

QuantLayer

This is QuantLayer's playbook. In this playbook, we discuss how we run our business, how we work with clients, and the kinds of technology we employ. These are the processes we implement to ensure that the software we build for our clients is top-notch.

How we run things internally

We bill our clients on a weekly basis. We work four days per week (Monday through Thursday). During these four days, we work normal business hours. On the fifth day, we catch up on the latest developments in technology and work on internal QuantLayer projects. We've found that carving out an entire day for internal development allows our developers to pursue interesting developments in technology, which then helps us write better and better software. Moreover, since we specialize in the tools we work in, we believe it's important to keep up to date with these tools, and that staying current in the technologies we use both directly and indirectly benefits our clients. In some rare circumstances, we may split a week and bill for a partial week, depending on the project and our availability.

Billing and invoicing

Since we work on a client to client basis, we require two weeks of advance payment to begin a project. We bill weekly at a per-developer rate, so there is nothing to itemize for our clients.

For shorter engagements, we may consider fixed bid contracts if they are carefully scoped. An example of this might be a very clearly defined project that is planned so well that we can say something along the lines of, "Oh, that will take three months to build and deploy."

Payments are due within 15 days of invoice. Invoices can be paid by check, wire transfer, credit, or debit card.

How we work with our clients

Many of our clients will come through referral or our website contact form. After the initial interaction, we will follow up with a very basic questionnaire of a handful of questions that help us understand what the client wants built. An example of the questions on the questionnaire can be found below:

1. Please describe (in a couple of sentences) what your app does.
2. What apps is it similar to (either in domain or general vicinity)?
3. Who would be your app's key users? What value will they get out of your app?
4. Is the app mostly web based? Does it support mobile?
5. Do you have designs or a style guide that the app should conform to? Or would you like for us to provide design services as well?
6. What is your budget?
7. Anything else you'd like to share about your idea?

After we receive answers to the questionnaire, we'll set up a phone call, or meet in person if the client is in town, in order to learn more about their needs. After the initial meeting, we'll put together a proposal and send it back to the client. After we have contractually agreed, we will spend our first week really delving into the project's scope. We will also roadmap the project so we and the client can have good understanding of timing and deliverables.

This is a really exciting time for the client and for us, because it gives us both more insight into the project. We use a combination of Waffle.io and Pivotal Tracker for project management.

Once a project has been fleshed out, we'll divide it up into a number of stages:

1. Backlog: The initial draft of a feature
2. Requirements gathering: Figuring out the specific acceptance criteria
3. Requirements/workflows: These often shift from when they were first written, so it's good to quickly revisit them here in detail before beginning the implementation
4. Architecture: A minimum of two people will quickly discuss the general approach to solving the problem and validate any data sources/dependencies to minimize costly rewrites
5. WIP: Work in progress
6. Code review
7. Staging (optional)
8. Live

Maintenance services

Occasionally, clients may ask us for maintenance services. These services may include but are not limited to upgrades, code review, architecting of new features, or bug fixes. These are billed as monthly retainer costs and require a minimum three month commitment of 24-32 hours per month, which we bill at a fraction of our normal weekly rate.

Developer sourcing

Clients may ask us for leads for developers who can maintain their apps. We have significant web development teaching experience along with consulting experience, so we have a robust network of fantastic developers and will happily provide thoughtful, meaningful leads for clients.

What kinds of technologies we use and why

While we have tools we prefer, our primary drivers for technology selection are the following:

1. Performance: Faster apps aren't a nice thing to have, they're a business requirement. Pages that are slow to load retain fewer users.
2. UX: Without an effective interface, your app will fail to engage users or be eclipsed by the competition.
3. Maintainability: If someone comes into the project, can they ramp up quickly? Will they like what they see and can they begin contributing quickly?
4. Stability: Just like slow apps, apps that crash and are unavailable lose your users' attention and trust.
5. Security: We use all the best practices to minimize the risk of data breaches or downtime from unwanted parties.

On testing

Why do we insist on testing? In all companies, but particularly in consultancies, it is important that anyone can quickly ramp up on the code and extend/maintain it. Testing acts as both a requirement and a form of living documentation that represents the current state of an app. As a project grows in size, adding features becomes slower. As you add developers, the slowdown is even more pronounced. Good test coverage ensures that you don't trade two weeks of faster development for drastic slowdowns and decreases in stability.

Our current technology stack

What are the technologies we currently employ in our projects? Our flagship product at <https://filings.quantlayer.com> is an API built on top of an Elixir/Phoenix backend and an Ember.js frontend. PostgreSQL is our database of choice for this product. We use Github for source control and the project is deployed on Digital Ocean. We also have significant experience in Rails and other databases like MySQL, Mongo, and Firebase.

Ambitious projects

Additionally, we love working on ambitious projects. Features and topics that we've been interested in incorporating into a client project include but aren't limited to the following: Offline sync, real-time, Fintech, complex and interactive UIs (the kinds of projects that Ember.js is perfect for), parallelism (data aggregation & pipelining with Elixir), search and alerts. If any of these more ambitious features sound interesting to you, do get in touch with us!

Thanks for reading our playbook! We hope you have a better idea of who we are and how we run our business. Please reach out to us at hello@quantlayer.com if you'd like to learn more about our services. We would love to help you with your software development needs!