PORTFOLIO

NICHE INTEGRATED TECHNO SOLUTION

SERVICES

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About

NIT SOLUTION

Our process starts with meeting clients and understands the requirement properly, this helps us in understanding their problem and providing them with solutions accordingly to achieve their business goals. We are providing complex solution and best architecture for any business domain with the help of niche technologies like cloud (AWS,Azure,GCP) and micro services using spring boot,Python,Laravel,CI,Oracle Cloud,SOA,OSB etc.

NIT have best UI developers also with Angular,React,Flutter,Iconic. We are doing mobile application with Android,IOS etc. NIT solution has a boarder initiatives for poor excellent students and NIT is providing financial support to 30+ students every year and also we are providing Apprenticeship for B.tech/BCA(H),MCA,M.sc final year students where we are providing financial support to complete their training and major project. NIT Solution Pvt. Ltd. is giving opportunity to poor students to complete their desire goals and always support poor families. NIT Solution has done couple of food distribution camp in COVID 19 situation and we will take more initiatives in coming days.

Front-End Development

Bootstrap

HTML

Angular

Materialize

Jquery

Sass

Javascript

Css

Back-End Development

Java

Spring

Springboot

MongoDB

NodeJS

AWS

PHP

CodeIgniter

Laravel

Azzure

GCP

Aurora

Influx

MySQL

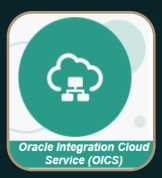
PostgreSQL

API Service

Python

SOA

OSB



OIC

Other Services

Provide Training on Over-Mentioned Languages with Experienced Faculties

Contact Us

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About DBoX

The Dbox project is a unique example of a wide E-commerce management system. It connects a brand/company to its Raw Material suppliers easily and securely. The Site owner monitors and controls the whole management system. In this platform any kind of company, makes materialistic products can Register and buy raw materials for their products.

Flowable

Flowable is none other than an access or permission management application that is generally used to make permissions to any kind of registration, payment or other activities belongs to other two modules likely suppliers and customers.

So generally, there are three modules which are interconnected through the flowable application.

Site Owner

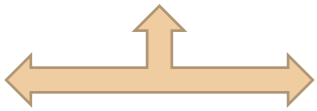
- Can monitor all kinds of permissions and accesses.
- Make one Superadmin for each customer.

Superadmin

- Controls each kind of activities from registration, role management to access management of the customer to whom he/she is assigned.

Add, track and manage the products, and orders.

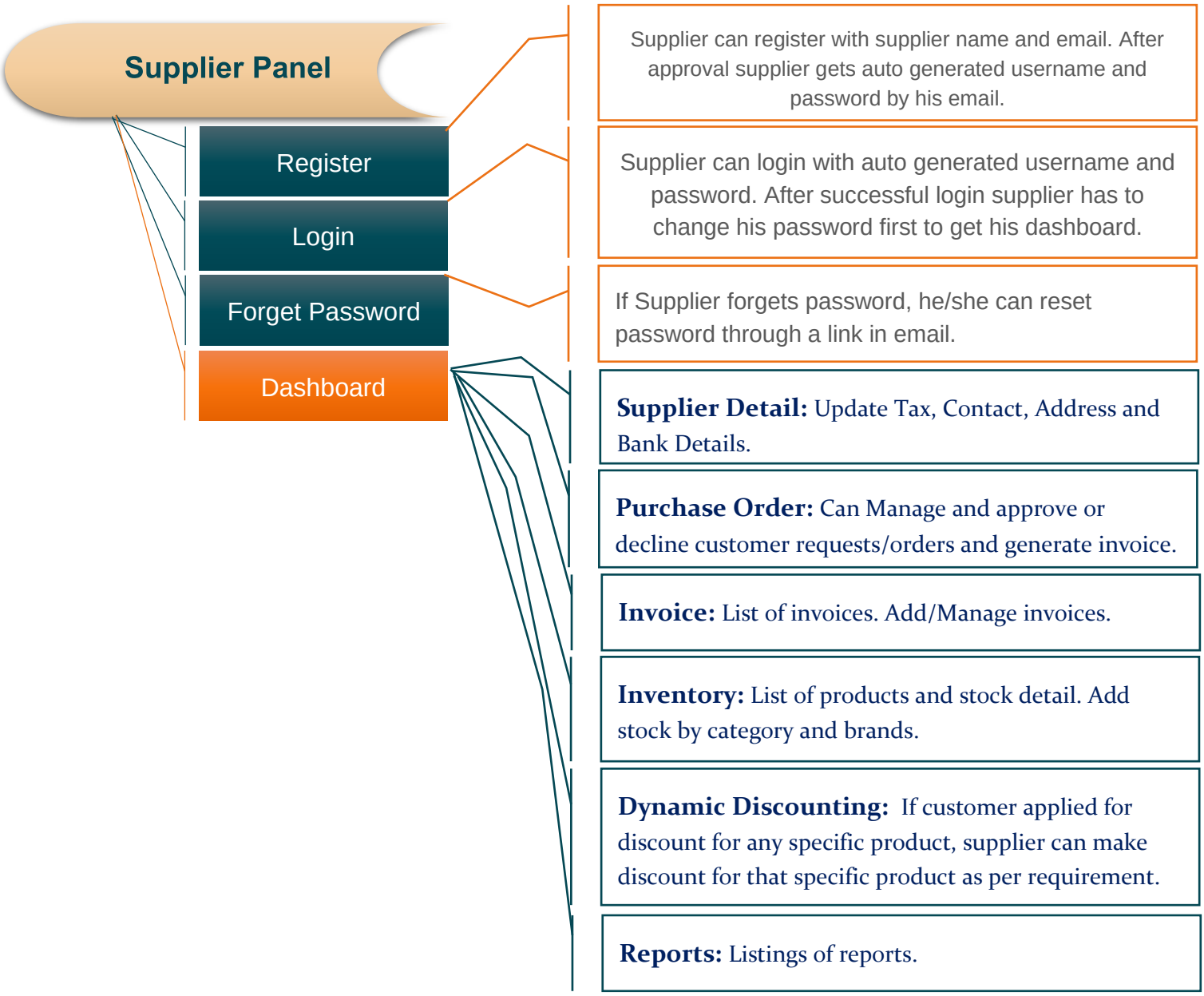
Supplier



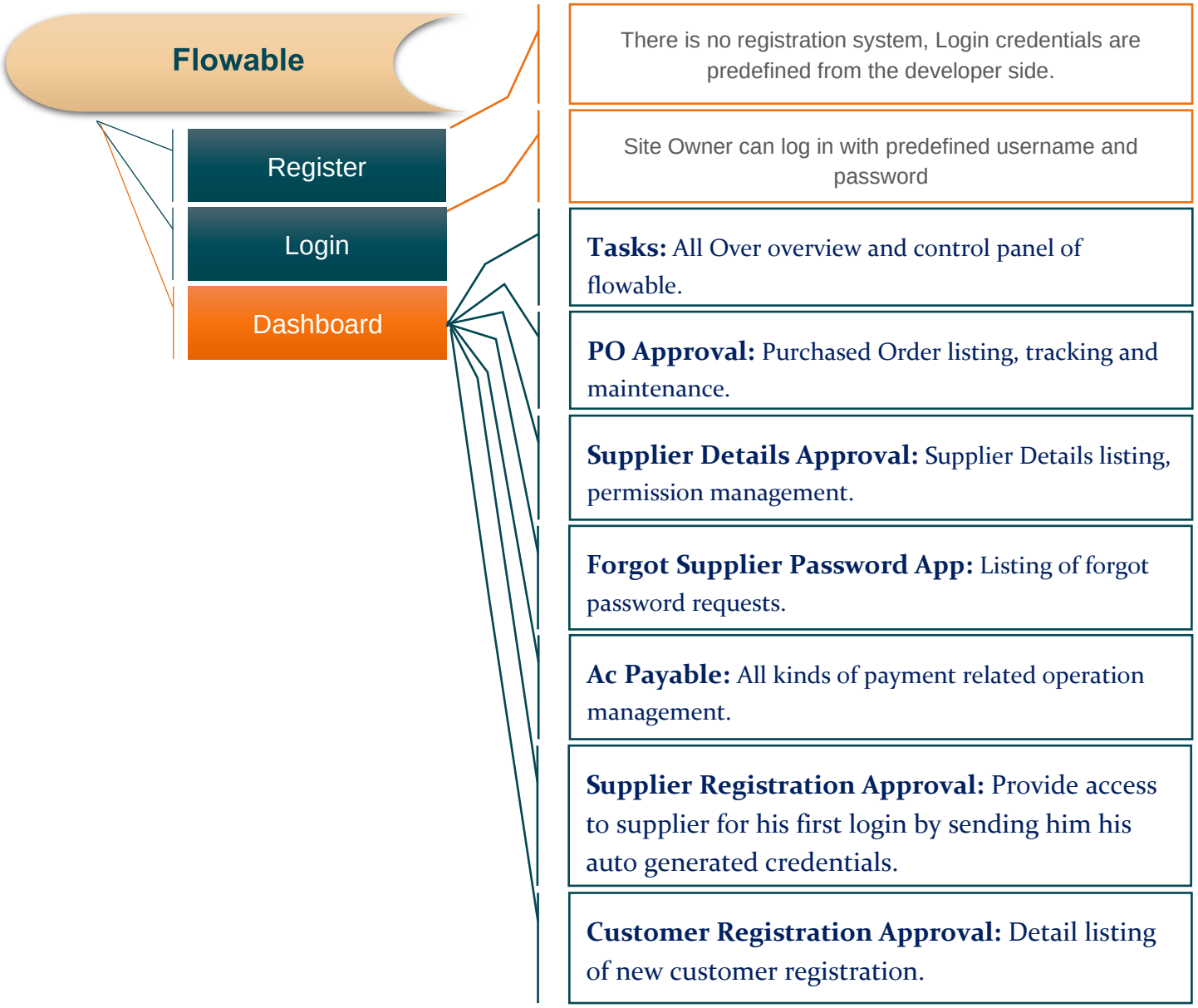
Customer

- **Admin:** Admin has the read and write access to the customer portal.
- **User:** User has only the Read access to the customer portal

DBOX WEB APPLICATION

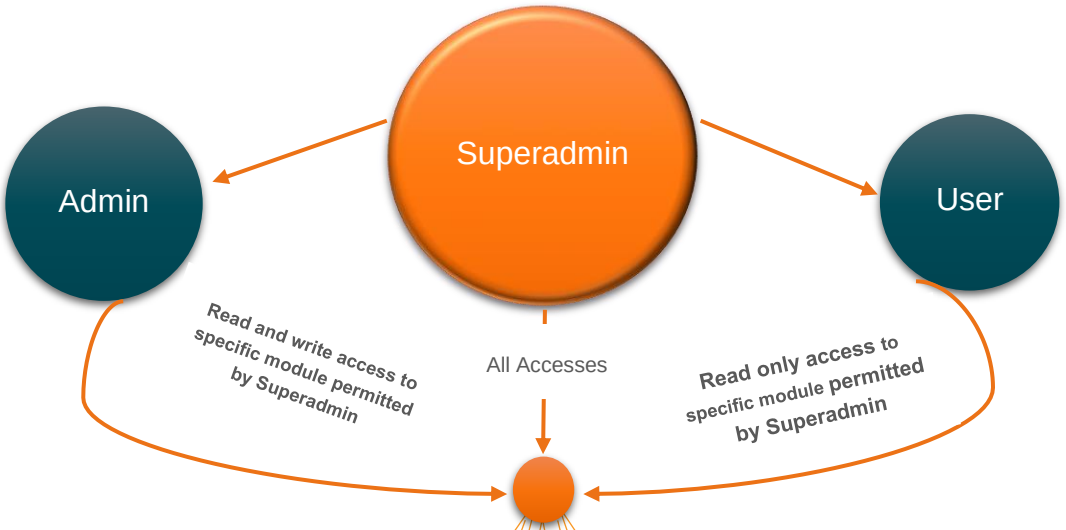


DBOX WEB APPLICATION



DBOX WEB APPLICATION

Customer Panel



Contract: Listing of contract and add contract.

Address: Listing of Addresses and add

Department: Listing of Departments and add department.

Bulk Upload: Upload Supplier details, supplier details update, registration type, currency, department, functionality, role and so on in bulk as excel file.

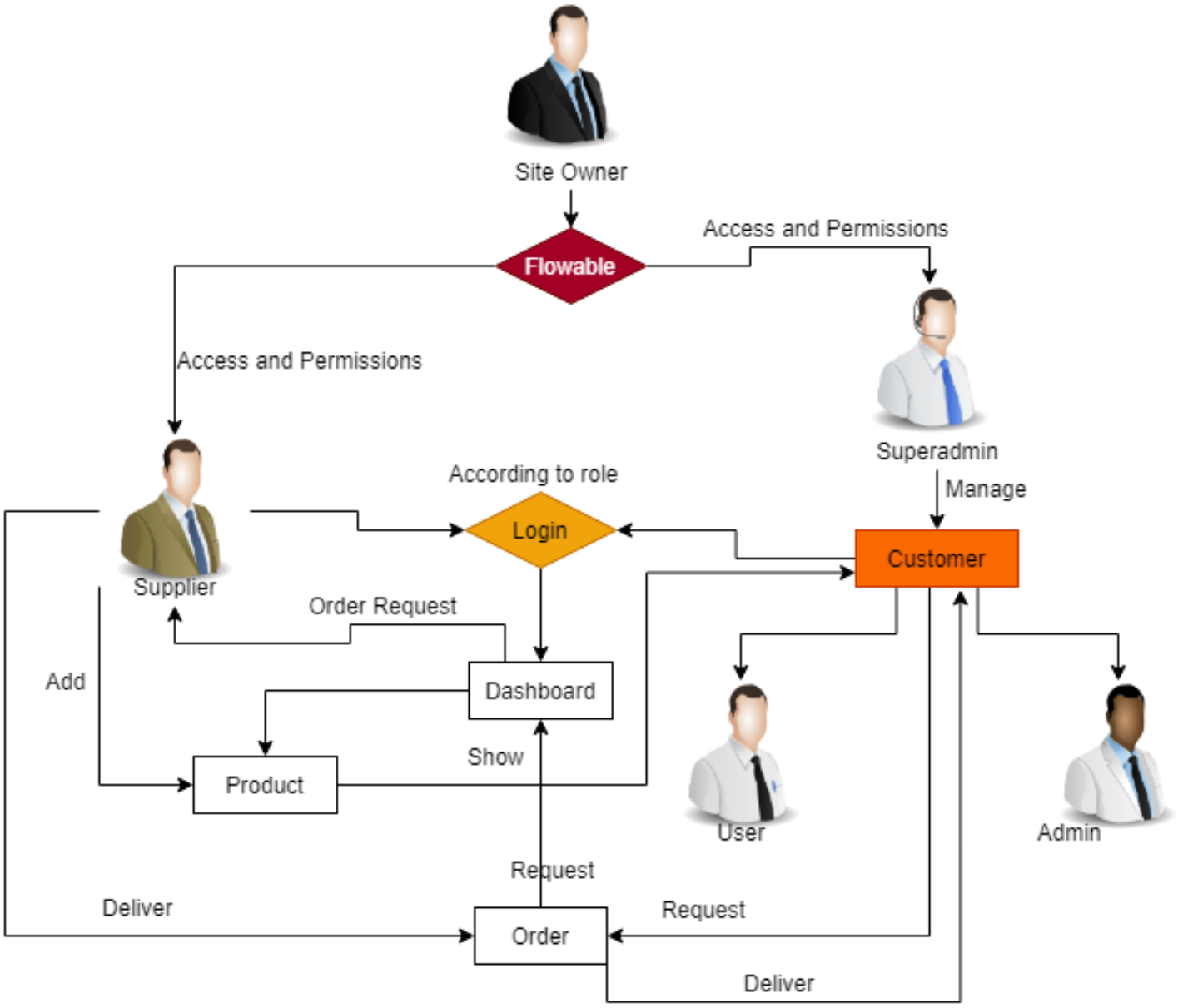
User Management: User listing, add and edit user.

Purchase Order: Listing of Purchase order.

Supplier Management: Supplier listing and add supplier and edit supplier details.

Company Management: Edit company details.

WORK FLOW


Site Owner
Flowable
Access and Permissions
Access and Permissions
Superadmin
Manage
According to role
Login
Customer
Supplier
Order Request
Add
Dashboard
Show
Product
User
Admin
Request
Deliver
Request
Order
Deliver

• TECHNOLOGIES BEHIND

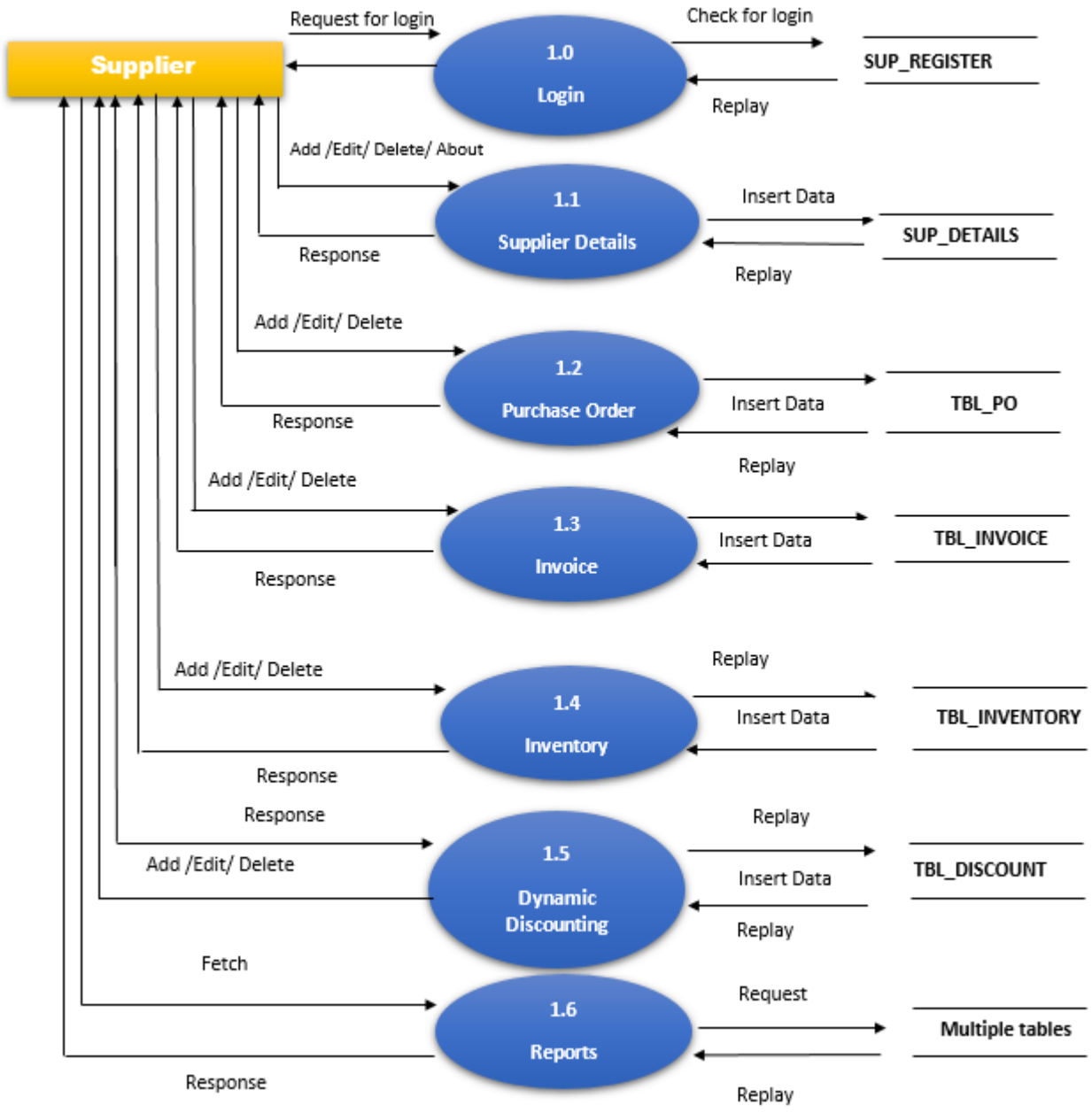
Front-End

- Angular 9.0.0
- Typescript
- Scss
- Material

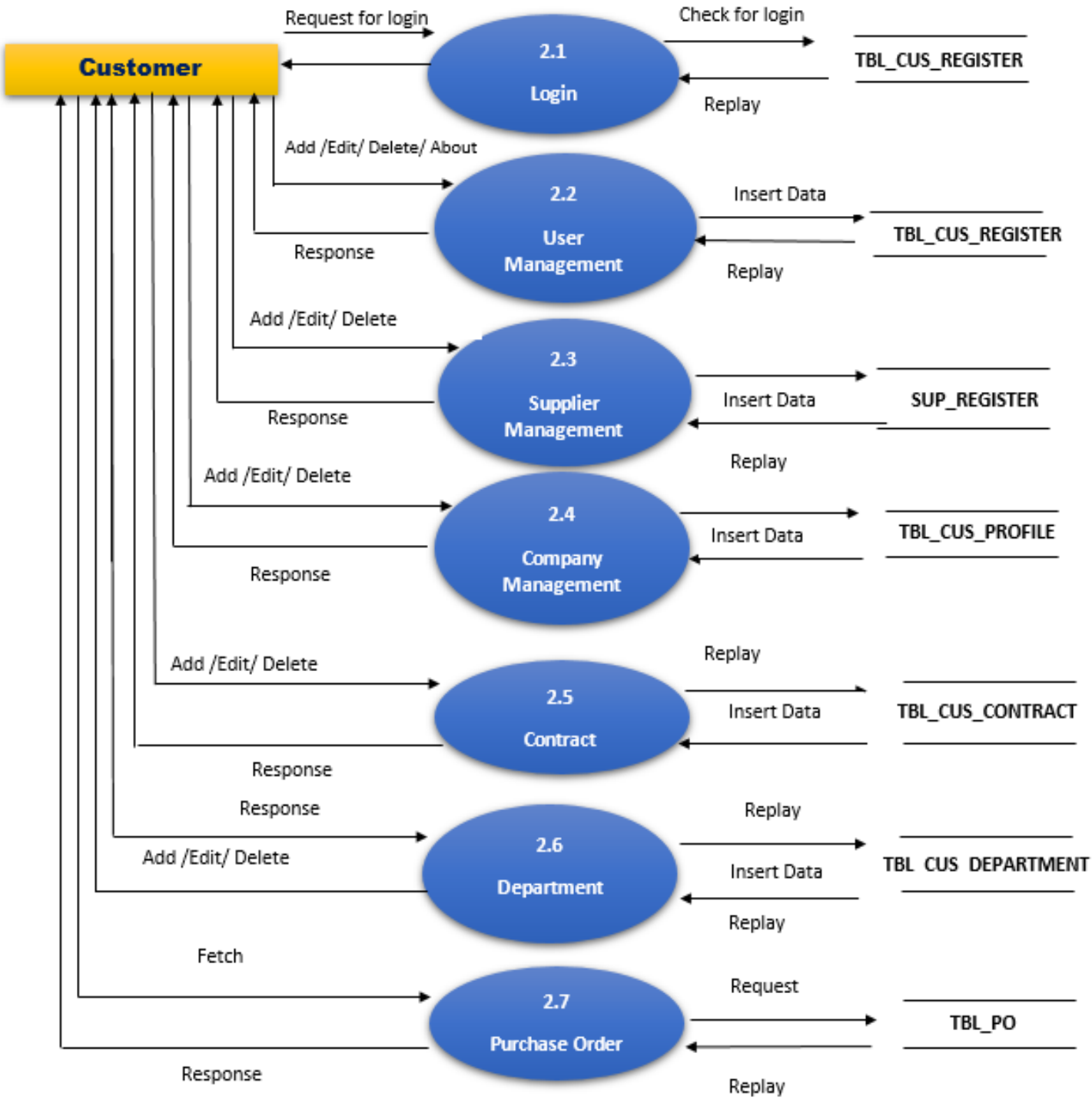
Back-End

- Mainly developed in Spring boot [Java Framework]
- JWT Token is used for session security.
- Used Rest Controller to handle rest requests.
- Used Spring Data JPA for relational mapping.
- Hibernate in Spring Boot.
- Spring Boot ORM is implemented.
- Spring Boot Swagger for API documentation.
- For external API call, Rest Template is used
- Used GSON for JSON String – Object conversion.
- Used GIT as version control.
- Used Jenkins for CI/CT.
- AWS S3 Bucket for file store.
- AWS Relational Database is also implemented.
- AWS instance for deploying application.
- Used Flowable, a BPM Tool for creating logics dynamically.
- MySql is used to manage database.
- MySql Store Procedure is used to simplify the database Operations.

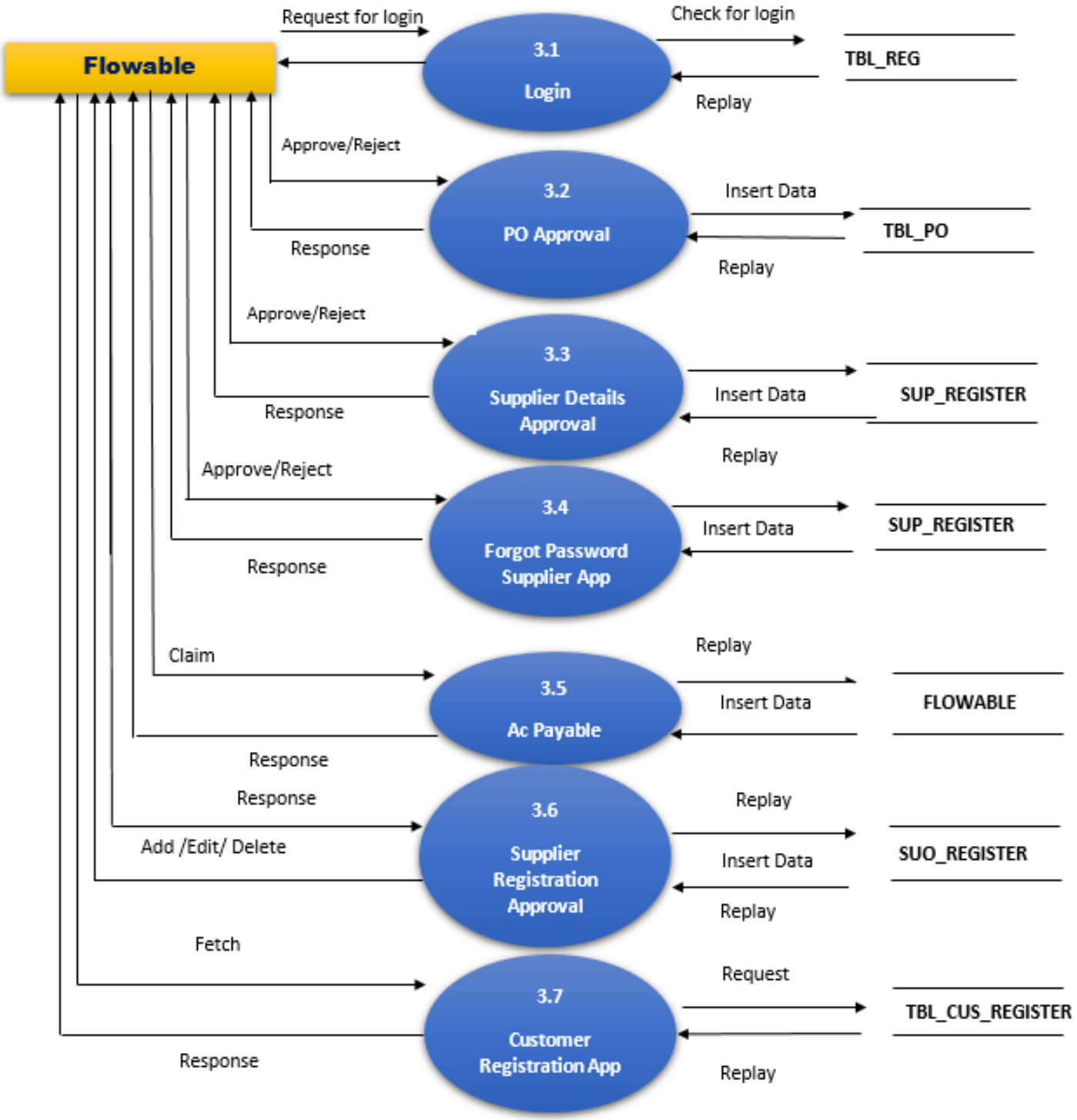
DFD [SUPPLIER]



DFD [CUSTOMER]



DFD [FLOWABLE]

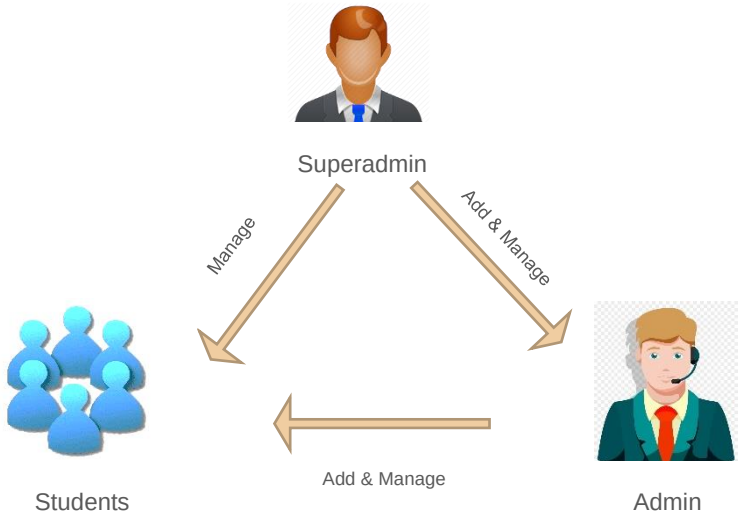


ULEARN

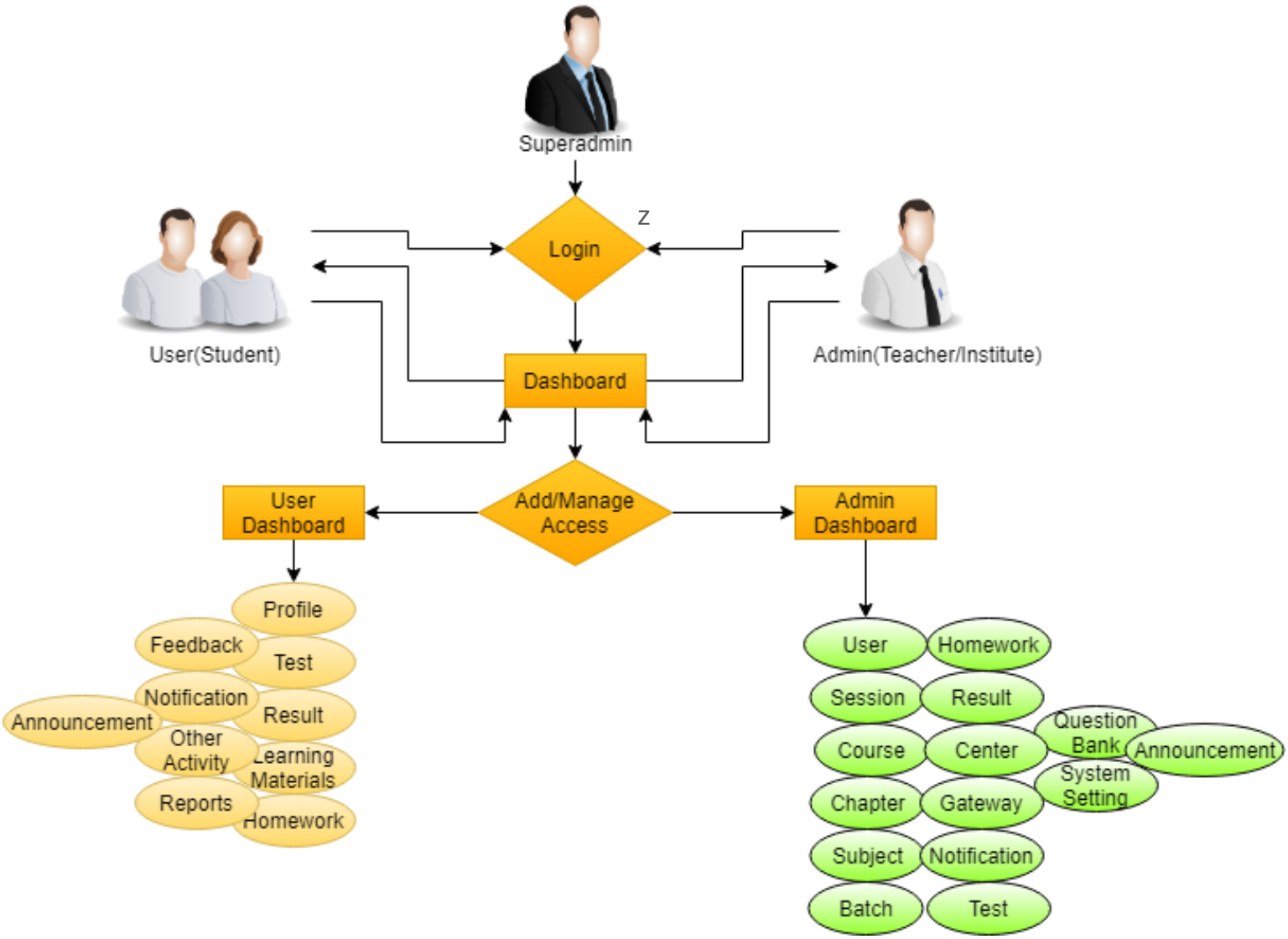
About uLearn

learn yourself

uLearn is a web application that is an online Education Management System. A teacher or an institute can register here and provide their services likely giving tutorials, taking tests etc. A student can be added at this platform by a teacher or institute to which he/she belongs to. Student can get tutorials and participate in test according to their institutional package. Superadmin can manage all the accesses for the admin(teacher/institute) and user(student).



WORK FLOW


Superadmin
Login
User(Student)
Admin(Teacher/Institute)
Dashboard
Add/Manage Access
User Dashboard
Admin Dashboard
Profile
Feedback
Test
Notification
Result
Announcement
Other Activity
Learning Materials
Reports
Homework
User
Homework
Session
Result
Question Bank
Announcement
Course
Center
System Setting
Chapter
Gateway
Subject
Notification
Batch
Test

ULEARN WEB APPLICATION

Tracking: *In this module super admin can track admin/student. Superadmin can see all the activities of admin/student like for admin how many tests taken by a particular admin, how many students reached by an admin.*

Manage Website: *In this module super admin can manage his website like website logo, banners etc.*

License: *License is about expiry of the application. While creating the license there is a field called create date. The create date denotes that, on which date the license is created.*

Package: *Package is about the subscription of users (Student). While creating the package there is a field called create date. The create date denotes that, on which date the license is created.*

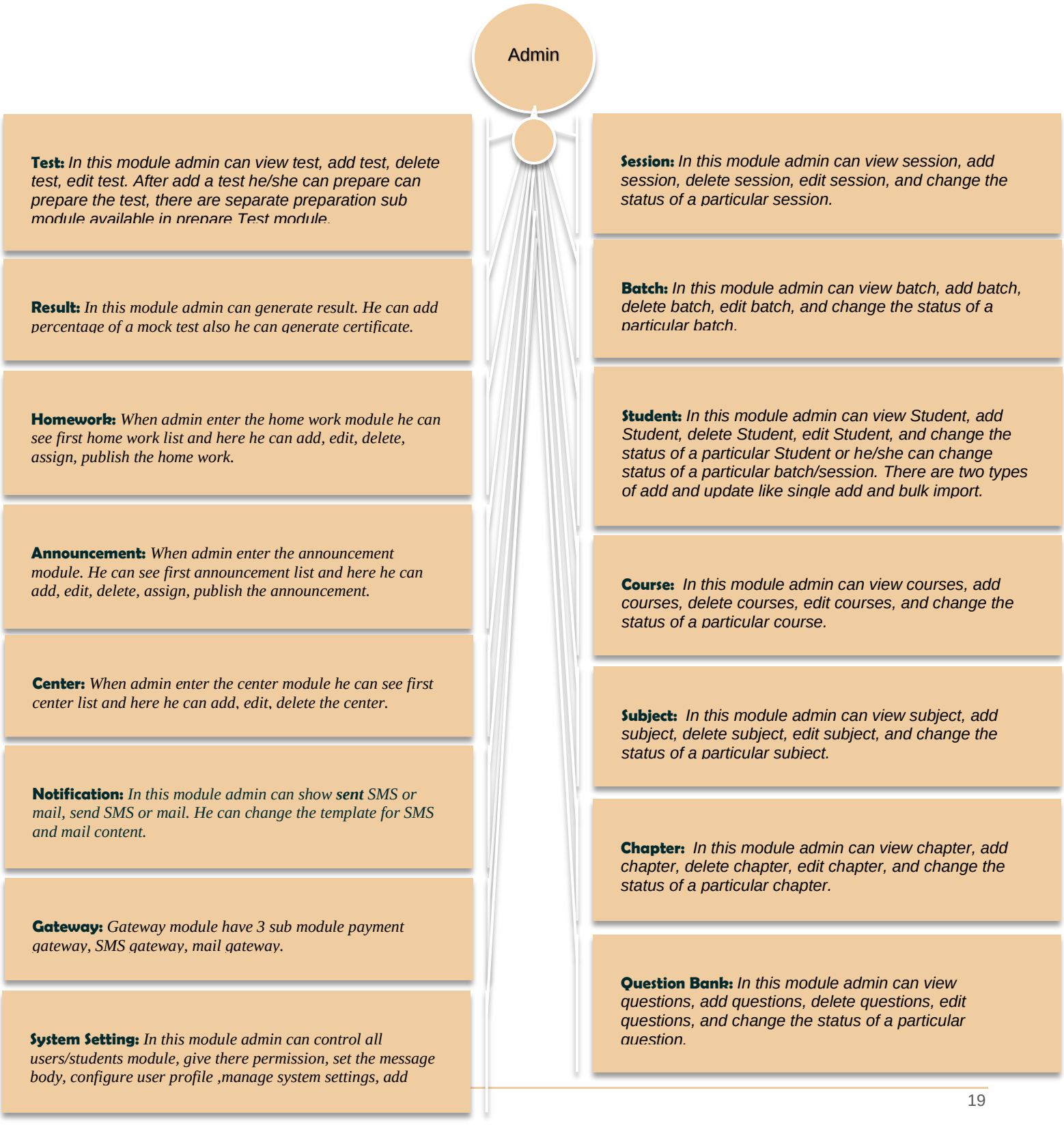
Settings: *In this module super admin can create a new admin, view the existing admins and edit the existing admins. After creating or editing an admin by Superadmin, admin will receive the mail/sms.*

Subscription: *In this module super admin can view all existing packages, add and delete packages. He can view the license, add license and also see the notifications, approve or reject the notifications.*

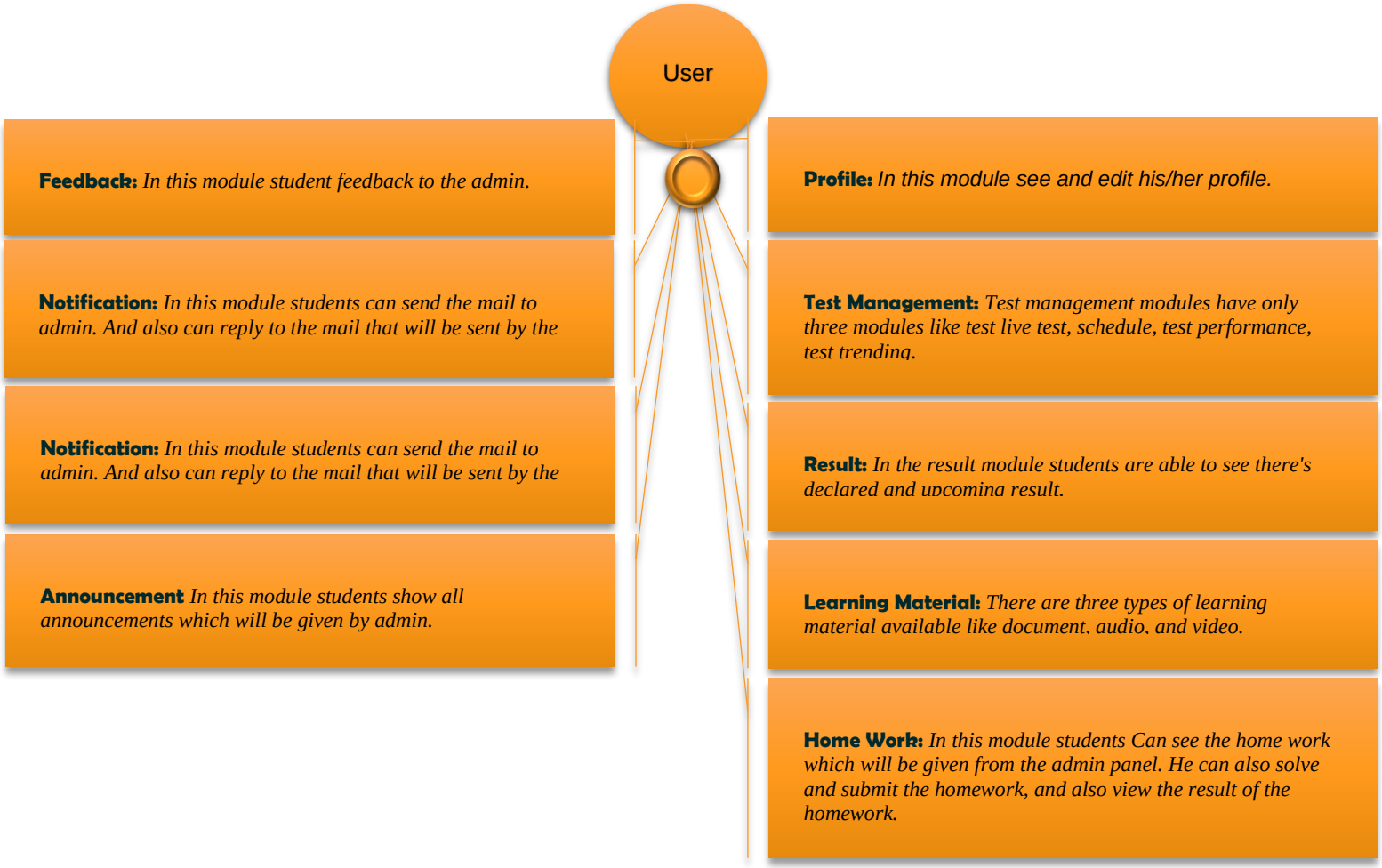
Notification Content: *In this module super admin can add a new content, edit a content, delete a content. He/she can send mail/sms to admin, see the previous send/receive mail/sms.*

Payment: *In this module super admin can view payment and add a new payment. There are two types of payment like part payment and full payment.*

ULEARN WEB APPLICATION



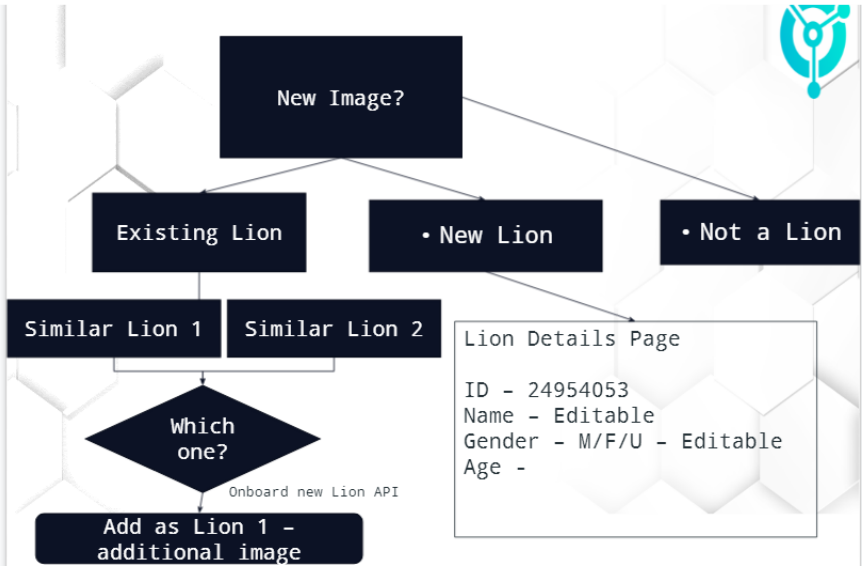
ULEARN WEB APPLICATION



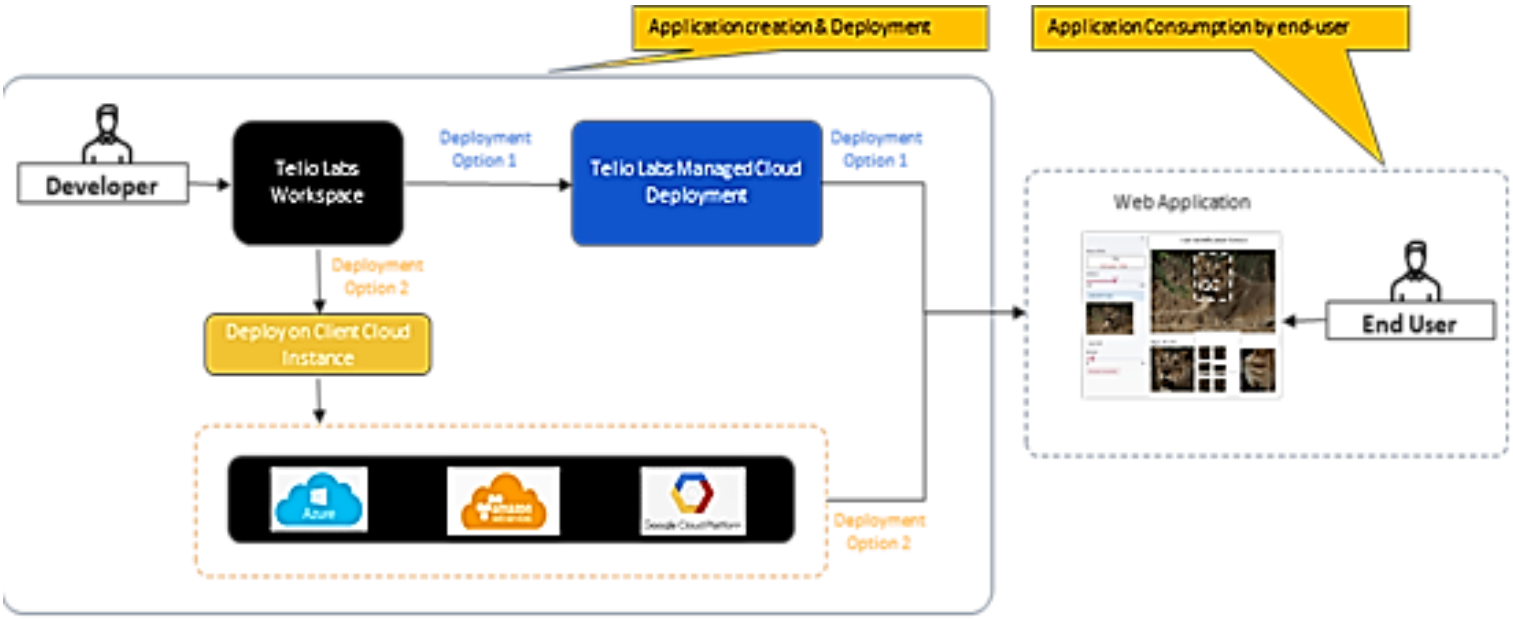
GIR

About GIR National Park

The GIR web application is all about GIR National Park situated in Gujrat. The application is made for recognizing the lions of GIR National Park. The GIR National Park is made for the lions specially. This web application helps to identify lion with a facial recognition tool named "Whisker" which uses Artificial Intelligence to validate the faces by dividing the face in several parts and validate those parts with picture given by the user.



WORK FLOW


Application creation & Deployment
Application Consumption by end-user
Developer
Telio Labs Workspace
Deployment Option 1
Telio Labs Managed Cloud Deployment
Deployment Option 1
Deployment Option 2
Deploy on Client Cloud Instance
Azure
Deployment Option 2
Web Application
End User

GIR WEB APPLICATION

Upload Photo

- Upload photo
- Fetch lions name with additional information
- Generate name tag

ID Card Generation

- ID card for each unique lion
- Along with name, tag and additional information

Edit Metadata

- Expert can edit or updatethe metadata of the lion

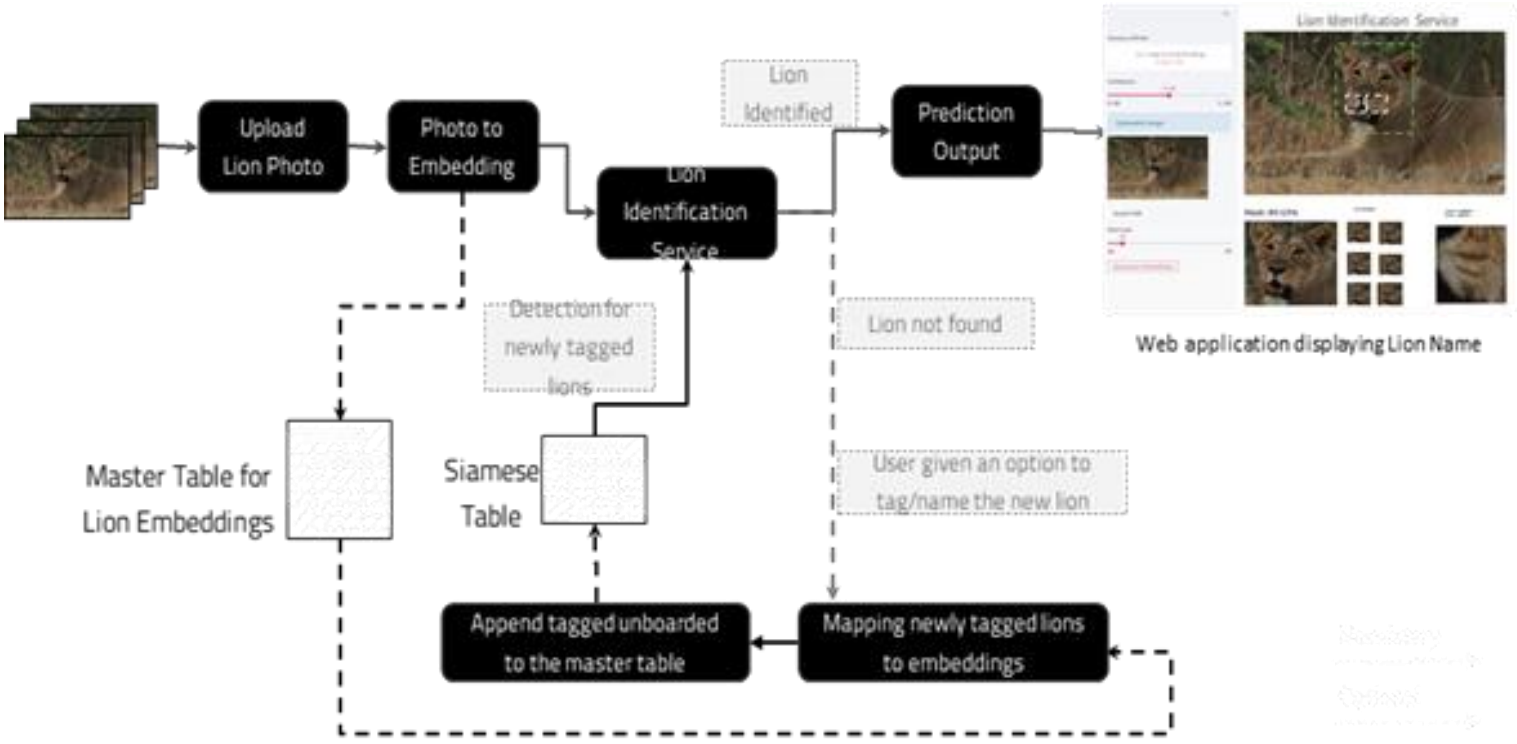
Model Prediction

- Predict folder of images to the end user side for validation.

Data Table

- Table with all the data of the lions.
- Can filter the data by several criteria.

“WHISKER” ARTIFICIAL INTELLIGENCE & AUTO LEARNING



TECHNOLOGIES BEHIND

Frontend: To create interactive and dynamic portal for end user, REACT is use

Backend: Django is used to create rest API.

Computer vision: Deep learning model is used for image classification and to differentiate the Lions.

Along with pytorch ,keras ,OpenCV is used for building model.

Database: MongoDB is used to store images.

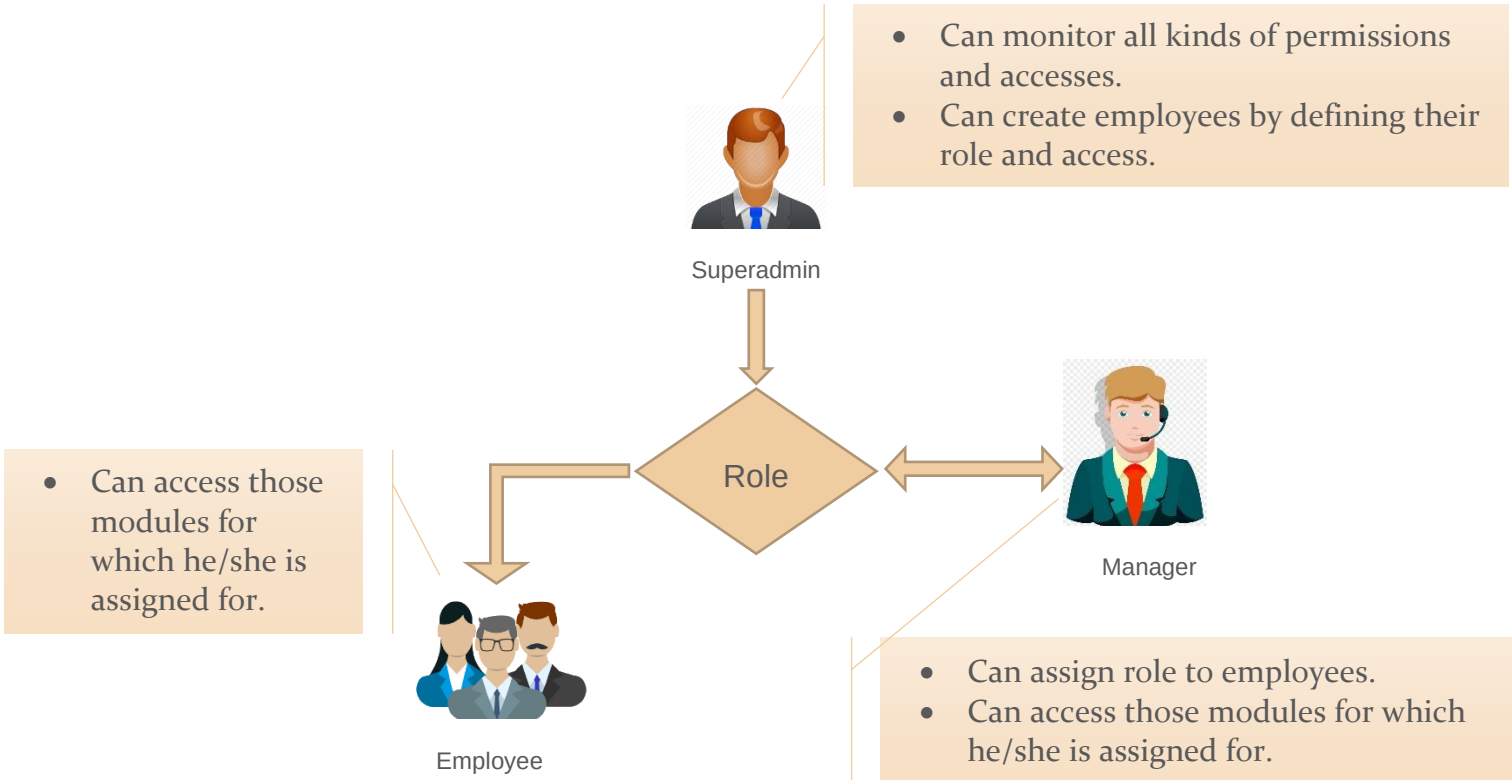
Cloud: To accelerate and automate the ML workload GCP is used

MLops : Docker, Kubernetes and Kubeflow is used.

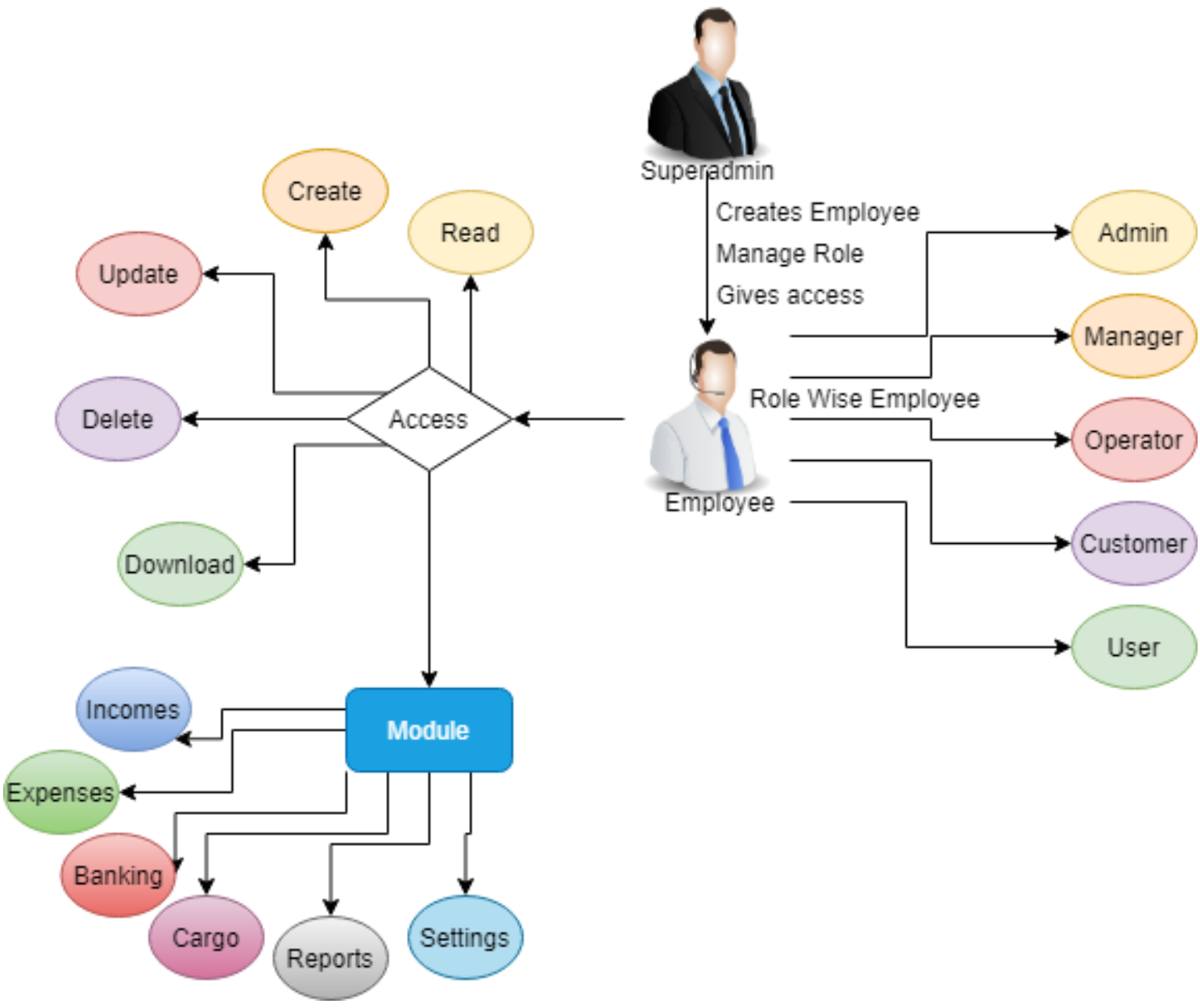
PRG EXPRESS

About PRG EXPRESS

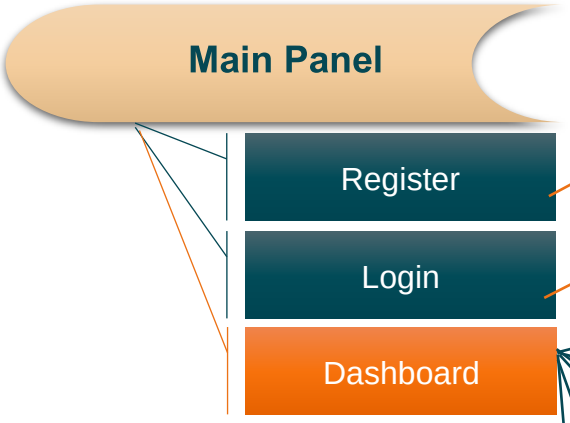
PRG Express is one of the biggest shippers in Canada with multiple office across Canada and India serving many of their clients. PRG Express provides end-to-end logistic services via Air, Land and Sea. PRG Express needs a website to automate all their daily manual work, and track invoice status (paid, unpaid, delayed, etc.). PRG Express expects the data to reside in Canada and would like to host it in Private cloud – to be setup in Brampton, Canada.



WORK FLOW


Superadmin
Creates Employee
Manage Role
Gives access
Admin
Manager
Operator
Customer
User
Role Wise Employee
Employee
Access
Create
Read
Update
Delete
Download
Module
Incomes
Expenses
Banking
Cargo
Reports
Settings

PRG WEB APPLICATION



There is no registration system, Login credentials are predefined from the Superadmin side.

Every entity of this application can login from same login panel

Incomes: All kinds of incomes can be listed and managed through this module.

- *Invoice:* Listing, add, import, export, manage.
- *Consignments:* Listing, add, import, export, manage customer details for whom invoices get generated.
- *Revenues:* Listing, add, import, export, manage against customer.
- *Customers:* Listing, add, import, export, manage customer details.

Cargo: Package management system.

- *Consignments:* Listing, add, import, export, manage package details.
- *Bags:* Add and Edit bags and assign consigner and package details to it.
- *Shipments:* Listing, add, manage Shipment details.
- *Addresses:* Addresses can be add or managed from here.
- *Cargo Settings:* Units can be manged here

Expenses: Listing, Add, Export, Import and Management of Billing, Payment, Employee and Vendor expenses

Banking: Listing, Add, Export, Import and Management of Banking Accounts, Transaction and Reconciliations.

Reports:

- Filtered and Month-wise reports download/ print and graphical representation of income and expense and income vs expense.
- Filtered and Month-wise reports download/ print of TAX and profit & loss report

Settings: Can edit any kind of elements of the application dynamically from this module.

TECHNOLOGIES BEHIND

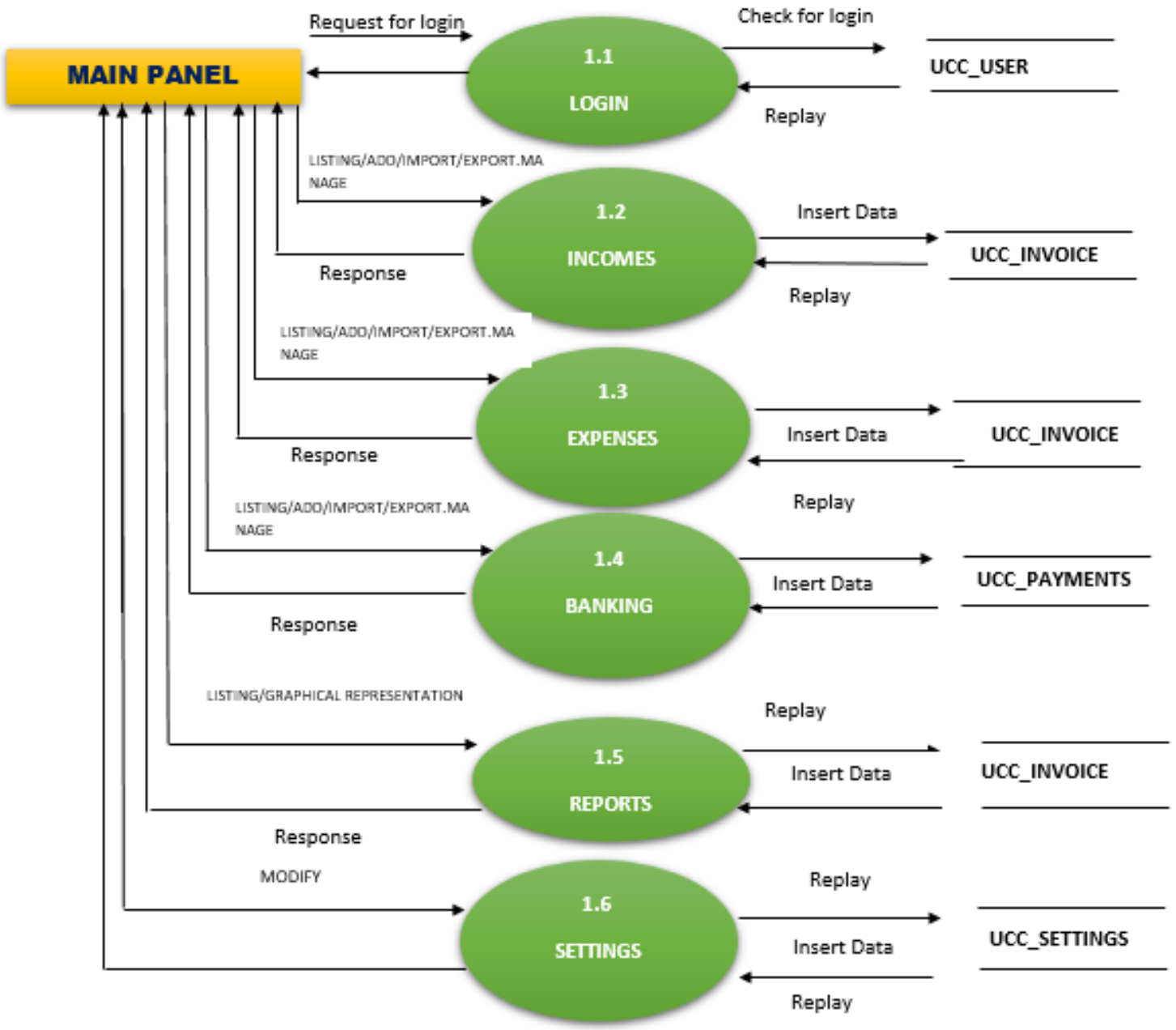
Front-End

- UI Framework: Bootstrap 3.3.7 (Main Panel)
- Javascript Framework: Angular 7.2.15 (Cargo)

Back-End

- Mainly developed in Laravel 5.4 [php Framework]
- The main Highlight is the whole application has **full of dynamic elements**.
- Even a from and its field are dynamically allocated.
- Laravel is also used to create and integrate bootstrap design.
- Laravel Auth is integrated to create the login system.
- Laravel Template Engine is used to create dynamic design.
- Laravel effective ORM is used to optimize sql code and make database operations with basic php syntaxes.
- Used Laravel migration to reduce efforts while making changes to database.
- Used Laravel Seed to take backup of specific tables and its data.
- MySql is used as database.

DFD

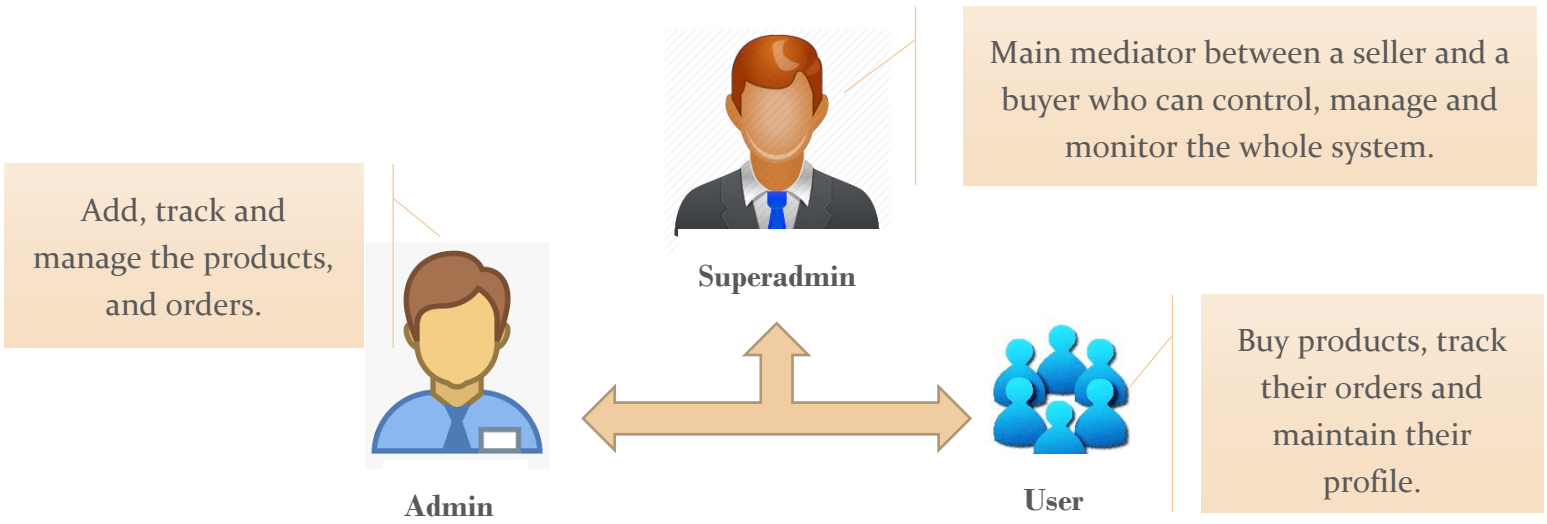

MAIN PANEL
Request for login
1.1
LOGIN
Check for login
UCC_USER
Replay
LISTING/ADD/IMPORT/EXPORT.MA
NAGE
1.2
INCOMES
Insert Data
UCC_INVOICE
Response
Replay
LISTING/ADD/IMPORT/EXPORT.MA
NAGE
1.3
EXPENSES
Insert Data
UCC_INVOICE
Response
Replay
LISTING/ADD/IMPORT/EXPORT.MA
NAGE
1.4
BANKING
Insert Data
UCC_PAYMENTS
Response
LISTING/GRAPHICAL REPRESENTATION
Replay
1.5
REPORTS
Insert Data
UCC_INVOICE
Response
MODIFY
Replay
1.6
SETTINGS
Insert Data
UCC_SETTINGS
Replay

HM SHOPPING

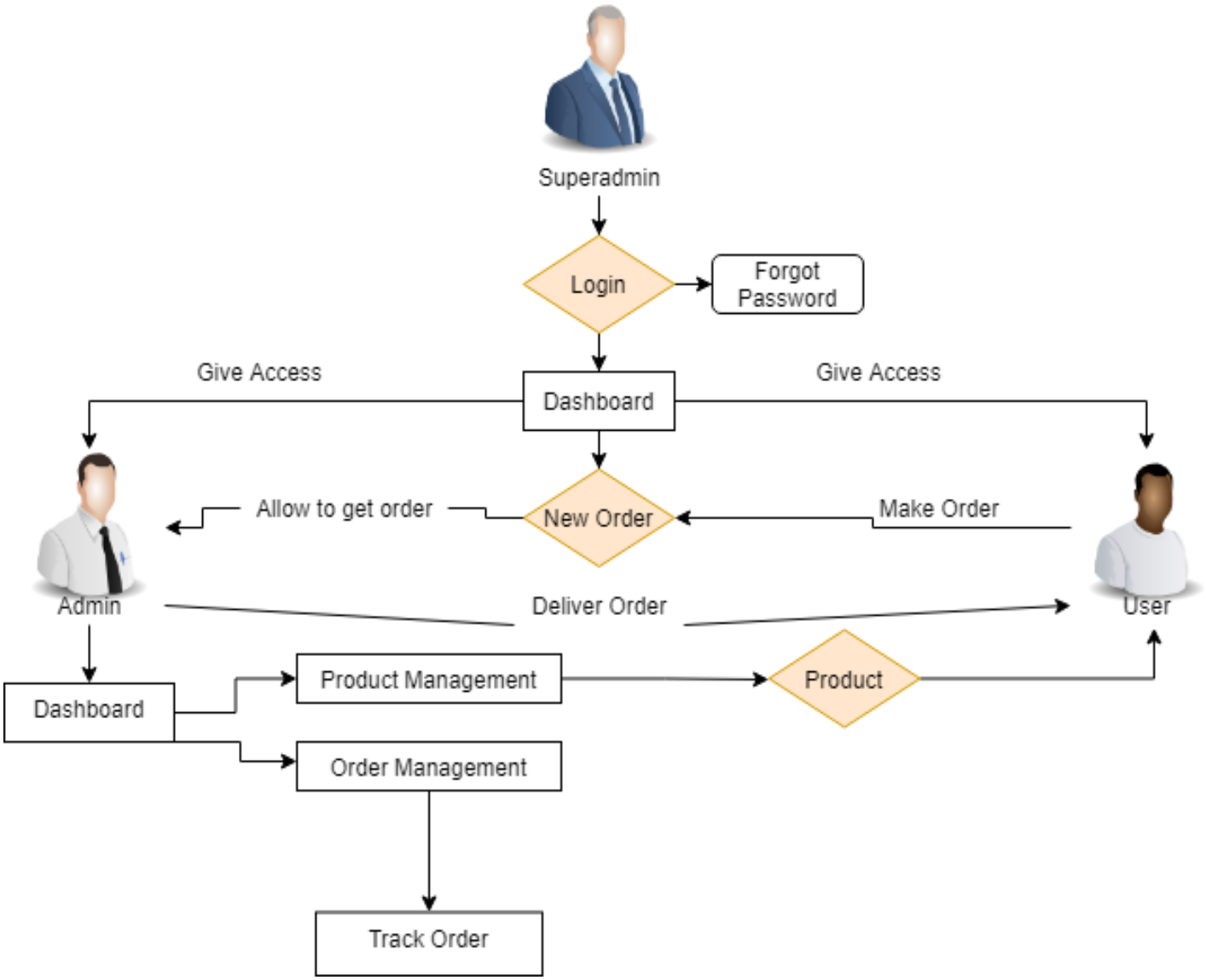
:

About HM Shopping

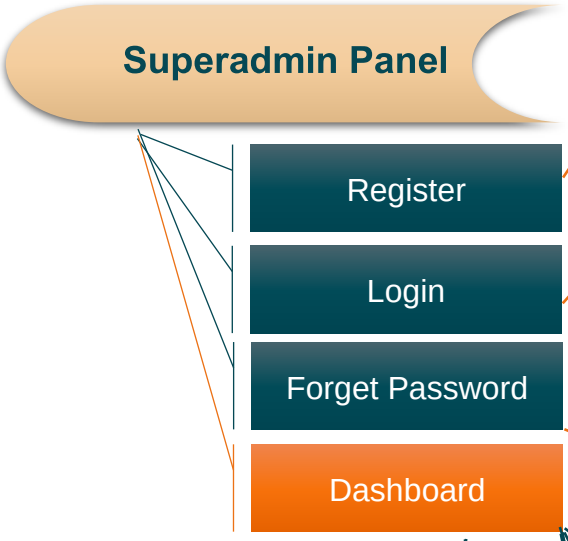
HM Shopping is the website where one can sell or buy home made products. Hm Shopping is made actually for connecting a home-based product seller to a buyer easily with a online platform. One can make anything like Food, Garments, Grocery etc. at home and sell that on HM Shopping easily just by making an account. The Project is actually made with a three-module architecture, are the followings



• WORK FLOW


Superadmin
Login
Forgot Password
Give Access
Dashboard
Give Access
Allow to get order
New Order
Make Order
Admin
Deliver Order
User
Dashboard
Product Management
Product
Order Management
Track Order

HM SHOPPING WEB APP



The registration system does not exist, but the credential can be updated. Initial credentials are pre-input from the developer side by Laravel seeder.

Superadmin can loin by verifying the pre-input email id and password.

Each time the Superadmin logs in, a **JWT** token will be generated and validated to secure the payload in an encrypted format

If Superadmin forgets password, he/she can reset password by validating OTP sent to pre-input email.

Order List: Status wise listing of order details section.

Order Track: Order status can be seen in this section.

Admin: Monitor the admin details and manage access.

User: Monitor the user details and manage access.

Contact Us: Any admin or non-admin user can make queries from contact us section of the admin welcome page. Those queries use to be displayed here.

Category: Superadmin can add or manage the categories, sub-categories, child categories, size, colour and so on in this section.

Settings: In this section Company details, Banner, Payment Policy, Privacy Policy, Return Policy and Terms & Condition are added and managed.

Product List: Business type, Category, Sub-Category wise product listing are shown in this section.

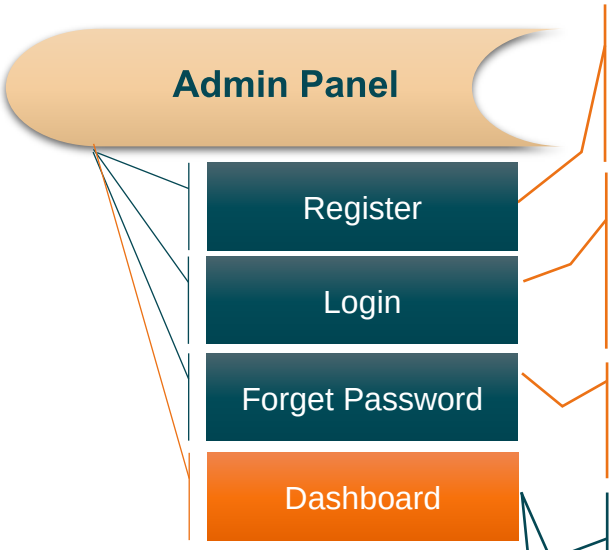
Frontend:

- We use Bootstrap 4, Jquery, and several javascript likely Moment, Slick, Zepto etc to make UI flawless, attractive and user friendly.

Backend:

- Here we have used "**Laravel**" framework at the Backend architecture.
- With the **Laravel ORM** concept, it's been easy to make the whole system Tense to Dynamic.
- By using **JWT** token we have made every payload more secure with encryption. With each page reload the token has to be verified every time.
- **MySql** has been used to store the data in well form structure that we can access and mage data properly with ease.

HM SHOPPING WEB APP



A seller/admin can register with his mobile number and name by validating a OTP he/she can set his password for login further.

Admin can Login by validating his mobile number and password.

Similarly, like Superadmin admin server also has to verify the JWT token to get the payload for more security.

If admin forgot his password, he/she can reset his password by validating a OTP with registered mobile number.

Product Management: Here admin can make request to Superadmin to add a new category and sub-category and get listing of existing category and sub-category for his business type.

Order Management: Here admin can manage and track the order belongs to him/her.

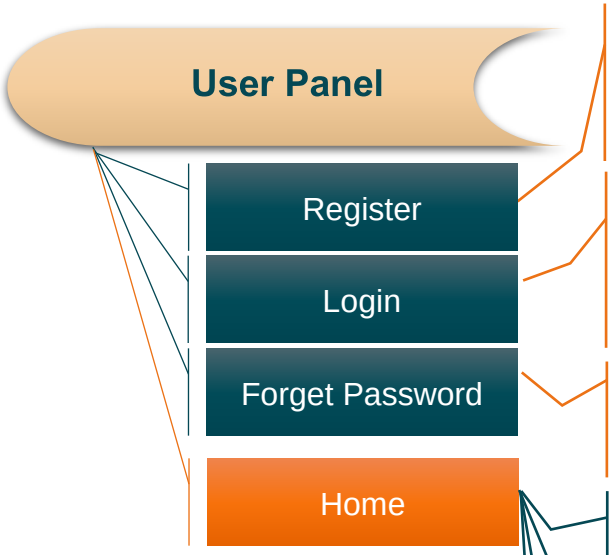
Frontend:

- **Angular** , a javascript framework is used to make its main UI.
- **Ionic** is use as web framework to make the UI smooth and efficient.

Backend:

- The whole Back-End is made of **Laravel** 5.8
- With the **Laravel ORM** concept, it's been easy to make the whole system Tense to Dynamic.
- By using **JWT** token we have made every payload more secure with encryption. With each page reload the token has to be verified every time.
- Each of the functionality comes from a **Api Service Call.**
- Some APIs contains multiple functionalities,
- Used **Laravel Seeder** to keep backups of important tables.
- Used **Laravel migration** for each table.
- **Laravel Job** is used to make data insertion operations.
- **Laravel Helper** to define some functionalities.
- **MySql** has been used to store the data in well form structure that we can access and mage data properly with ease.

HM SHOPPING WEB APP



A User can register with his mobile number, email and name by validating a OTP. he/she can set his password for login further.

User can Login by validating his mobile number and password.

Similarly, like Superadmin and admin user server also has to verify the JWT token to get the payload for more security.

If User forgot his password, he/she can reset his password by validating a OTP with registered mobile number.

Search: Here User can search products by categories or titles.

Product: Here User can get product list by several categorization and also details view of the product.

Order Management: Here User can manage and track the order belongs to him/her.

Profile: User's profile can be managed and updated from here.

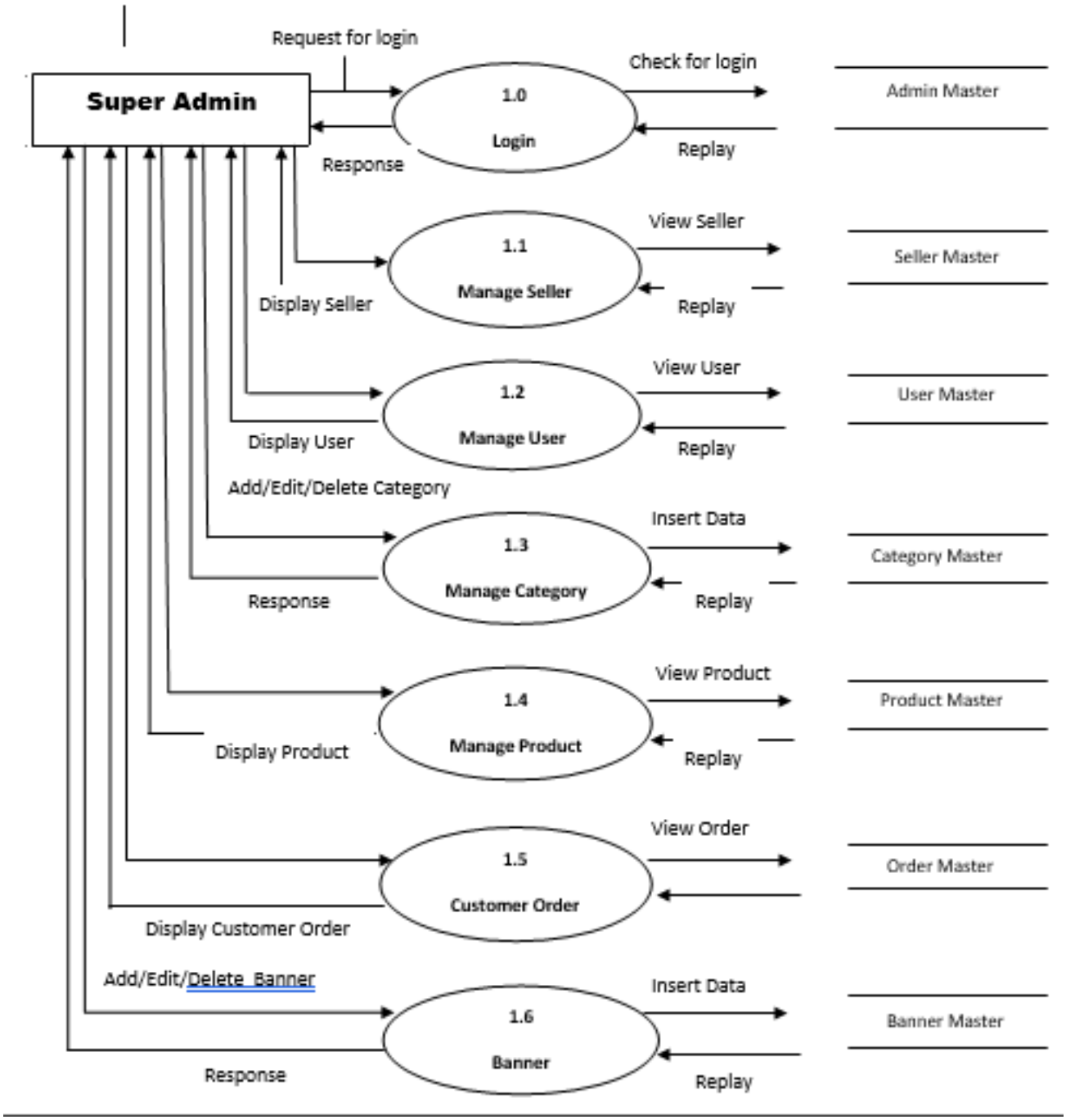
Frontend:

- **Angular** , a javascript framework is used to make its main UI.
- **Ionic** is use as web framework to make the UI smooth and efficient.

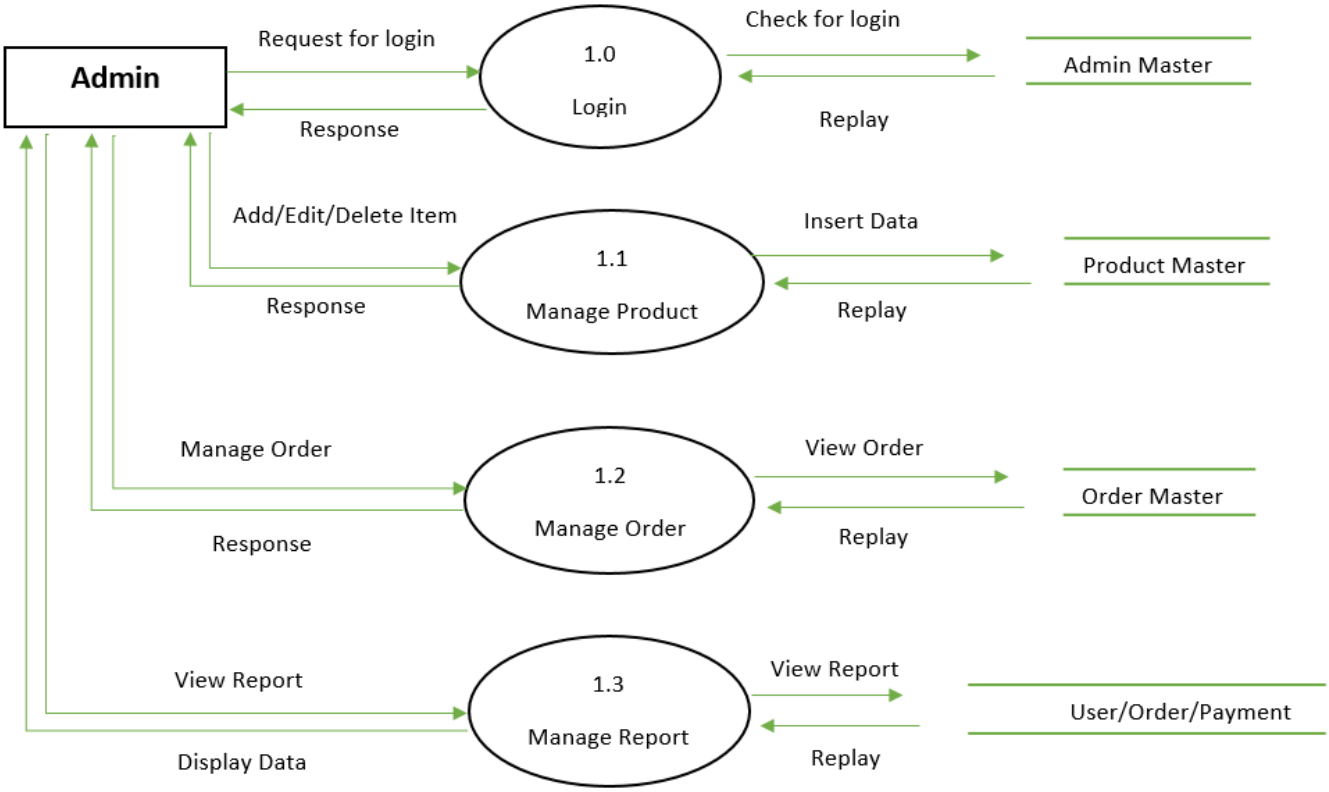
Backend:

- The whole Back-End is made of **Laravel** 5.8
- With the **Laravel ORM** concept, it's been easy to make the whole system Tense to Dynamic.
- By using **JWT** token we have made every payload more secure with encryption. With each page reload the token has to be verified every time.
- Each of the functionality comes from a **Api Service Call.**
- Some APIs contains multiple functionalities,
- Used **Laravel Seeder** to keep backups of important tables.
- Used **Laravel migration** for each table.
- **Laravel Job** is used to make data insertion operations.
- **Laravel Helper** to define some functionalities.
- **MySql** has been used to store the data in well form structure that we can access and mage data properly with ease.
- There are dynamic designs made from backend.
- The **ORM concept** make the data flow faster and smoother.
- We have Used **Laravel Model and Jobs** to retrieve the data from database.
- Manual inputs got added to the **Laravel Request** functionality to Join Queries and in other query builders.

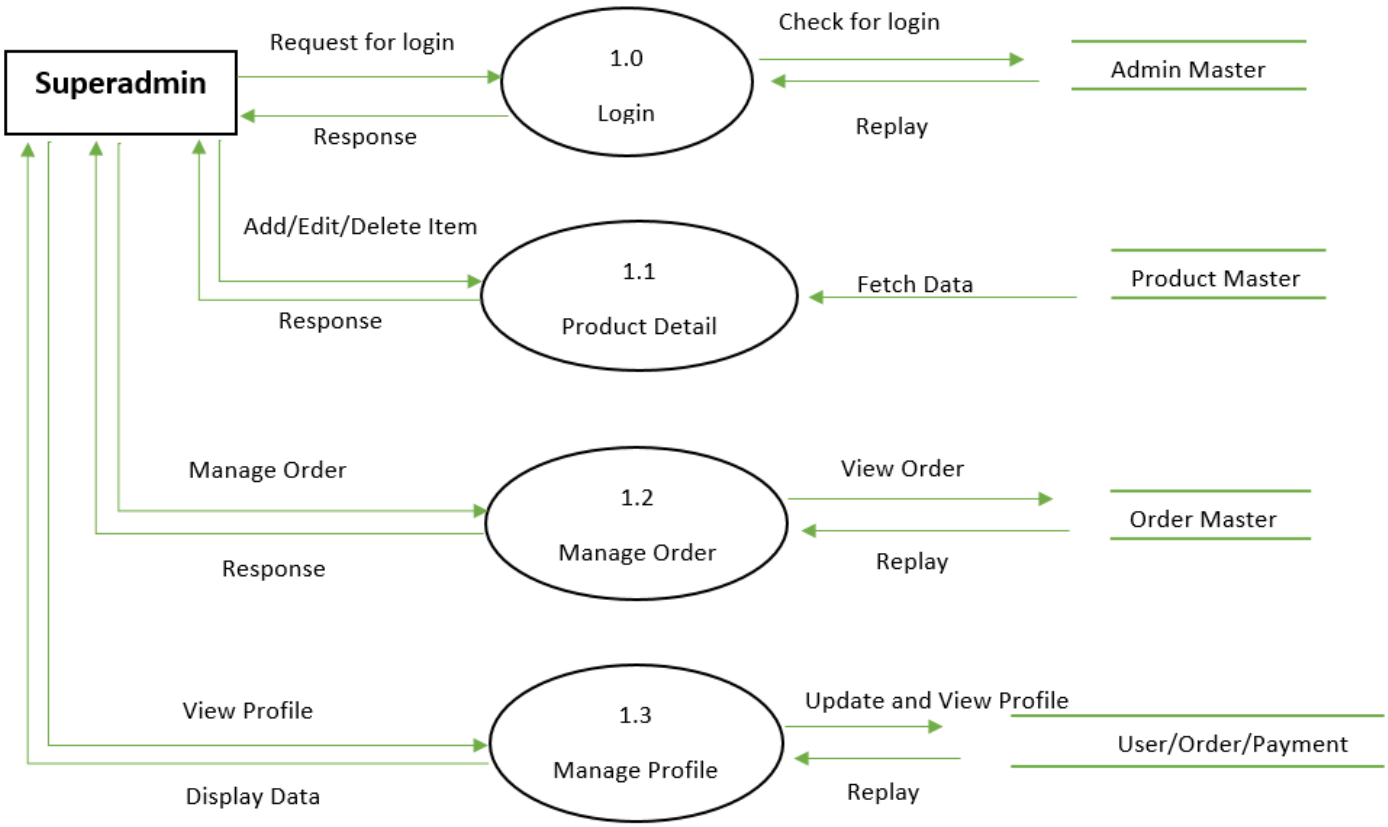
DFD [SUPERADMIN]



• DFD[ADMIN]


Admin
Request for login
Response
1.0
Login
Check for login
Replay
Admin Master
Add/Edit/Delete Item
Response
1.1
Manage Product
Insert Data
Replay
Product Master
Manage Order
Response
1.2
Manage Order
View Order
Replay
Order Master
View Report
Display Data
1.3
Manage Report
View Report
Replay
User/Order/Payment

DFD[USER]


Superadmin
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1.1
Product Detail
Fetch Data
Product Master
Manage Order
Response
1.2
Manage Order
View Order
Replay
Order Master
View Profile
Display Data
1.3
Manage Profile
Update and View Profile
Replay
User/Order/Payment