VETRON

Laboratory Information Management System

What is Vetron-LIMS?

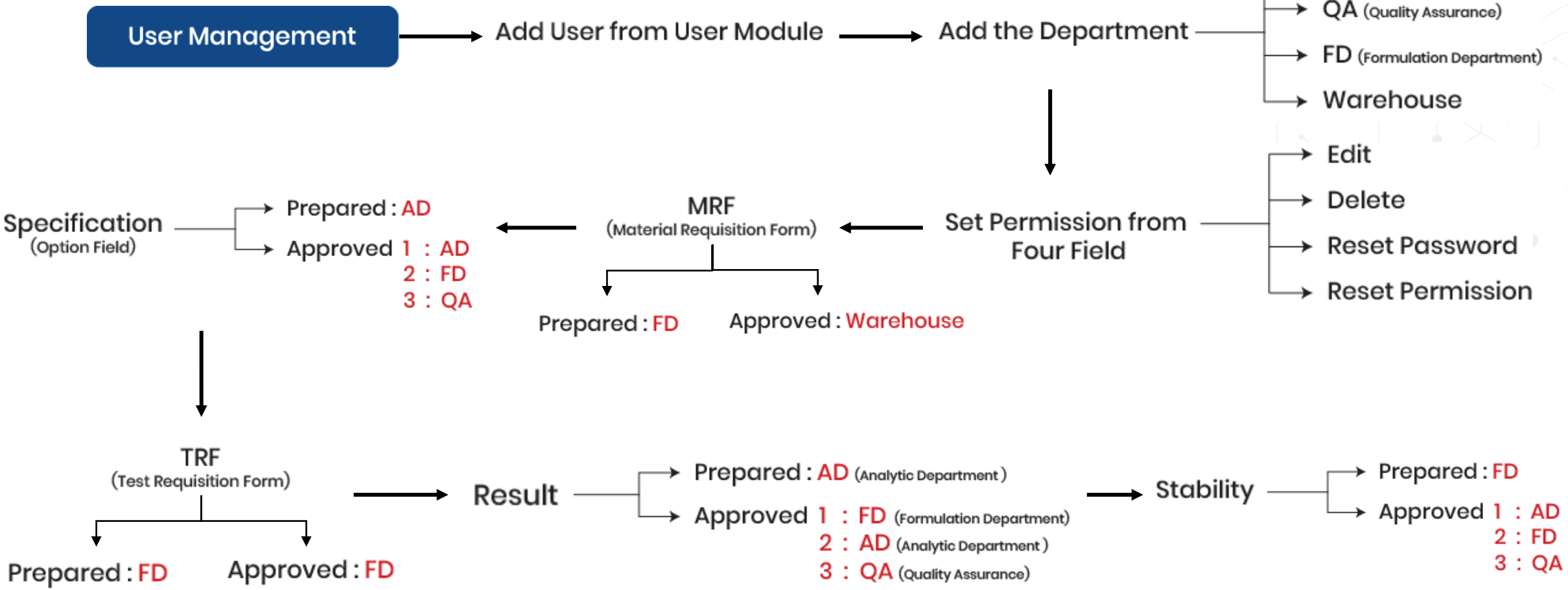
A Laboratory Information Management System(LIMS) is software that manages the flow of samples and associate data to improve laboratory efficiency. By using LIMS, the labs can automate the workflows, integrate instruments, and manage samples and associated information. A LIMS helps standardize workflows, tests, and procedures while providing accurate controls of the process.

With the growing needs of laboratories, the traditional LIMS too has mitigated, which is able to do much more than just tracking samples. The main purpose of LIMS is to improve lab efficiency and accuracy by reducing manual operations. A LIMS system will perform a range of core functions.

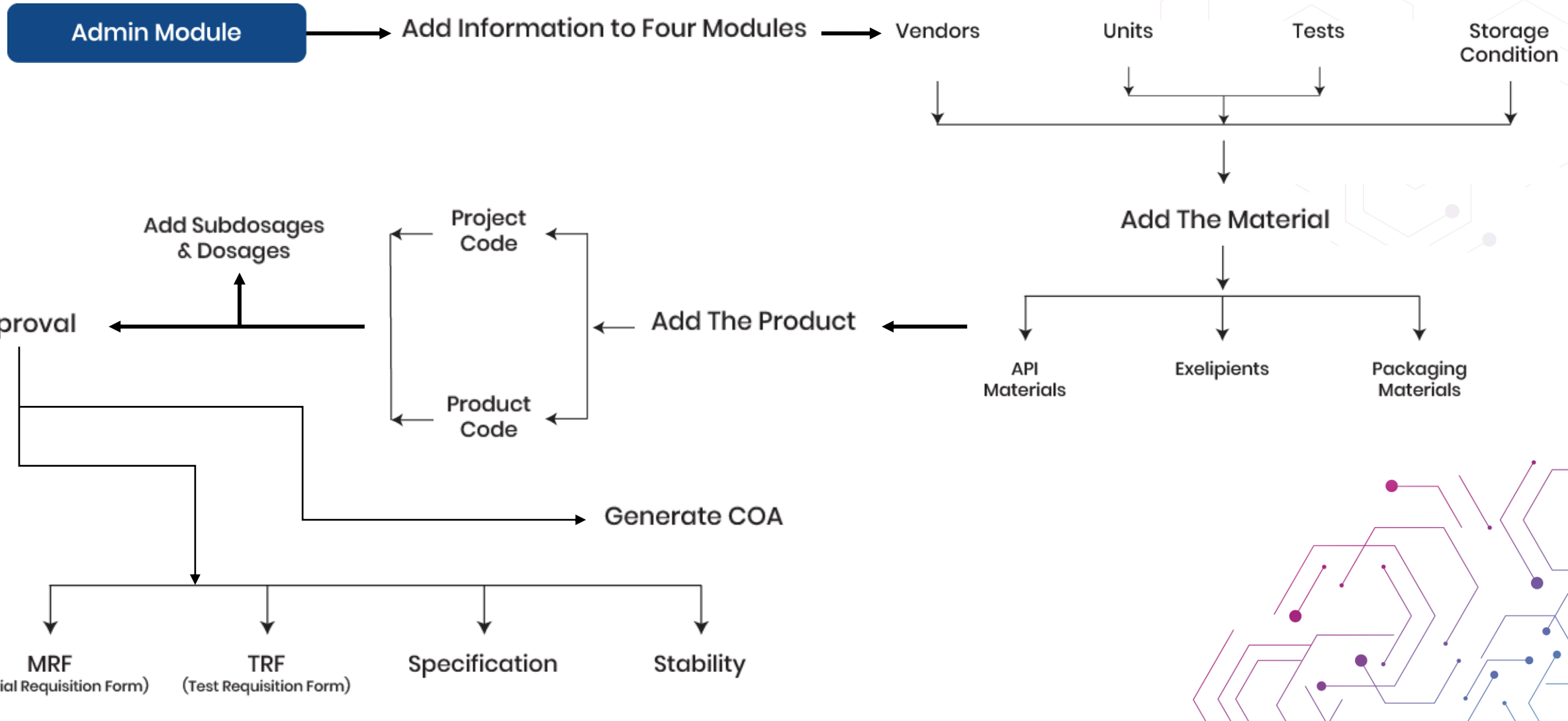
These normally include:

- Workflow management
- Record keeping
- Inventory management
- Reporting

Vetron-LIMS Flowchart (User Side)



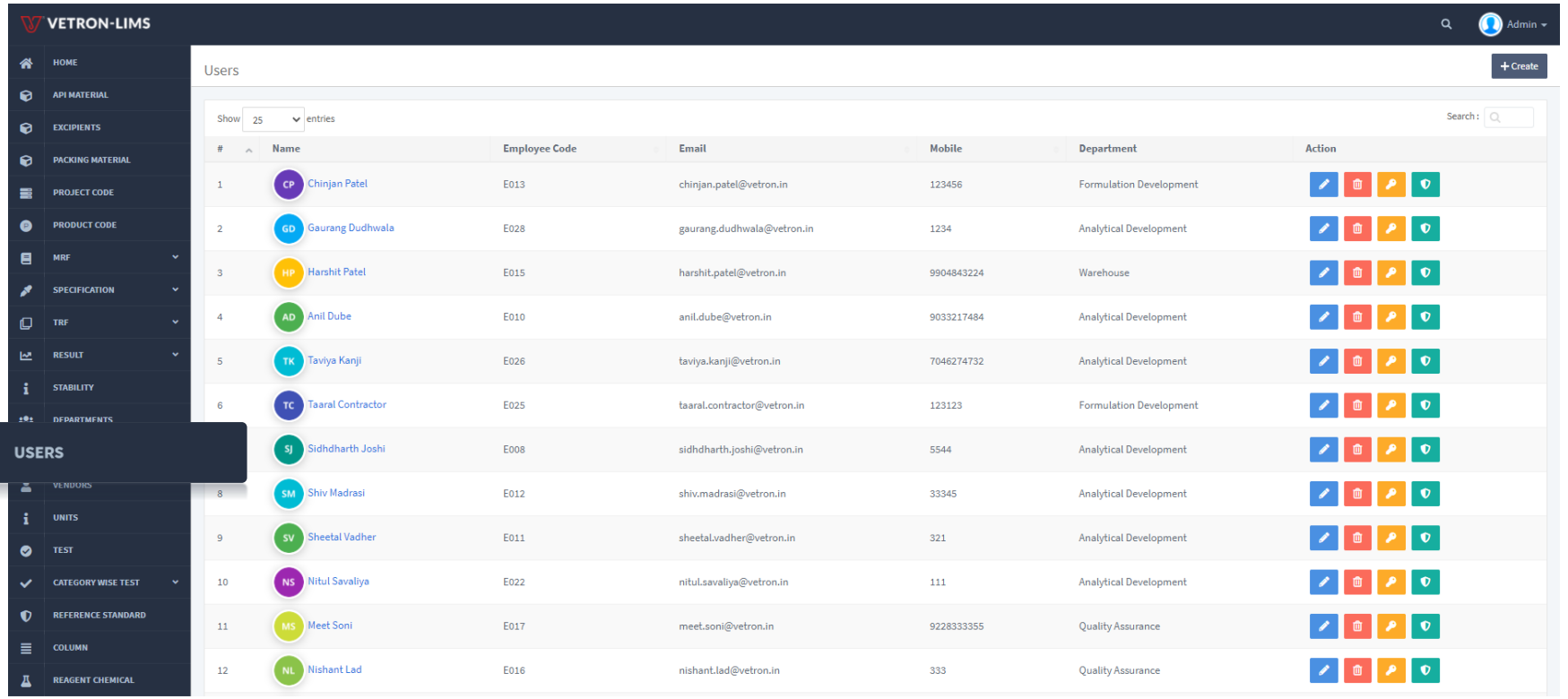
Vetron-LIMS Flowchart (Admin Side)



The Workflow of the Vetron-LIMS:

Step 1: User Management

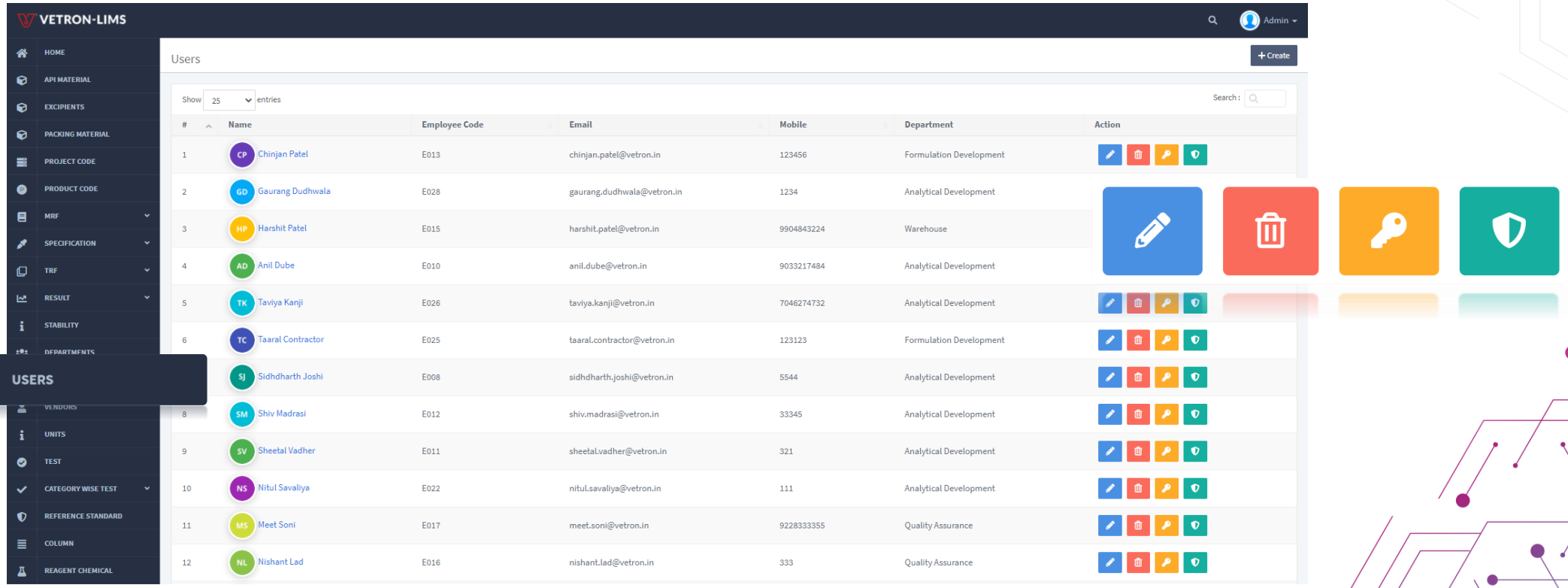
In the Users Module, first, we will add the number of users from predefined departments from Microbiology, Analytical Department, Warehouse, Formulation Department, and Quality Assurance. The basic information such as Email, Phone number, Department, and Password would be created here for later access.



The Workflow of the Vetron-LIMS:

Step 2: Action Field

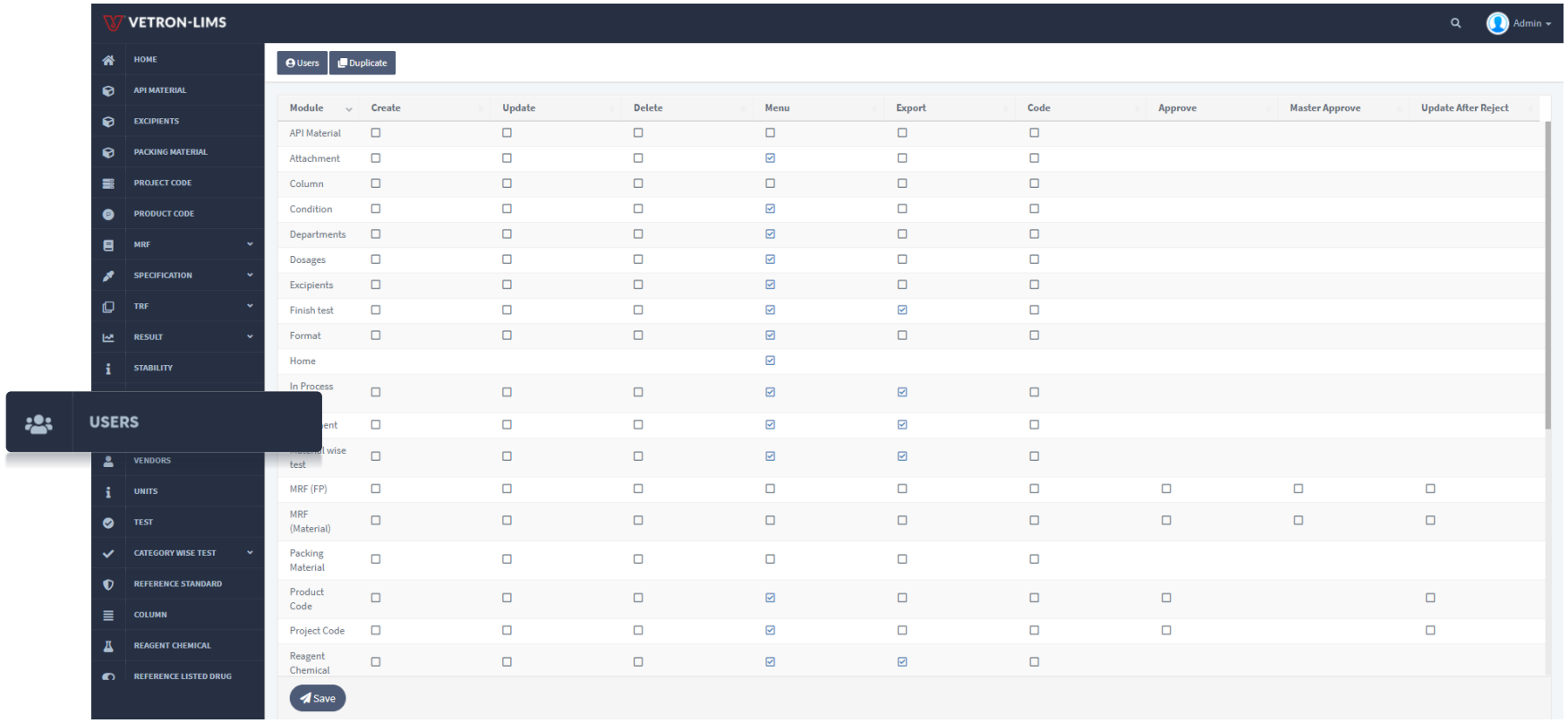
There are four main fields with every individual in the User module: Edit, Delete, Reset password & Set Permission.



The Workflow of the Vetron-LIMS:

Step 3: Permission Access

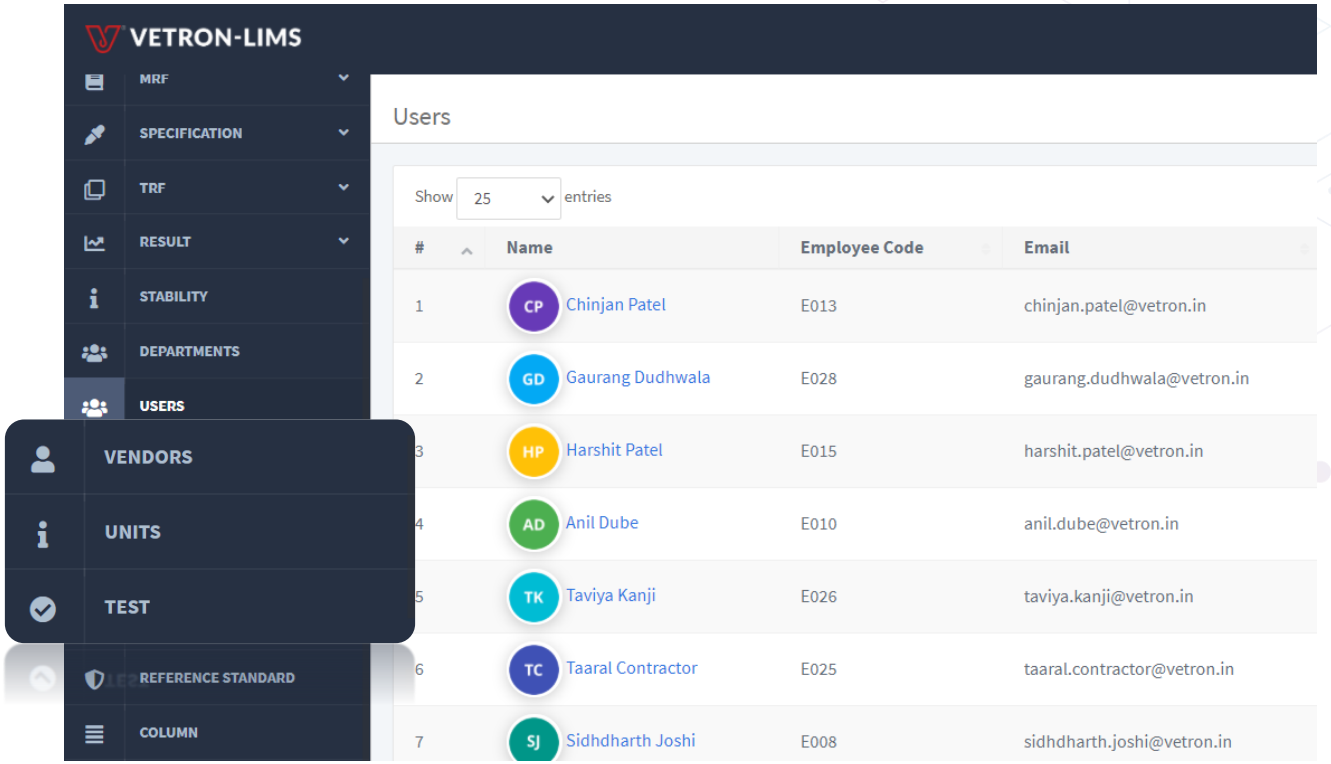
In the User Module, every user is assigned the set of Administrative rights granted by the administrators to users which allow them to create, delete, and modify items and settings in the modules and also the how many numbers of modules would be displayed to the individuals are allowed in the User Module.



The Workflow of the Vetron-LIMS:

Step 4: Add the Basics

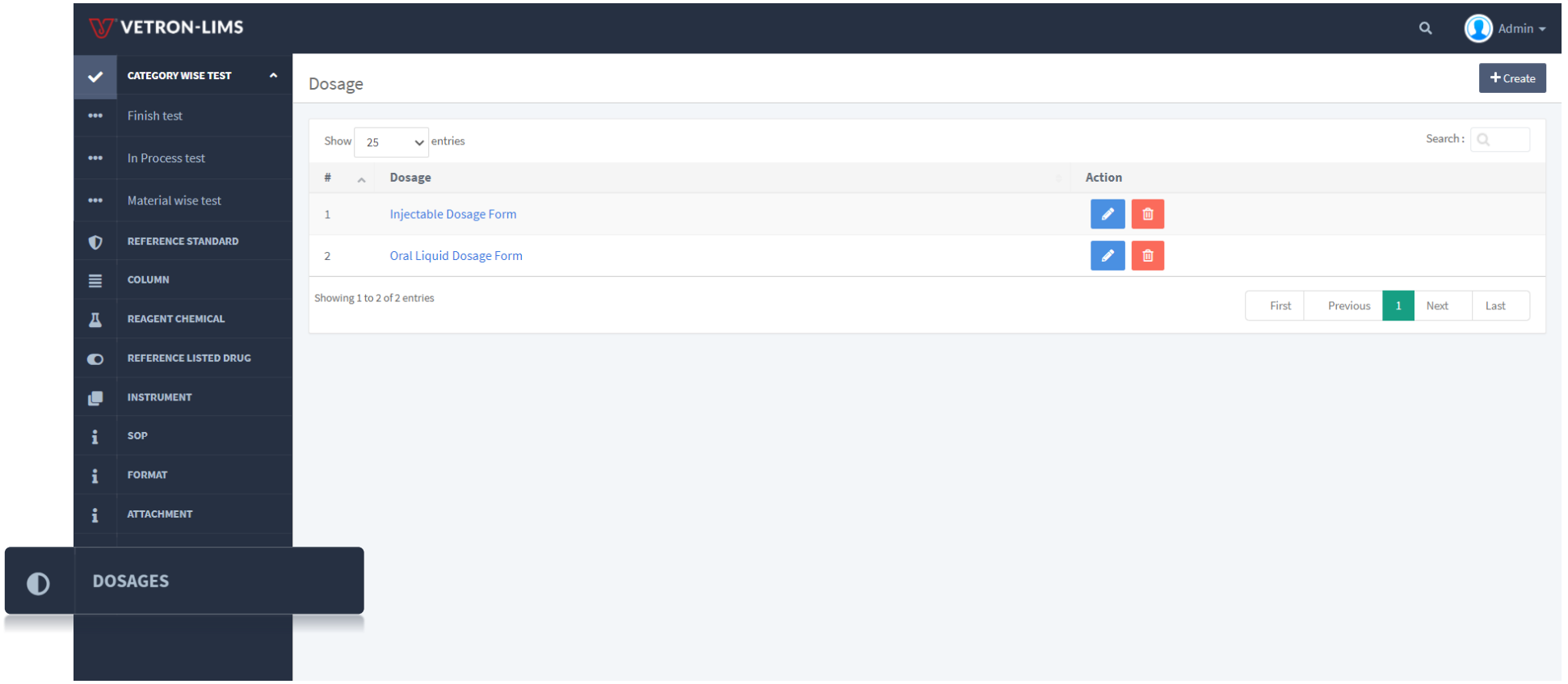
The four modules are crucial to add the information first, before adding the details of materials in further modules. The modules named **Vendors, Units, Test, and Storage conditions** are added first from the admin panel before adding details to the specific three products in Raw Material, Package Material & API.



For creating the specific projects, the modules named- **project code and product code are used.** Firstly, the project is created under which multiple products are created in the project. Then add the products in the particular project and each individual product will have a product code along with its project code.

The Workflow of the Vetron-LIMS:

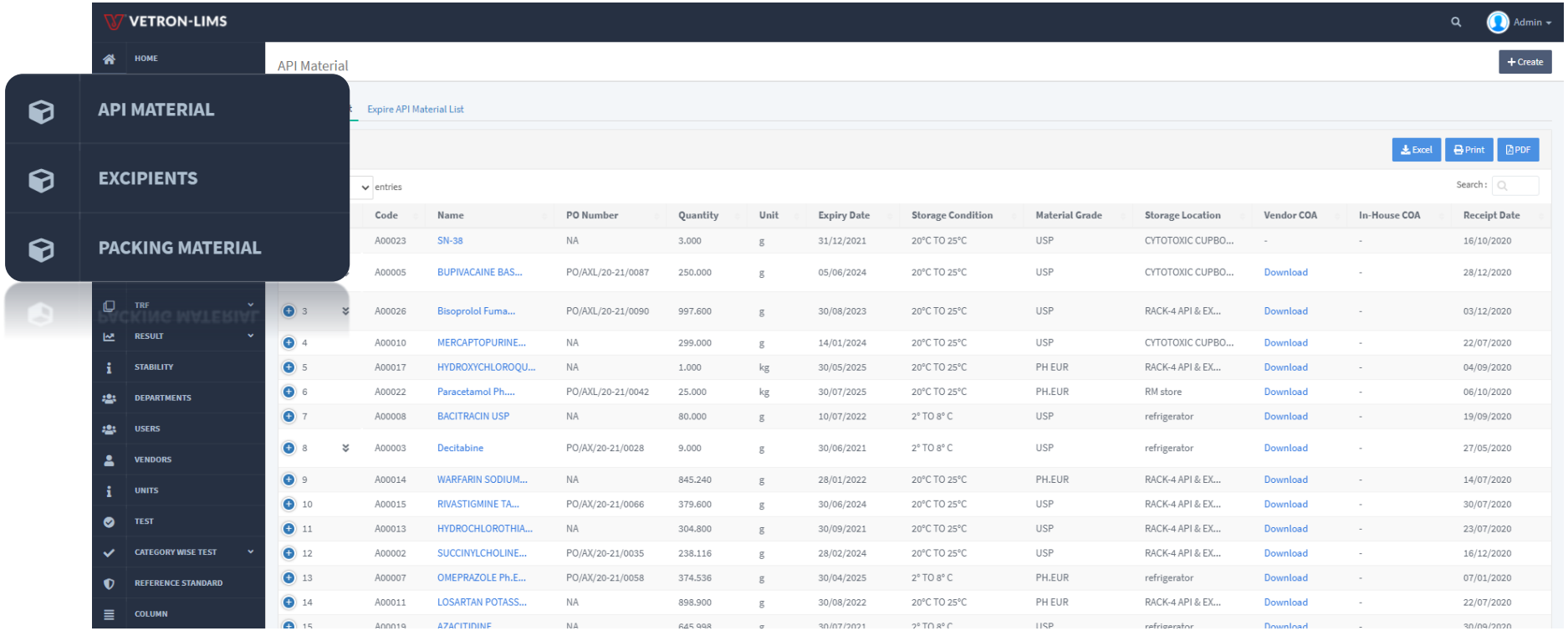
Before generating the project code and product code, we will add the information in **Dosages and Sub Dosages Modules.** After adding the dosages, create the project name first to generate the project code.



The Workflow of the Vetron-LIMS:

Step 5: Adding Raw Material and Package Material & API

First, we will add the products from the three fields- **API materials, Excipients, and Packing material.** In which, they will add the details of materials provided by the warehouse department.



The Workflow of the Vetron-LIMS:

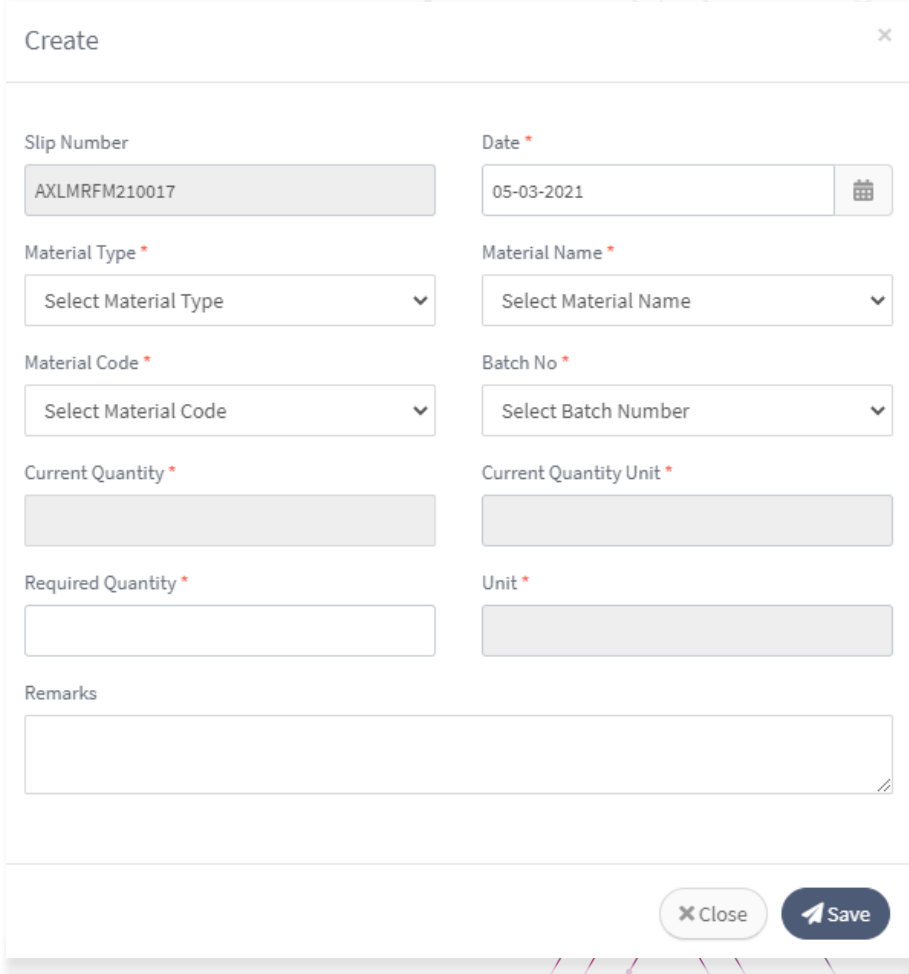
Step 6: Material Requisition Form (MRF)

Here all the materials are approved and finalized by the departments. The departments are only added by the Admin.

In the MRF(Material) & MRF(Final Product) modules, it will be approved from two departments: **Formulation Department and Warehouse Department.** The one who prepared it and the warehouse department will approve or reject it.

If the product is rejected, the MRF(Final Product) record would be rejected with the remark by the departments of why the product is rejected.

FD dept gives the request to warehouse dept for issuance of Material through Material Requisition Form (MRF).



The Workflow of the Vetron-LIMS:

Step 7: Specification of Materials

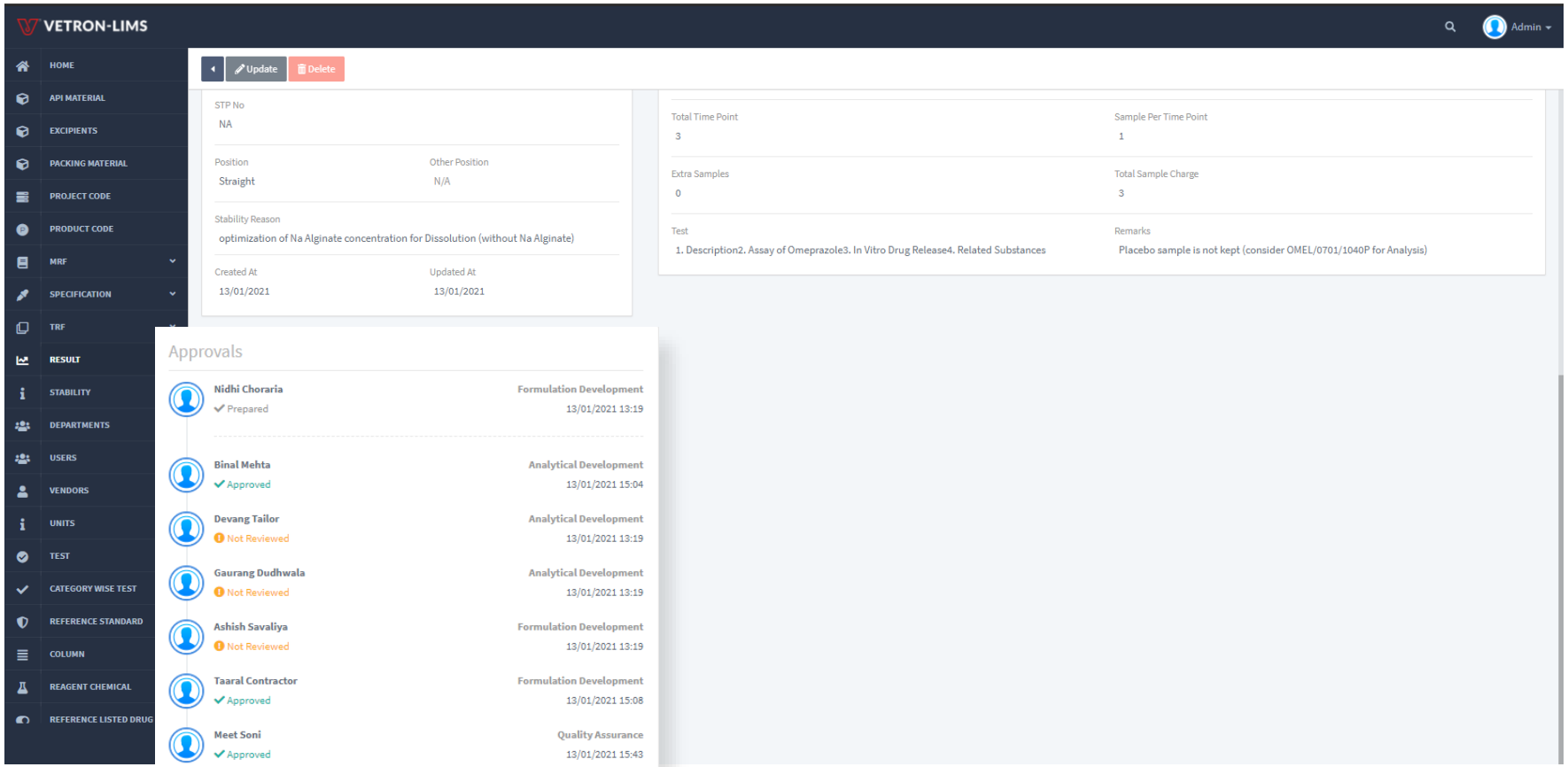
FD(Formulation Department) department gives the request to the warehouse department for issuance of Material through (MRF) Material Requisition Form.

The Specification of material would be added by the AD(Analytical Department), in which the Material Type, Name, and Code is selected from the prefilled information added before in the modules. The form request would be in three fields: Approved, Rejected, and Not reviewed. After the entry is added in the specification, the request would first be approved by the FD(Formulation Department), and lastly, it would be approved by the QA(Quality Assurance Department).

The sequence is important for the approval because until and unless the FD(Formulation Department) will not approve the request, it won't be sent to the QA(Quality Assurance Department) for approval. In the Specification module, the entries of the test module will be given the option for the user to select from the checkbox which will use it later in the TRF Module.

The Workflow of the Vetron-LIMS:

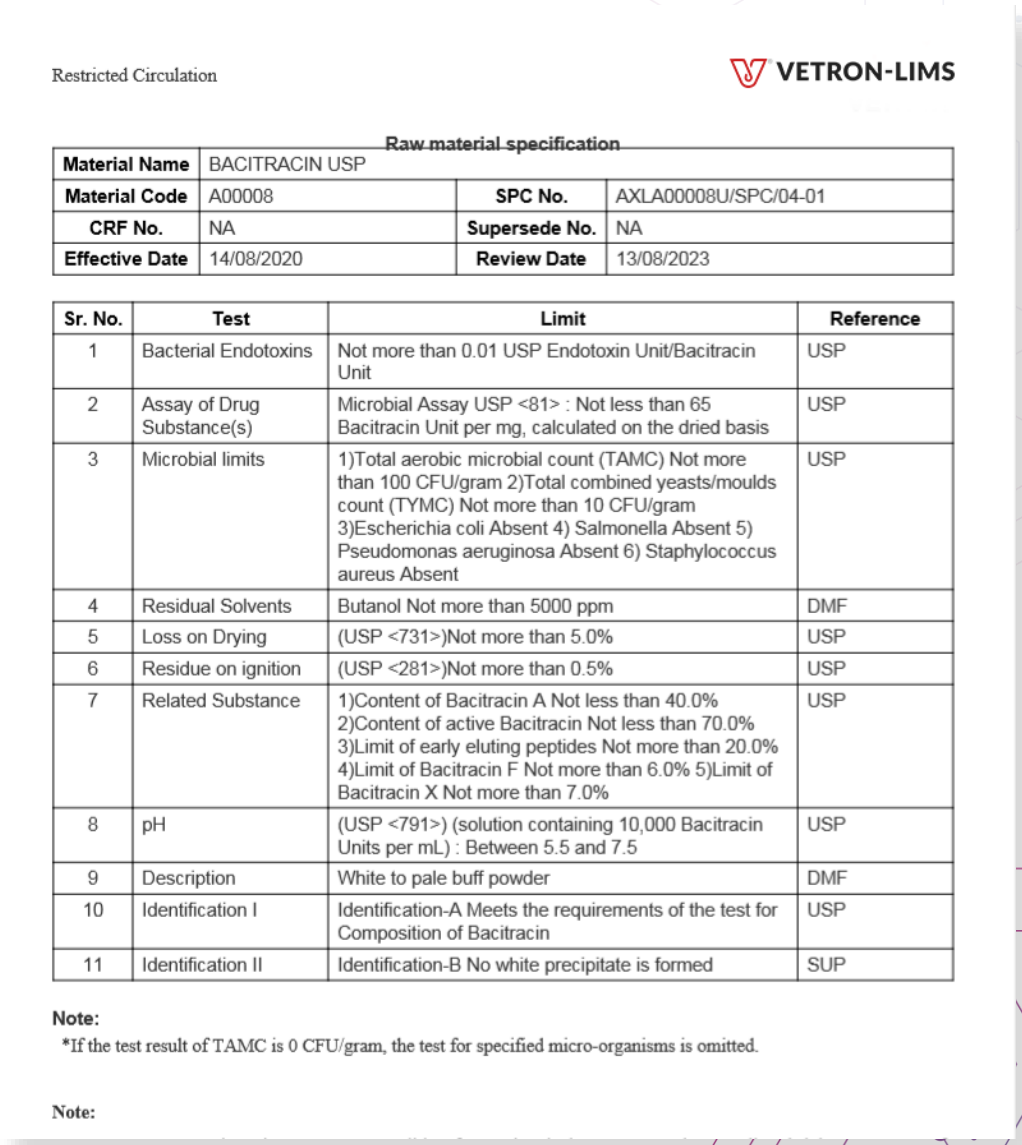
After the approval, the COA is generated which will be reviewed by AD(Analytical Department) and further it cannot be altered. After approval from the AD(Analytical Department), the COA will be approved by QA(Quality Assurance) Department.



The Workflow of the Vetron-LIMS:

Step 8: Test Requisition Form (TRF)

FD dept generates the (TRF) Test Requisition Form for the testing of material. The TRF code is generated with the help of Product code and the following details from the modules of Materials, MRF, & Specification in which the selected testing features would be displayed from the specification module. And it also gives the option for the second time to select the check-boxes from the test module which will be used in the Result Module.



Restricted Circulation

VETRON-LIMS

Raw material specification

Material Name	BACITRACIN USP		
Material Code	A00008	**SPC No.**	AXLA00008U/SPC/04-01
CRF No.	NA	**Supersede No.**	NA
Effective Date	14/08/2020	**Review Date**	13/08/2023

Sr. No.	Test	Limit	Reference
1	Bacterial Endotoxins	Not more than 0.01 USP Endotoxin Unit/Bacitracin Unit	USP
2	Assay of Drug Substance(s)	Microbial Assay USP <81> : Not less than 65 Bacitracin Unit per mg, calculated on the dried basis	USP
3	Microbial limits	1)Total aerobic microbial count (TAMC) Not more than 100 CFU/gram 2)Total combined yeasts/moulds count (TYMC) Not more than 10 CFU/gram 3)Escherichia coli Absent 4) Salmonella Absent 5) Pseudomonas aeruginosa Absent 6) Staphylococcus aureus Absent	USP
4	Residual Solvents	Butanol Not more than 5000 ppm	DMF
5	Loss on Drying	(USP <731>)Not more than 5.0%	USP
6	Residue on ignition	(USP <281>)Not more than 0.5%	USP
7	Related Substance	1)Content of Bacitracin A Not less than 40.0% 2)Content of active Bacitracin Not less than 70.0% 3)Limit of early eluting peptides Not more than 20.0% 4)Limit of Bacitracin F Not more than 6.0% 5)Limit of Bacitracin X Not more than 7.0%	USP
8	pH	(USP <791>) (solution containing 10,000 Bacitracin Units per mL) : Between 5.5 and 7.5	USP
9	Description	White to pale buff powder	DMF
10	Identification I	Identification-A Meets the requirements of the test for Composition of Bacitracin	USP
11	Identification II	Identification-B No white precipitate is formed	SUP

Note:

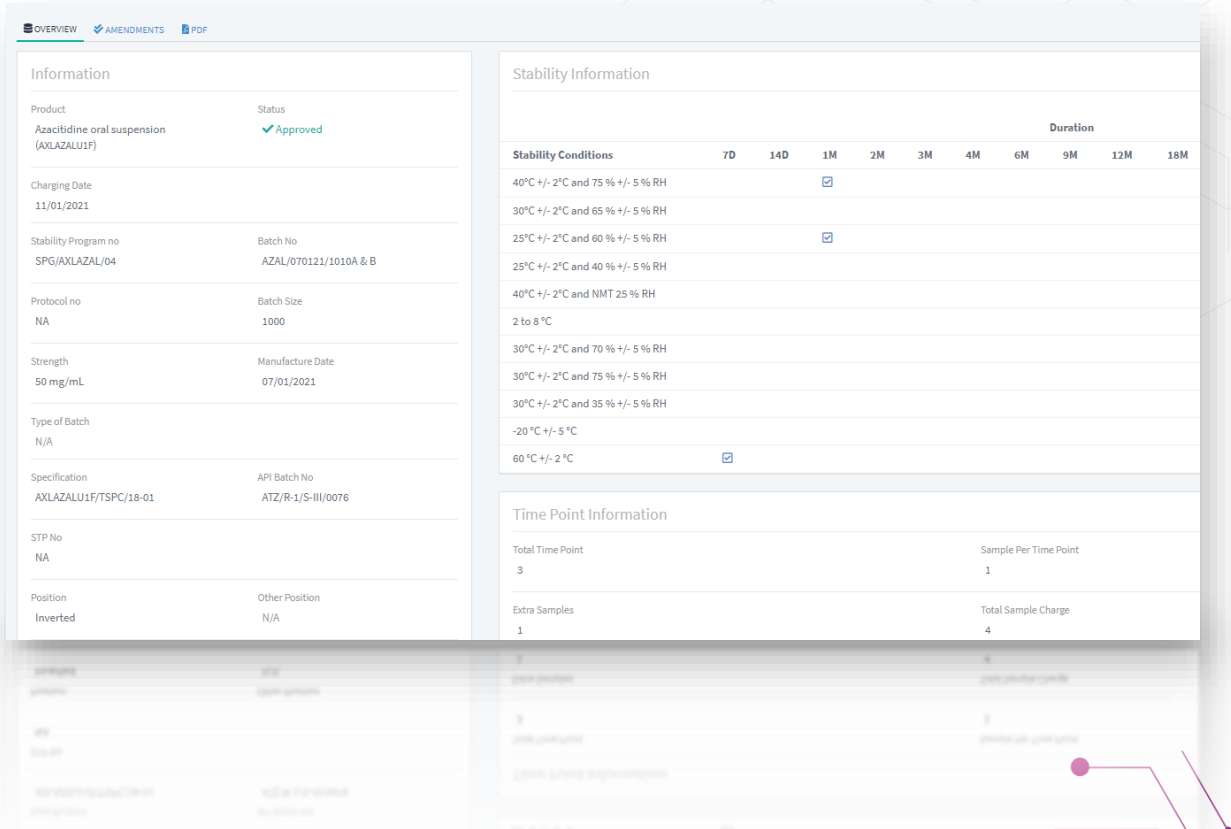
*If the test result of TAMC is 0 CFU/gram, the test for specified micro-organisms is omitted.

Note:

The Workflow of the Vetron-LIMS:

Step 9: Stability Program

The Storage Conditions would be selected here according to the product, where Total samples are added. This is the final module where all the beforehand information from the modules is added here. And lastly, the document is generated after the approval where it is approved firstly by FD and AD Department and lastly final approved by QA Department.



There are two features in the stability program :

Amendments: The comments and reviews which are related to company internal queries would be added here by the FD Department and approved by the QA Department.

Notification: The comments which are created by the FD Department in Amendments section, would be notified to the QA Department for approval through the Notification feature.

Purpose of

Vetron-LIMS

Purpose of LIMS

❖ Sample Management

Sample management is one of the critical functions of a LIMS. A LIMS manages detailed and accurate records of each sample and stores it securely, thus eliminating loss of data as it moves between the departments. Additionally, when the sample moves from one unit of the laboratory to another, the Chain is updated to ensure proper tracking of the sample's location and custodian.

❖ Inventory Management

The inventory management function of LIMS is an essential part of a laboratory's day-to-day management. A LIMS manages stock supplies and reagents. A LIMS can also generate automatic reorder alerts in case of stock depletion. These alerts facilitate laboratory workflows and prevent any delays resulting from the unavailability of stocks. A LIMS can also help to keep detailed and up-to-date information about your equipment and notify when any equipment is due for upgrade or maintenance.

Purpose of LIMS

❖ Test Management

A LIMS helps standardized testing workflows while providing complete and accurate control of the testing process. A LIMS allows you to manage the test conducted on the batch of samples, enables easy entry of the results, tracking approval/validation of results, and generation of reports.

❖ Reporting

Reporting is an essential part of LIMS that enables a laboratory to achieve an entire view of data collected and potential trends, reducing reporting overhead of the laboratory.

VETRON

Laboratory Information Management System

www.vetron.in

inquiry@vetron.in

+91 9820 735101

+91 9727 767101

Thank You