

Business

Contracting for Engineers

 FORGE APPS

Introductions

Disclaimer

Struggled to keep this talk positive. Startup culture celebrates mistakes, but that's stupid. Learn from mine.

Economics

Dismal Science

Gold rush ends, solo prospector declines

The Plan:

- Get the work
- Do the work
- Deal with problems

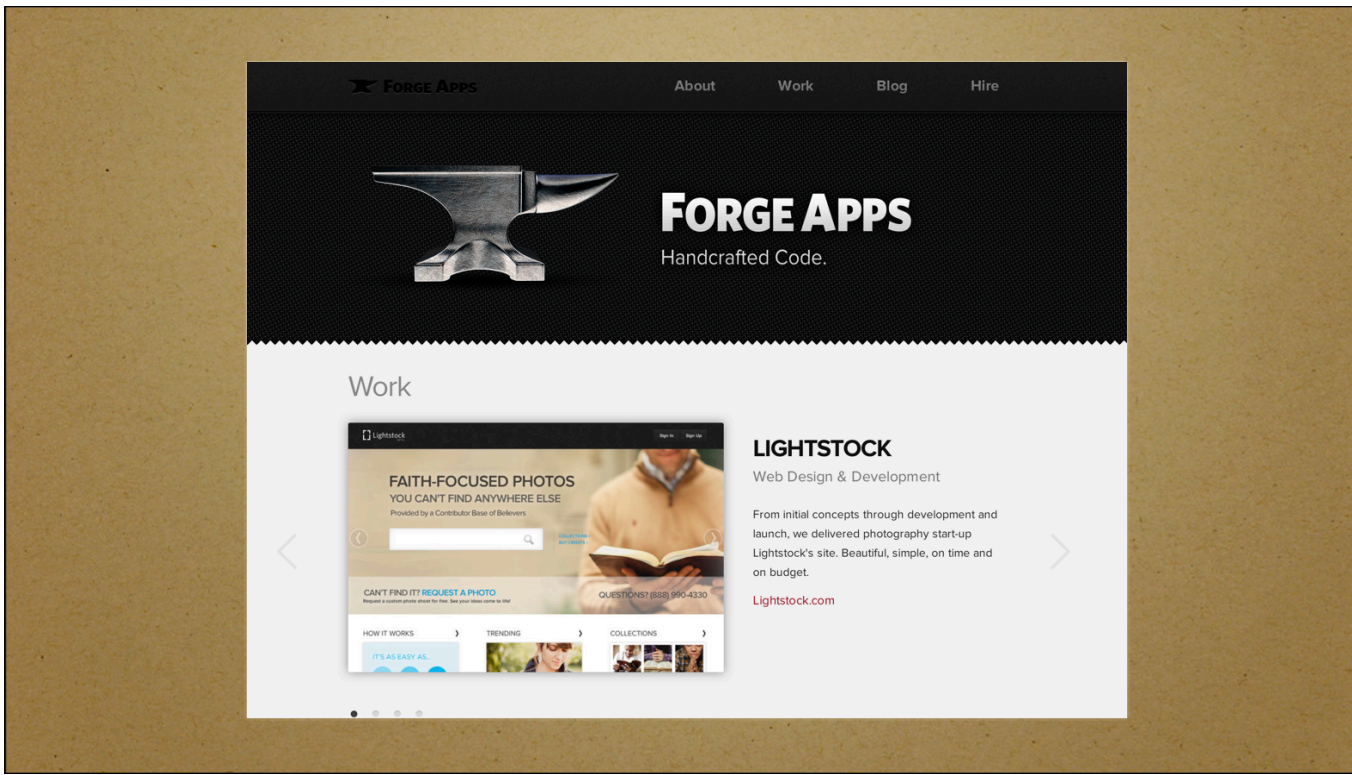


Two ways: Word of mouth / Branding
Network

Be Memorable – have a theme. Have a Website



Use a template until you can hire a pro. Don't build your own.



Now you've got a lead

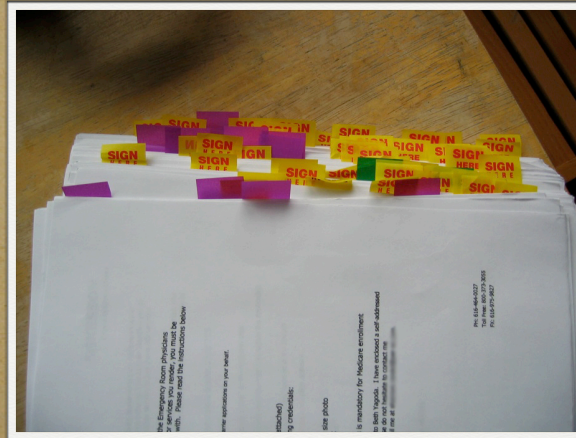


Ideally.

Act as client's agent for short time. Deliver a report using your expertise. (Founders, MVP)

Focus on solutions, whether you're right for the implementation or not.

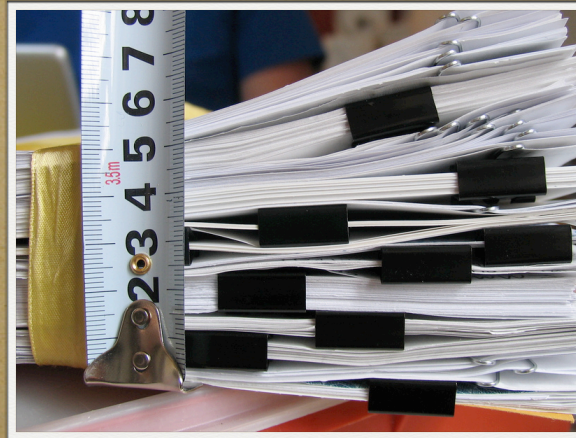
Tests fit, builds relationship in low-risk phase, plan work, validate ability to pay.



Contract

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Yes, you need a lawyer and a signed contract before doing any work.
No, contracts won't actually help if project gets in trouble.
Reality is messy. Clients care about their needs, not the scope (or you).



Communication

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Avoid waterfall, but writing scope down is the only way to ensure comprehension on both sides.

Document all assumptions explicitly. Forces talking through, set expectation.

Approx 1 page of text/diagrams per \$4k of budget.



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Pricing

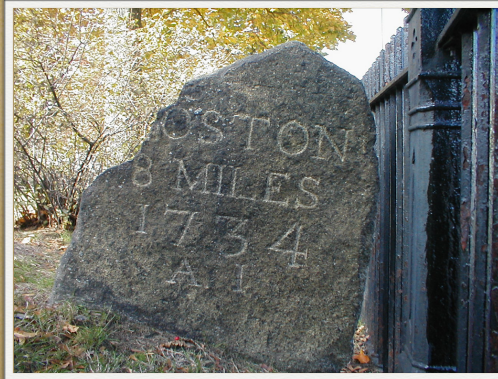
Sell value, not hours.

Hourly has perverse incentive, no chance for big win, and pushes risk away from experts.

Focus on deliverables and goals, milestones.

Only do hourly when doing R&D and client wants to assume the risk.

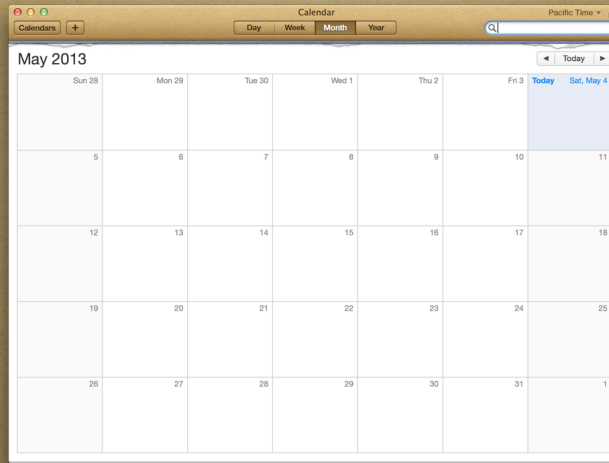
Track hours either way, so you know.



Milestones

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Lots of them
Smaller checks = less painful checks
Concrete, things under your control



Scheduling

Your estimates will be wrong.

Make sure there are lots of them to balance out errors.

Multiply timeline by number of companies involved.

Assume delays, plan accordingly.

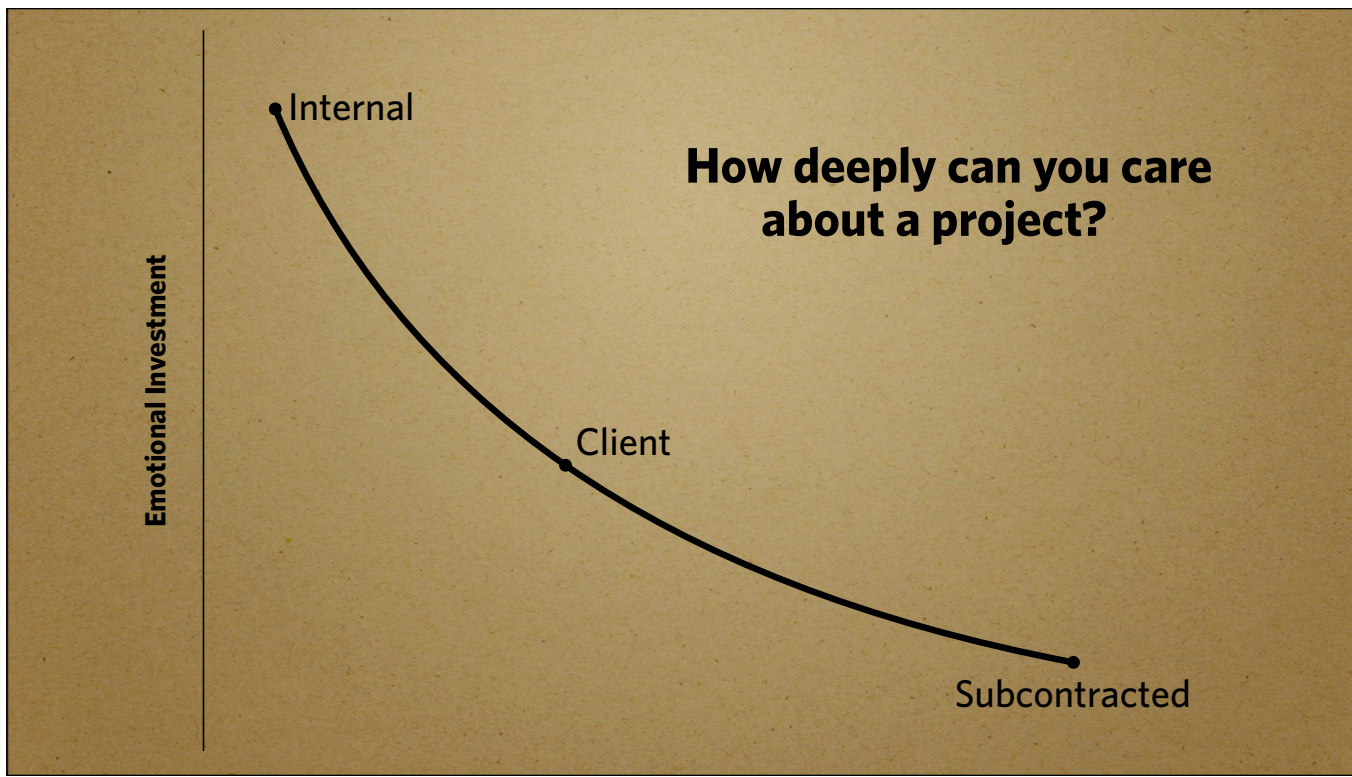
Feast/Famine – grow team to smooth out swings



Resources

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Oh no, too much work.
Don't subcontract. Hire for the long term. If solo, take on a partner.



Hard question.

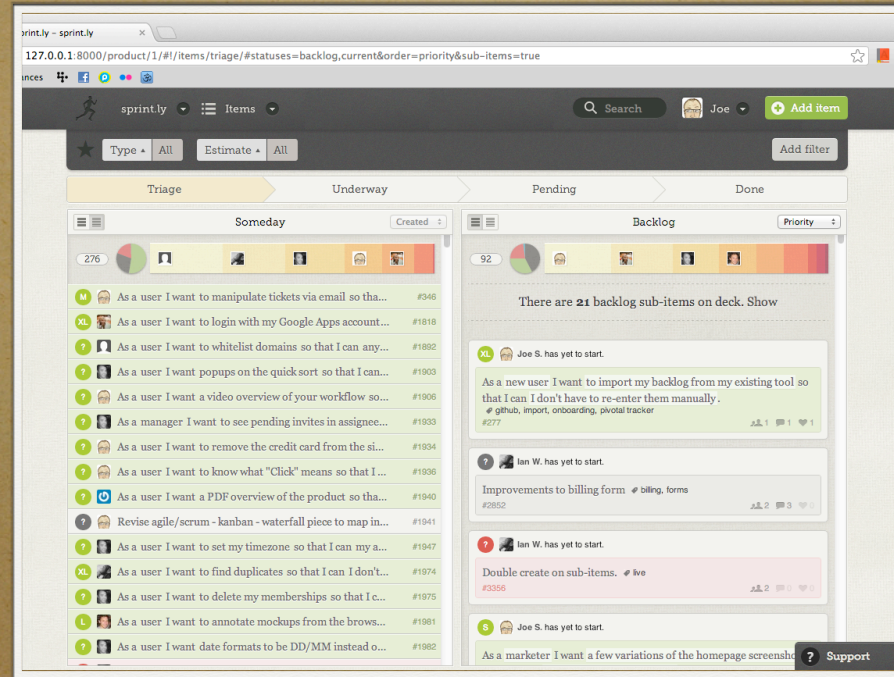
Emotion and motivation are huge factors in productivity.

Short-term commitment drains resources managing, precludes investment, promotes instability in schedule and rest of team.

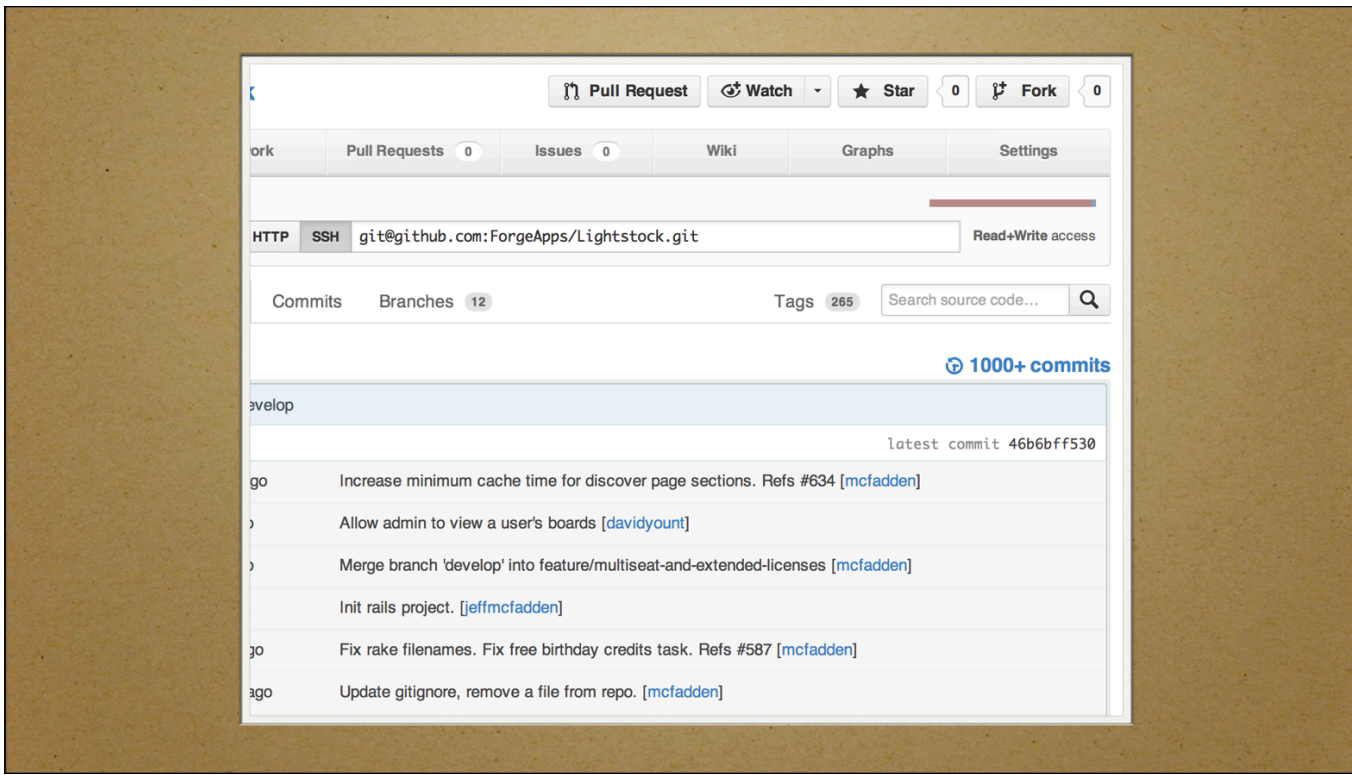
Don't operate at low levels of passion. Might pay the bills now, but will erode your craft.

Process

Matters most of all
Need three things at minimum, even solo.



Issue Tracker
Not in here, doesn't get done.
Essential discipline for teamwork.



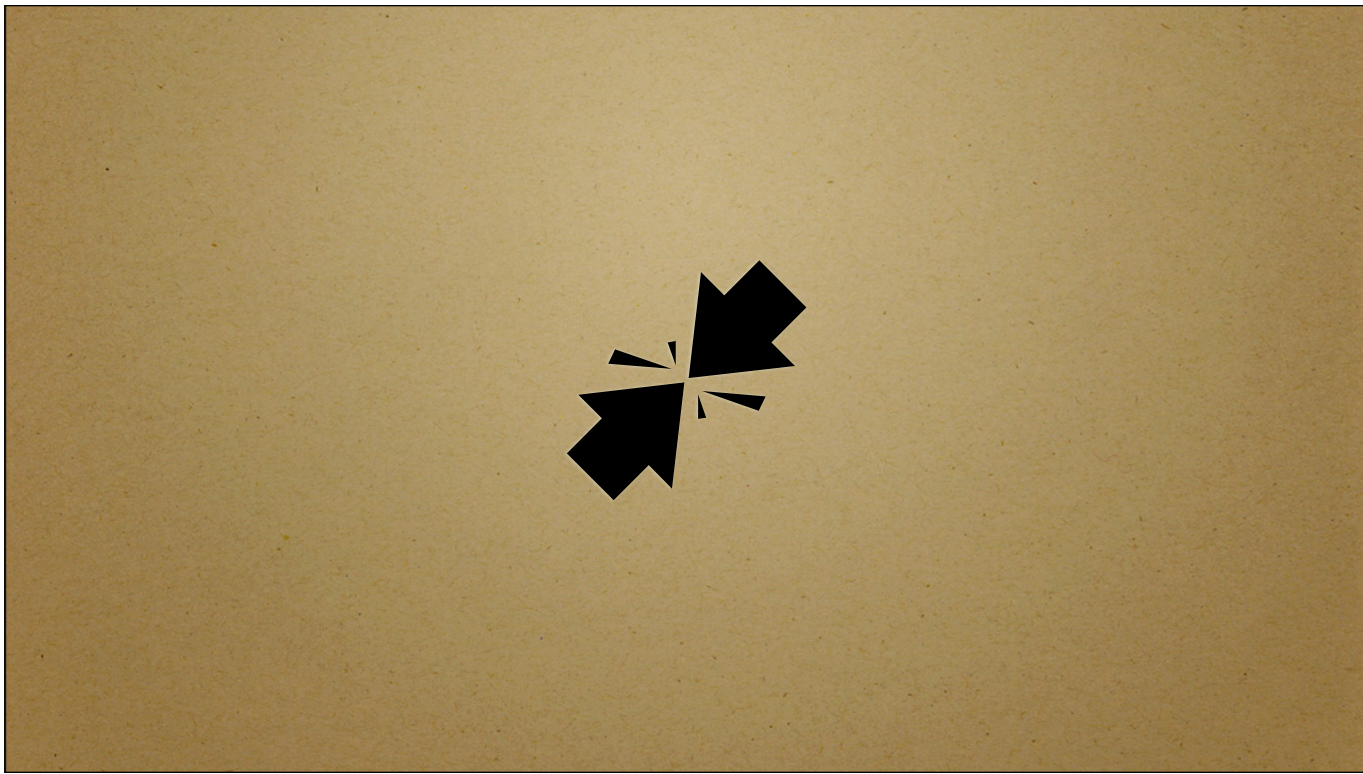
Source Control



Code Review

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Code gets seen by multiple people before it goes live
If you're not doing this, you're not developing your skills to their full potential



Conflict happens
Communicate
Incompatible? Find a graceful shutdown



Thanks!

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