and refurbishing related needs. It provide solutions to consumers by simplifying procurement of materials ,products & services.

It believes in simplifying the buying process for construction purpose and provide a transparent platform for suppliers as well as customers. Major modules consist of order management system and internal panel to be handled by technical team to provide maximum applications (concerned with placed orders and automating functionalities required inside msupply ) for the ease of both end users(supplier and buyer).

In mSupply.com based on the requirements in the required panels or systems, I am working in internal panel's techHelp module and users module .Both the modules are intuitively concerned with automating all the procedures being carried by the employees of msupply to provide quality of services in future.

The techHelp module takes into account of all the processes being performed by techHelp team like maintaining and updating supplier's details,customer's details,VAT details and RFQcity's details (cities from where quotes are raised).It saves a lot of time that was taken in manual handling of all the specified areas.Further it should include all the required services of techHelp team to facilitate efficient work handling by the team.

Internal panel include two user's module as enrolled user and registration for new user.It provide the service of registering a new user in the panel with the required access rights for further indulgence in various services.The enrolled users are given the services to be performed according to their access rights.Further many other features are to be included to facilitate services(updates ,managing orders etc) efficiently by right and authenticated user.

# **Introduction**

Msupply.com accounts to provide a platform for suppliers and buyers of construction and interior materials with ease in efficient manner. It provides with a full fledged system from raising quotes to delivering materials including all the required services for both the end users.

## **1.Motivation :**

While constructing, renovating, refurbishing or redesigning our homes, offices etc., most of people have limited understanding about material cost, quality and quantity to be used. Thus, there is always an ambiguity in the planning and budgeting of the overall process. And more often than not, they all overshoot budget & timeframe by large margins.

This situation leads to a motivational tool for msupply to let the end users manage their budget and timeframes with quality and efficient solutions. To work out with solutions respective panels are developed. Amongst them one is internal panel that facilitates the order management system (manage construction material orders) as well as techHelp panel (automate the internal work of msupply).

There is a need to automate the manual work being undertaken by the techHelp team to manage all the required details of orders, customers, suppliers etc. Also, required employees can facilitate certain services according to their access rights provided at the time of registration.

All the above mentioned needs and situations acted as a motivation for the development of internal panel with order management system, user panel and techHelp panel.

## **2.Background :**

The exchange of construction and interior materials from a supplier to required buyer considering all the efficient parameters at every step with appropriate margin lies in the background of msupply. It develops various applications to carry out the mentioned exchange of goods and services.

According to the requirements, I am working in internal panel's modules of msupply. Concisely I am working on the backend side of internal panel to develop services to fulfill requirements for providing a automated techHelp and users module

with various functionalities. Basically to get rid of a lot of manual work related to end users, employees, orders etc will be taken in these modules. The backend services will be further combined with the frontend to provide user friendly interface for all the developed applications. Finally the applications are tested to evaluate its working in all scenarios keeping in mind the end user. Likewise, development for the internal panel additional modules or functionalities will be carried out.

### **3.Problem Definition :**

The motivation and background section above explicitly elucidates about msupply and its platform with all the services and motives. As stated previously, my work is concentrated in internal panel's modules (techHelp, order management system and users) by developing services from backend to run various required applications for automation of various required manual but important tasks for providing solutions in msupply business.

In techHelp, applications are required to maintain and perform various operations on company, customer, VAT and RFQcity's etc details for further delivery of efficient services. It should retrieve all the details of required entity by efficient searching algorithms. It will include the updation (add/delete/edit) of details of the required entity according to the current needs. Also, every scenario or outcome will be kept in mind while developing the services for techHelp to handle valid input and output cases.

In order management system module all the orders are managed with their different stages (in progress/delivered/cancelled/failed). It will help to keep track of all orders by the required users. Finally the user module of internal panel will allow to register new users and updations in existing users with other access rights and functions.

Following are some of the inputs that should be provided to get expected output—

1. In techHelp module:

a. Input → Customer mobile number

Output → All details of the Customers fetched in edit mode

b. Input → Company ID number

Output → All details of company fetched in edit mode

c. Input → VAT percentage for products

Output→added to VAT list

d.Input→Any city name for a state

Output→The city is added if it does not exist

e.Input→Fill details for a new user

Output→New user registered in internal panel

f.Input→Enrolled users fetched in edit mode

Output→Edit the user's detail accordingly

Likewise there will be various input-output cases for different services with appropriate test cases after development. My major services will be developed to introduce more functionalities in internal panel. Every service will be created with reasonable requirement behind it for the end user. Main task will be to develop the applications for internal panel to create an environment of efficiency and ease for its users and end users.

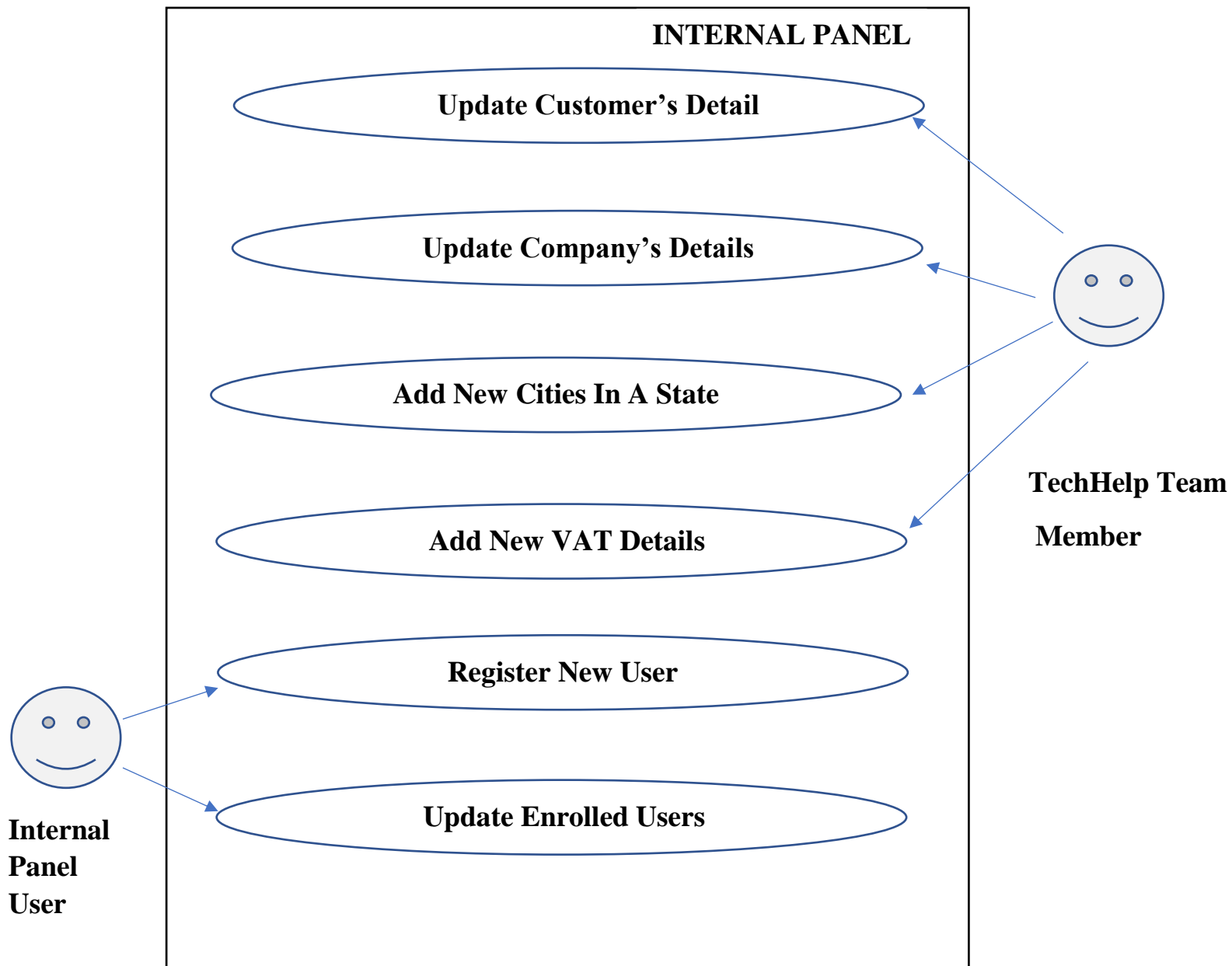
## **Literature survey**

Following is the list of the sources I intuitively considered and read for my project work –

1. <http://internal.dev.msupply.com/enrolledUsers>
2. <http://internal.dev.msupply.com/techhelp>
3. The.Node.Beginner.Book.pdf
4. <https://www.msupply.com/about-us>

## **Design And Implementation**

Following use-case diagram will elucidate properly about the implementation of techHelp and user module of internal panel as a part of my work at msupply. Further modifications may be possible in the design and implementation according to future needs and requirements.



### **Work plan / Future work**

Further, other functionalities according to future needs and requirements will be included in the internal panel that may include updations and maintaining other entities associated with the msupply .Different modules may be introduced for completely different functional requirement of internal panel for the users.

I will be developing various services for the newly introduced functionalities for more ease and efficiency to carry out all the automated applications instead of manual work and increase the number of users for msupply business.

## **Conclusion**

The internal panel's module – techHelp and User modules are my major contribution areas as I developed backend services using NodeJs and MongoDB technology (MEAN Stack) for these modules. All the developed services are working in msupply.com domain efficiently. The updation services for techHelp module and user services were successfully deployed. Further, I will be working in internal panel project to develop more applications that will carry various manual tasks efficiently by automating through applications development.

## **References**

Following are the references used by me for my project work—

1. <https://docs.mongodb.com/manual/crud/>
2. <https://nodejs.org/en/docs/guides/>
3. <http://internal.dev.msupply.com/enrolledUsers>
4. <http://internal.dev.msupply.com/techhelp>