**Billing & Recurring Payment System**

**Admin**

1. Signup login and logout of users(name, email, password, type[admin,buyer], profile photo) - users cannot sign up, only admin can manage users, and invites should be sent with email verification for any new user added
2. Admin can create many plans
3. Plans can have many features. Each plan will have a monthly fee and name.
4. Features will have a name, code, unit\_price, max\_unit\_limit. Admin can create these features.
5. Can launch the call to charge accounts on billing\_day
6. There will be a view for admin in which he can make entries in usage table about feature’s usage of any buyer’s subscription

**Buyer**

1. Buyer can subscribe to more than one plan. Buyer will have a billing\_day on which we will charge him for his active subscriptions. Billing day will be between 1 - 30(for months with <30 days, charge will be made on the last day of month).
2. **There will be record of all the transactions** of the buyer about subscriptions and recurring payments according to billing day
3. There will be a table to store/show the usage entries of each feature of associated plans and subscriptions.
4. **Users should authorize payment with the use of stripe on the app, and the app will store if payment authorization is done or not yet, if not, the user cannot subscribe to any plans.  
   Any/all payments will be recorded properly.**
5. We should calculate the overuse of features by the buyer. Like if one buyer is subscribed to plan xyz and plan is associated with the feature abc which has a limit of 40 units. On billing\_day, we need to calculate the total units of above features from the usage table for a given buyer. If buyer has overuse the feature then we will charge him for overuse by using the given formula:

**Bill of overuse = No of exceeded units \* unit\_price** (unit\_price can be found from feature table)

**Invoicing Flow**

1) On the creation of subscription, we should immediately charge him for plan monthly fee

2) On billing\_day, we should charge him for active subscriptions for the next month and also charge him for overuse of features as described in point 4. 3) An email invoice should be sent to the buyer everytime we charge him. Like on subscription creation and on billing\_day.

use pundit for authorization.

## NOTES:

1. EVERYTHING(data wise) should be visible in the flows of the app, there should be all entries visible to respective users, there should be no confusion.
2. Take reasonable assumptions and get your assumptions approved by buddy timely.