

1) Questions to Clarify Scope and Context:

Billing Model Clarifications (Fundamental questions for architecture definition):

Can companies use multiple billing models simultaneously, or should they select only one billing model per team or project?

- **One billing model per company is enough.**

Are billing formats set at the group/team level, or globally per company?

- **Per company.**

Billing Events and Notifications (Intermediate):

Besides posting projects and hiring freelancers, what other events trigger charges in the pay-as-you-go model (e.g., analytics usage, premium features)?

- **Users are charged only when posting projects and hiring freelancers.**

Do prepaid credits expire, and if so, what's the typical expiration policy?

Should users be notified as prepaid credits approach zero? What notification thresholds are expected?

- **Credits do not expire and users don't need to be notified of their balance.**

Seat-Based Subscription Details (Intermediate):

Are seat licenses transferable between team members?

- **No**

How should the system handle mid-cycle subscription changes (e.g., adding/removing team members)?

- **Seats are purchased for the full period (month/year). Members can be added or removed during that period as long as the total number of active members does not exceed the purchased seats.**

Credit Limits & Overage Handling (Advanced):

Should reaching credit limits trigger alerts, or should access be automatically suspended?

How is overage calculated and billed—separately or included in the next billing cycle?

- **No alerts are emitted, access is blocked if overage handling is strict or charged to the next cycle if soft.**

Billing and Permissions Integration (Intermediate):

Precisely how should billing status affect feature access (immediate revocation, grace periods)?

- **Immediate revocation.**

Is real-time integration with the permissions system required, or can asynchronous updates suffice?

- **Asynchronous updates whenever the user's status changes.**

Billing Flow, Notifications & Invoice Generation (Intermediate to Advanced):

What specific automated email notifications are necessary (invoice availability, payment confirmations, payment failures, overage warnings)?

Should each billing event generate an explicit invoice, or are monthly aggregated invoices acceptable?

- Monthly/yearly invoices are enough. No email notifications are needed for the exercise.

Payment Processing and Account Management (Intermediate to Advanced):

Are specific external payment processors (e.g., Stripe, PayPal) already defined to be integrated or should the billing processing module be generic?

- It should be designed so that the actual provider can be swapped. The integration itself does not need to be implemented.

How should subscription renewals be managed (automatic or manual)?

- Automatic.

2) Assumptions and Prerequisites:

To simplify and define the scope clearly for this exercise, I'm assuming:

An external payment processing integration (such as Stripe) is available.

A basic permission system exists, and billing triggers relevant events in this system.

An existing email notification infrastructure, where billing simply triggers predefined templates.

Billing and permission interactions can be asynchronous, with eventual consistency acceptable.

- Correct. No email notifications are necessary, though.