Render Sponsor Lecture Check-In

how to win web.lab

Kenneth Choi

plan out your web app

How We Taught Catbook:

HTML + CSS (page content, structure, and design)

Client-Side JS (interactivity, API calls)

Server-Side Node/Express JS (creating routes, serving pages)

Databases using MongoDB and Mongoose (creating APIs, accessing and editing data)

Authentication (creating users and accounts, secure login)

Advanced Features (sockets, games, machine learning & deployment)

How We Designed Catbook:

Full-Stack Design, Feature-by-Feature

Full-Stack Design, Feature-by-Feature

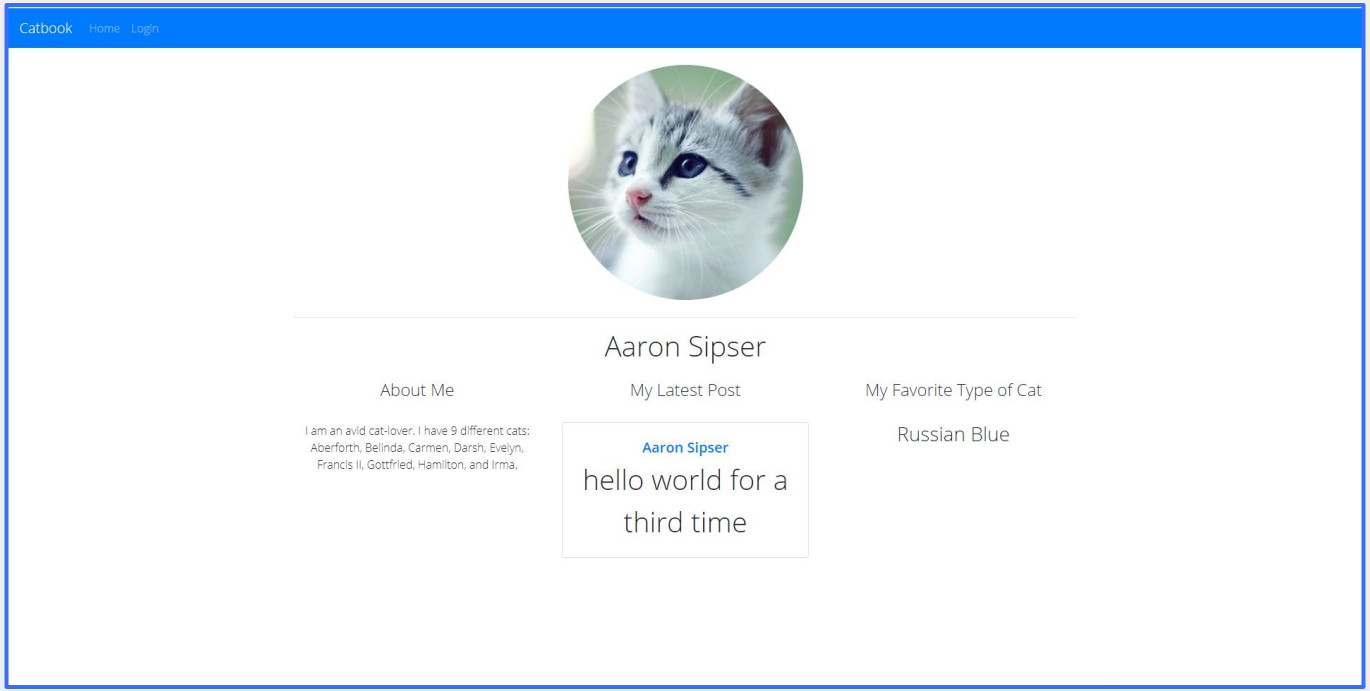
Full-Stack: Design with all the layers of the app in mind

Front-End, Server-Side, Database

Feature-by-Feature: Design each feature independently

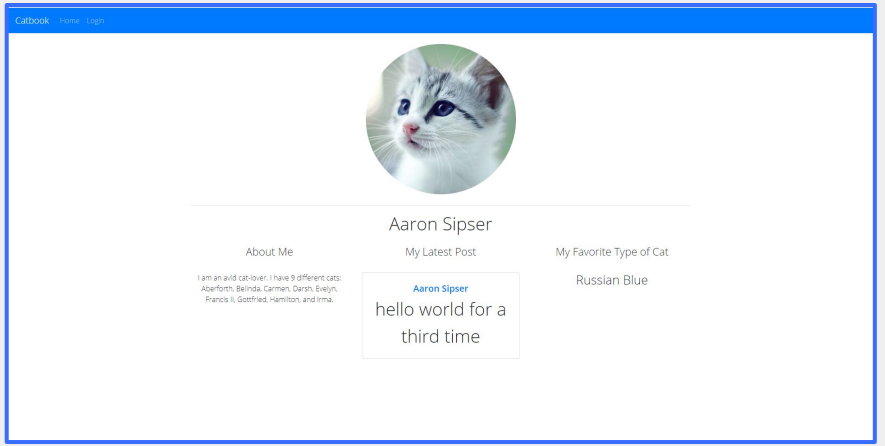
case study: how did we *actually* design catbook?

Example: Profile



Example: Profile

- Creating detailed wireframes
- Creating a component tree
- Designing APIs
- Designing database schemas



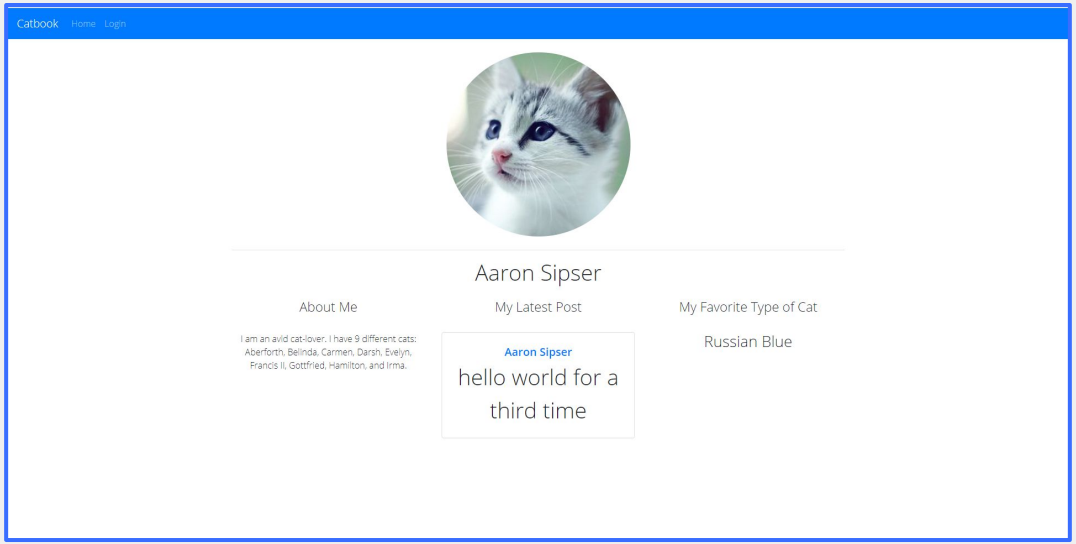
Example: Profile - Feature

Visual display of information about a user

Example: Profile - Wireframing

Feature: Visual display of information about a user

How to Design: Ask “What do we want to show?”

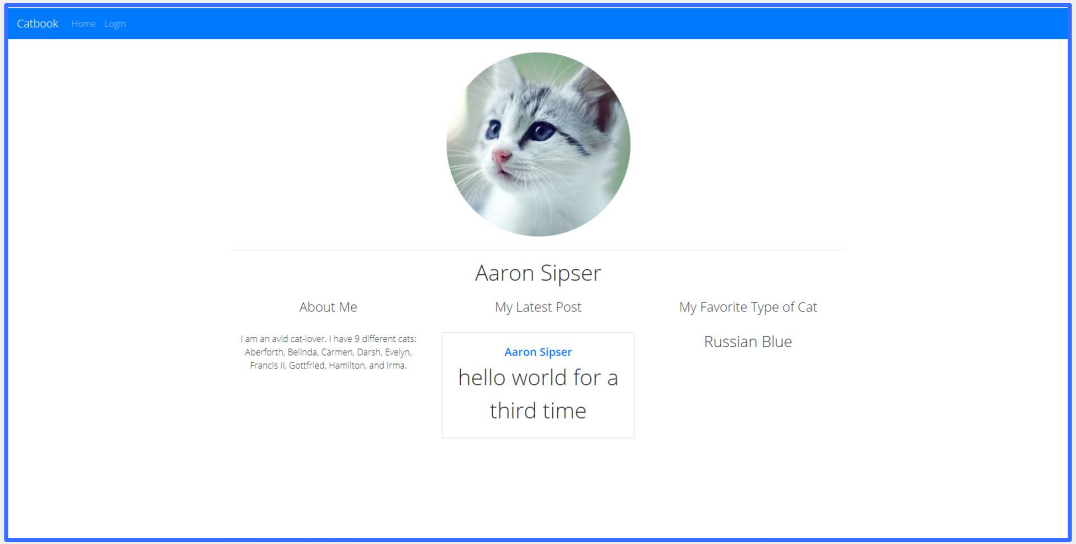


TODO:
Figma
Figure out what redirects where

Example: Profile - Front-End

Feature: Visual display of information about a user

How to Design: Ask “How to translate to frontend? (React)”

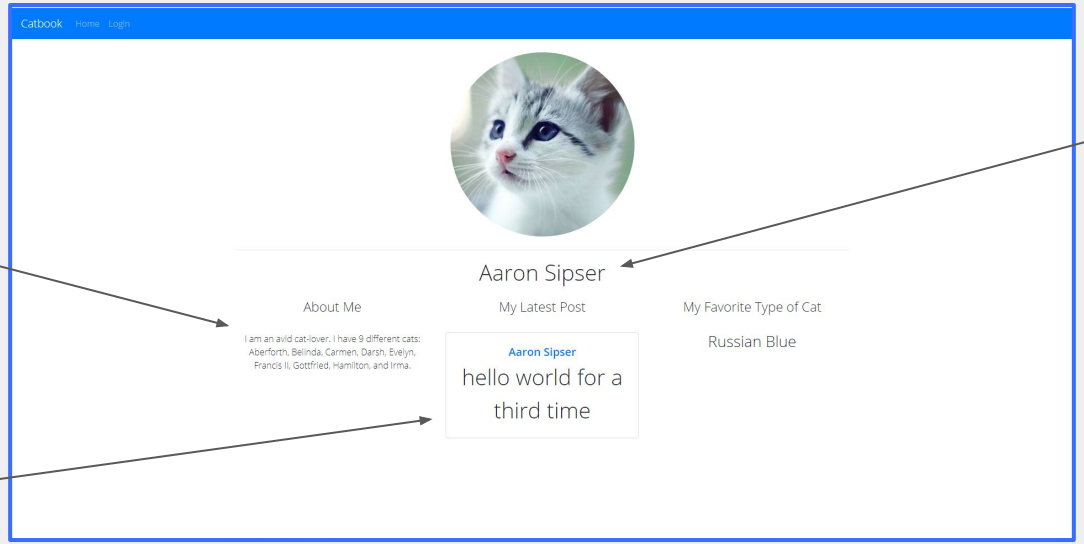


TODO: create profile.css, profile.js

Example: Profile - Server-Side

Feature: Visual display of information about a user

How to Design: Ask “What does the client need?”



User’s Name

User’s About Me

User’s Cat Happiness

TODO: create /api/user API to provide data

Example: Profile - Database

Feature: Visual display of information about a user

How to Design: Ask “What data do we need to store?”

```
User:
- name
- cat_happinness
- about_me
- ...
```

TODO: create a mongoose schema/model

Example: Profile

Visual display of information about a user

TODO: create profile.js, profile.css

TODO: create /api/user API to provide data

TODO: create a mongoose schema/model

Your Website!

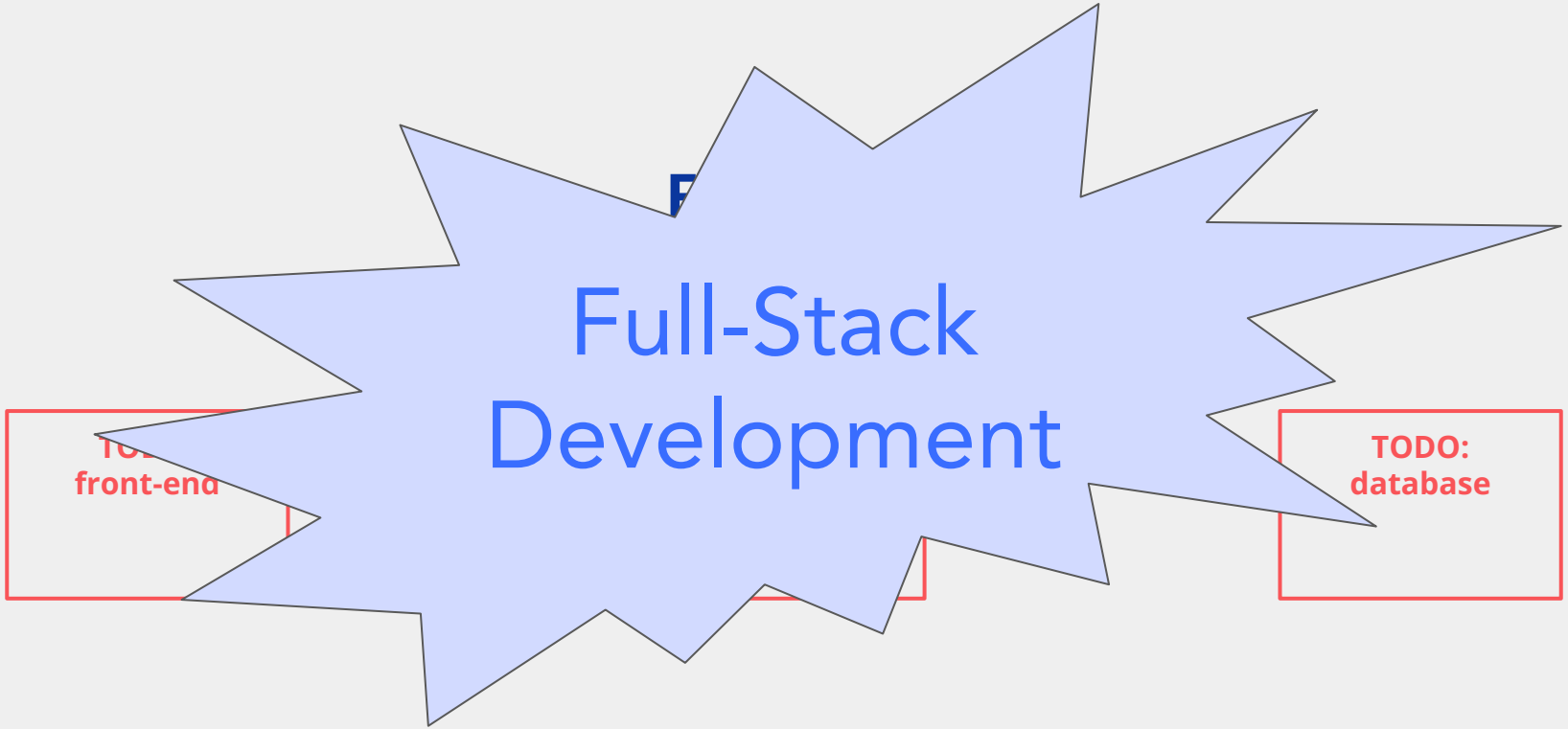
Your Feature

TODO:
front-end

TODO:
back-end

TODO:
database

Example: Profile

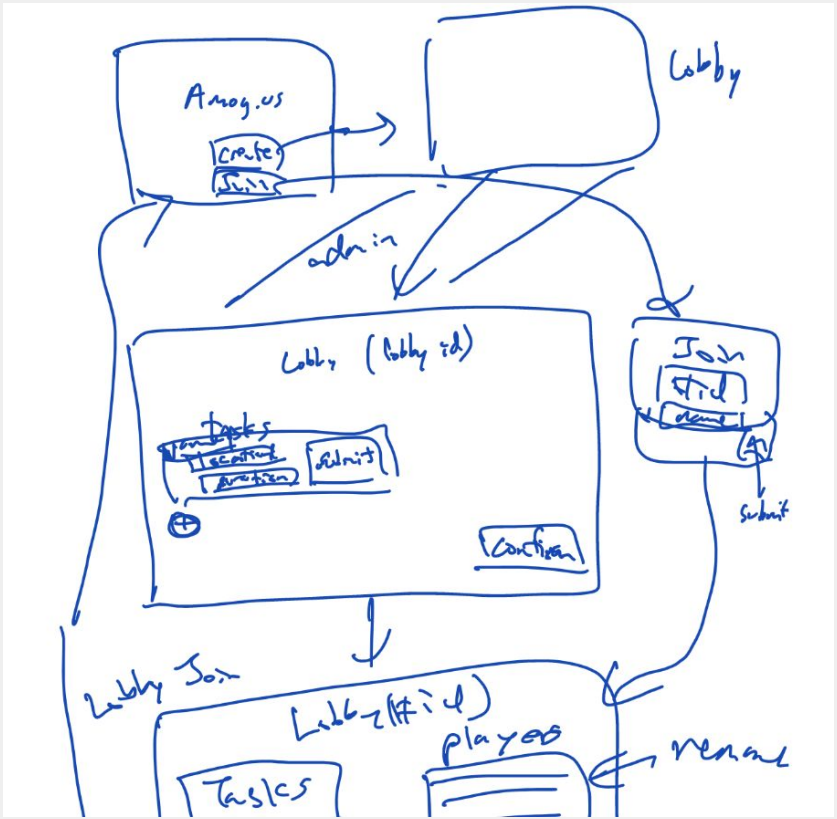


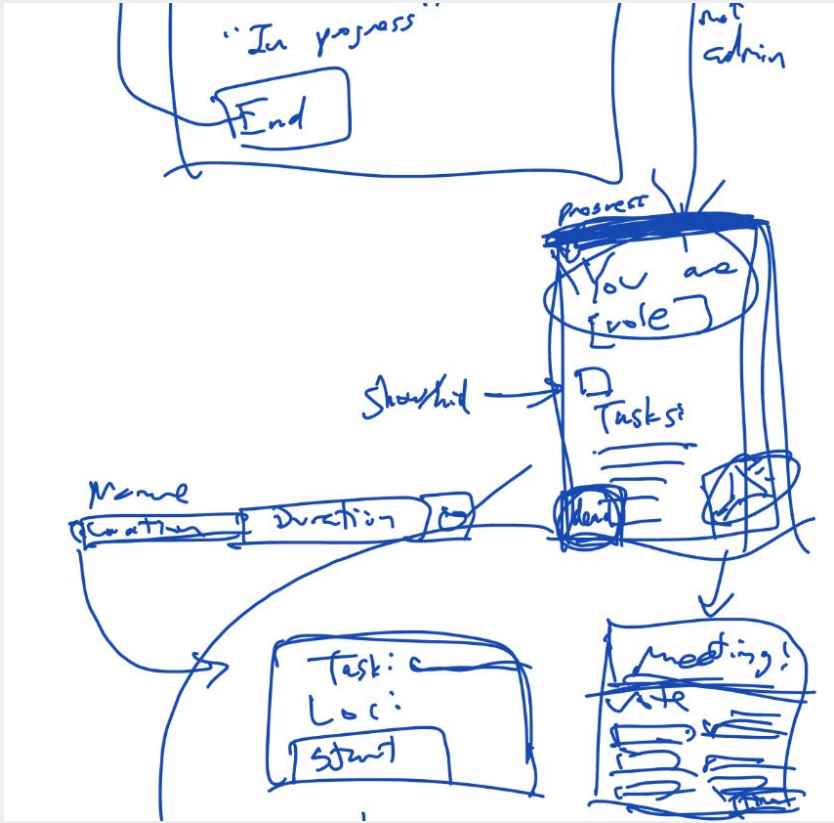
How We Designed Catbook, Full-Stack:

Feature	**Profiles**	**Stories (posts)**	**Comments**
Front-End	Profile page with name, description, cat happiness	Card with name, story, comments	Card footer with name, comment
Server-Side	/user API request for above info	/stories API request for above info	/comment API request for above info
Database	User MongoDB Schema/Model	Story MongoDB Schema/Model	Comment MongoDB Schema/Model

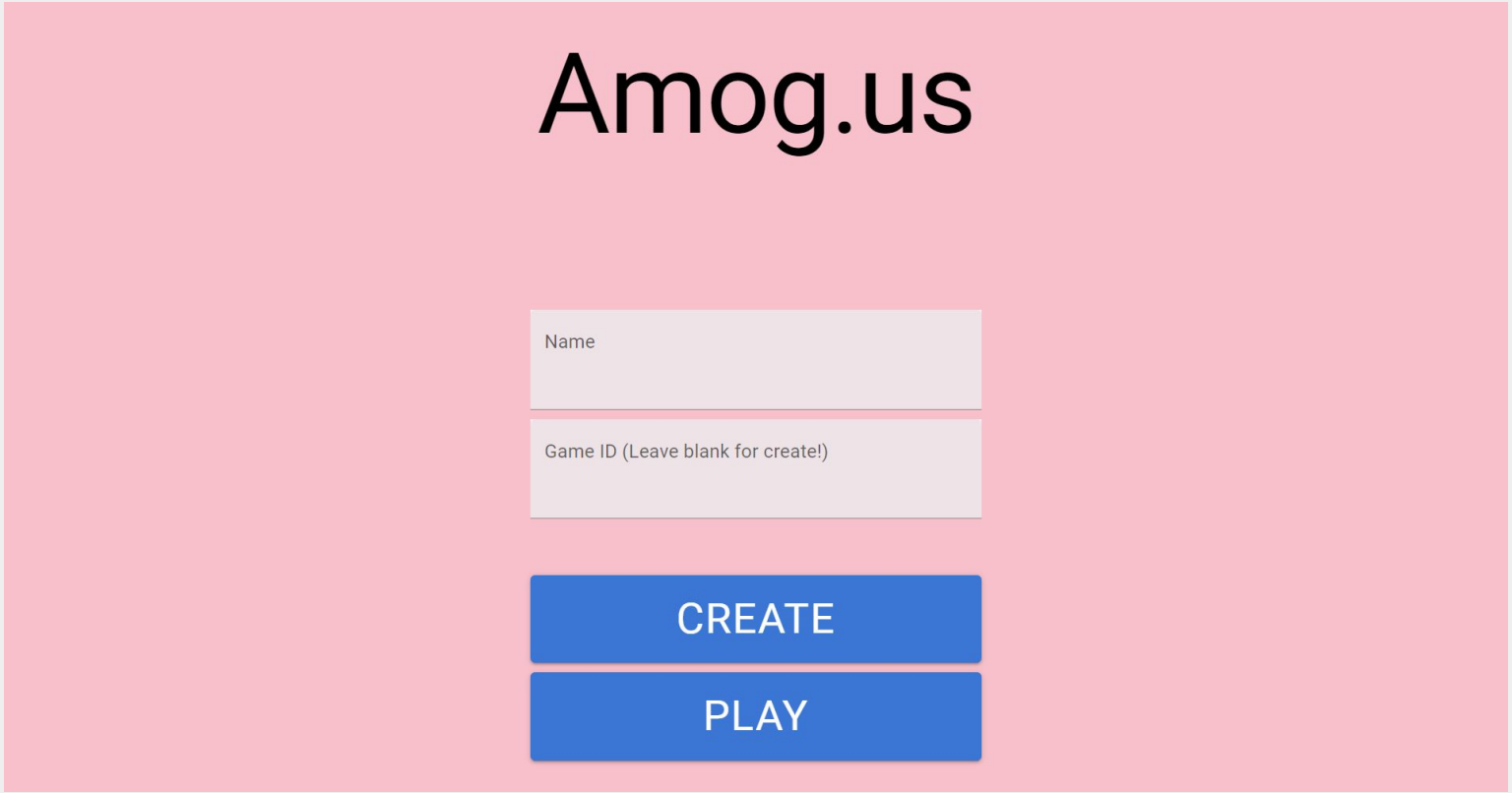
Planning ahead will help you stay organized and improve productivity!

Soon, you'll go from something like this…





…to something like this…



…to something like this!

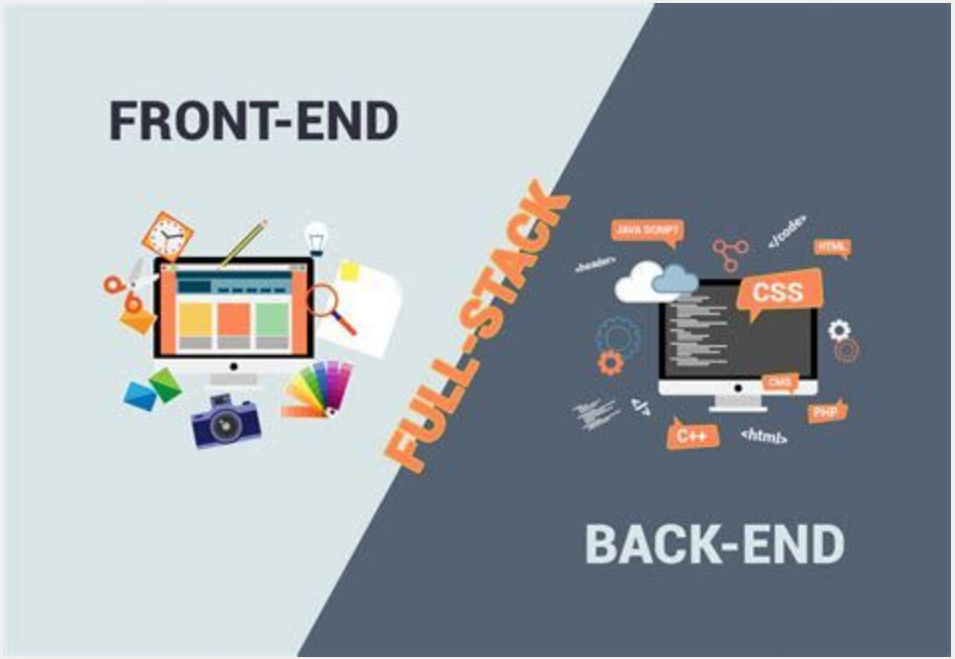
keep your plan updated

Your plan should serve as good **documentation** and a method of **communication** between your team.

As your team makes decisions, your plan should reflect this.

communicate with your team

divide up the work


FRONT-END
FULL-STACK
JAVA SCRIPT
HTML
CSS
CMS
PHP
C++
BACK-END

focus on that one killer feature

quality > quantity

Join social game lobbies from any browser, no install required

Raise your magikarp to jump higher than anyone else’s

use your team’s strengths

Team of 3 artists make a beautiful hand-drawn game

test test test

what do you think you are supposed to do?
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try and make
a magikarp
jump
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try and make
a magikarp
jump
were you
able to do it?
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try and make a magikarp jump
what was confusing?
ere you able to do it?
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try and make
gikarp
what stood out? what did you like?
what was confusing?
ere you able to do it?
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try and make
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were there
any bugs?
what was
confusing?
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able to do it?
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....
try and make
gikarp
what stood
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were there
any bugs?
what was
confusing?
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able to do it?
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when
did I ask?
try and make
gikarp
what stood
out? what did
e?
were there
any bugs?
what was
confusing?
ere you
able to do it?
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build. test. polish.
repeat.

when you're stuck...

let’s try piazza
i’m sure
someone’s up

let’s try piazza
i’m sure
someone’s up

yeah, what’s up
- Enrique Casillas,
5:45 am

let’s try piazza
i’m sure
someone’s up

let’s try piazza i’m sure someone’s up

or what about office hours

let's try piazza
i'm sure
someone's up

or what about
office hours

or what about the
hackathon
TONIGHT
7pm-1am IN
32-082 and online
@ weblab.is/q

let's try piazza
i'm sure
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@ weblab.is/q

Good luck!

Reminders

- **Milestone 2 (MVP) is due THIS COMING WEDNESDAY, Jan 24 at 6PM ET sharp.**
  - all milestones required to compete or get credit.
  - do NOT leave this till the last minute
  - weblab.is/milestone2
- **Hackathon in 32-082 TONIGHT 7PM - 1AM ET!**
  - food and drinks :0 🍕🥤
  - ⭐Come at 7⭐ for Nick's v cool mini-lecture on how to start + design your project!
- **Subject evals open next week 👉👈**
  - Special stickers for ppl who fill out their evals 🥺 (screenshot the page)