

## **Material Management System**

# 1. Introduction of Project

Comprehensive Material and Ingredient Management System, designed to streamline inventory tracking for efficient manufacturing and product development processes. Corewave is a leading Software Development company providing **On Demand Software**, that too at an affordable price.

## **Deliverables:**

Admin (Web Panel)

# 2. Purpose of Project

## 2.1 Targeted Region

Suggested by client

## 2.2 Required Third Party API's

- Twilio/MSG 91 for OTP verification and password recovery
- Send Grid API for mail verification

# 3. Key Modules Available

### **Material Library/Purchase Management System:**

#### 1. Material/Purchase Database Management:

- Create and maintain a comprehensive database of Raw materials.
- Store information such as material name, type, pricing, availability, Safety Stock, Cost Influencing Factors, MSDS, Imported/Domestic.

#### 2. Search and Filtering Capabilities:

o Enable users to search and filter materials based on various parameters like name, type, properties, etc.

### 3. Material Properties Management:

o Record and manage detailed properties of each material such as density, color, texture, strength, etc.

### 4. Cost Management:

- o Track the cost associated with each material.
- Generate cost reports and analysis for budgeting purposes.
- o Price change trends for certain period

## 5. Material Usage Tracking:

Record and track the usage of materials in various projects or applications.

6. Security and Access Control:



## **Material Management System**

- Implement user authentication and authorization mechanisms to ensure data security.
- o Define user roles and permissions to control access to sensitive information.

#### 7. Reporting and Analytics:

- o Generate reports on material usage, inventory status.
- o Approved vendors, price increase period wise

#### 8. Product Management:

- Add product and map with the Batches as well as Version History
- o Add Different Additional prices (Eg. Cost of Manufacturing, Packing, Variable etc)
- Product application and value addition

#### **Version/QC Management System:**

#### 1. Ingredient Database Management:

- Maintain a centralized database of ingredients used in manufacturing processes.
- Store details such as ingredient name, type, safety data, etc.

#### 2. Recipe Formulation:

- Allow users to create and manage recipes for products.
- Specify ingredient quantities, proportions, and preparation instructions.
- o Recipe change management, approval process. (Via Admin)

#### 3. Additional Details:

Adding Notes while preparing all the Versions of the Product

### 4. Quality Control Management:

- Collecting and feeding all the Feedbacks as well as errors in system while requesting for next Version preparation
- o Add Production Defects and Customer Complaints on Versions of the product

#### 5. **Inventory Control:**

- Track inventory levels of each ingredient.
- o Implement alerts for low stock levels and automate reordering processes.

#### 6. Version Tracking and Traceability:

Assign unique identifiers to ingredient batches for traceability (Version Control)

#### 7. Reporting and Analysis:

- Generate reports on ingredient usage, inventory levels, supplier performance, etc.
- Analyze data to optimize ingredient procurement and utilization processes.

#### **Sales/Distribution Team Portal**

Get A list of all the products with real-time updated pricing

#### Add A Module New Product / Process Development.

1. objective of NDP. expected value addition. expected sales volume projection. implementation plan. developmental data. (Via Excel)