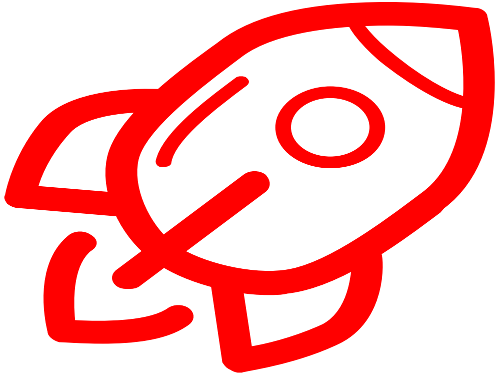
Midterm Project

Kickoff 🚀

Pick a Project

- Wiki Map
- Quiz App
- Story Creator
- PasswordKeepR
- Buy/Sell Listing Website
- Decision Maker
- Smart Todo
- Resource Wall
- Schoodle
- Food Pick-up Ordering

WHERE DO I START?



PLANNING

USER STORIES

As a user… **Role**

I want to… **Goal**

Because… **Benefit**

- User **should**… in the title
- As a user, I want to <u> (goals, desire)   </u> because <u>   (benefit)</u>

User Stories

Title: Users should see a list of the available maps

User Story

As I user I want to see all the available maps because I want to quickly select a map that matches my interests.

[A framework for modern User Stories](https://medium.com/@jonatisokon/a-framework-for-user-stories-bc3dc323eca9)

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FEATURES

What is the list of features?

MVP

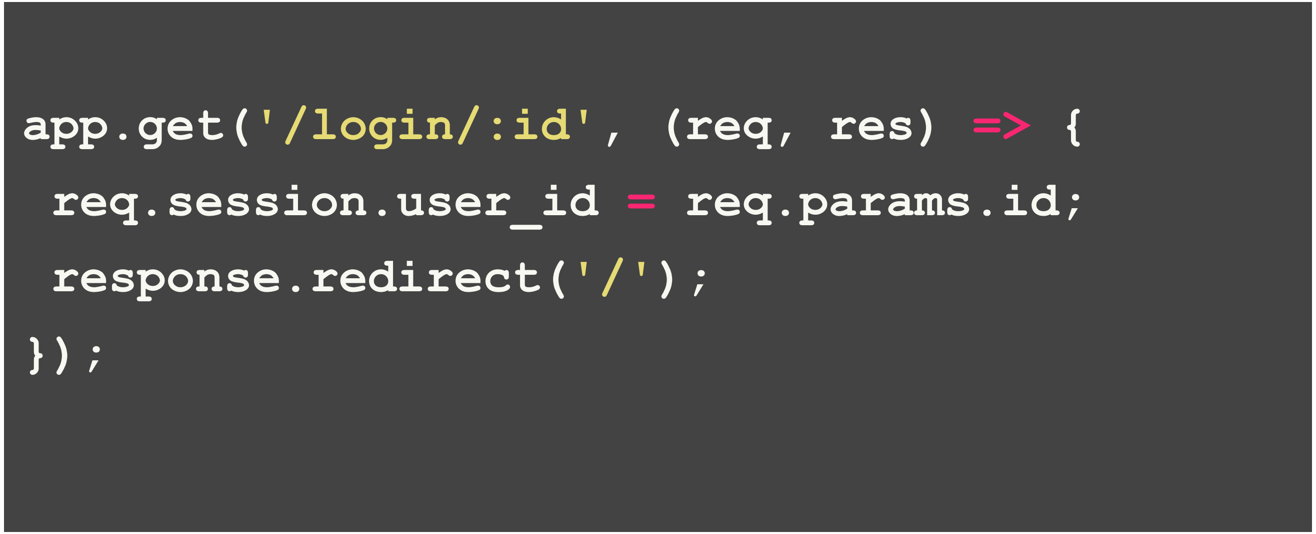
Minimum Viable Product

FEATURES

For midterm project, follow the list of requirements

USER AUTHENTICATION

No need to use forms

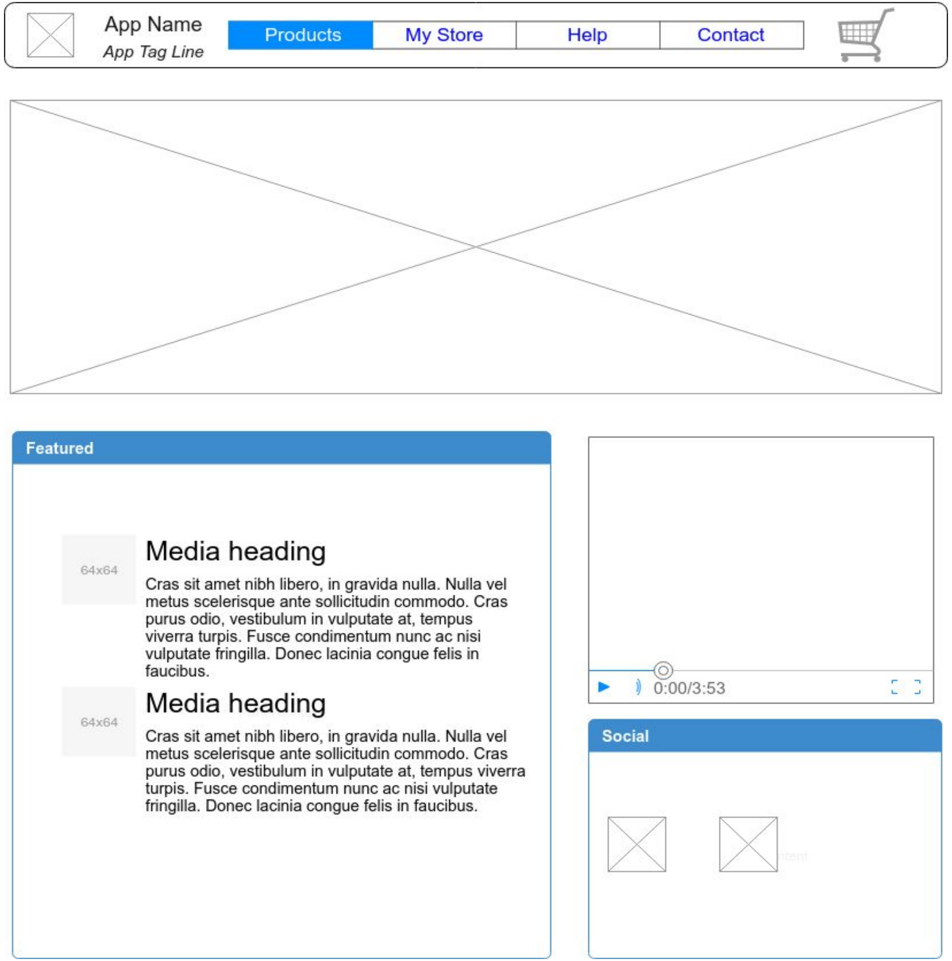


```
app.get('/login/:id', (req, res) => {
 req.session.user_id = req.params.id;
 response.redirect('/');
});
```

WIREFRAMES

- Sketch a wireframe for every page you plan to build
- VERY low-res version

Use a prototyping tool like Figma



Media heading

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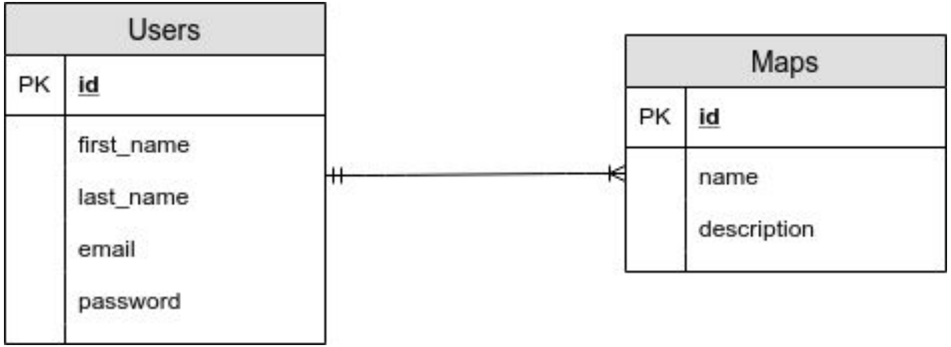
DATA

ERD



Users	
PK	id
	first_name last_name email password

Maps	
PK	id
	name description

- Tables are nouns, they can be taken right from User Stories.
- What are the relationships?
- Use a design software (draw.io)

Follow conventions:

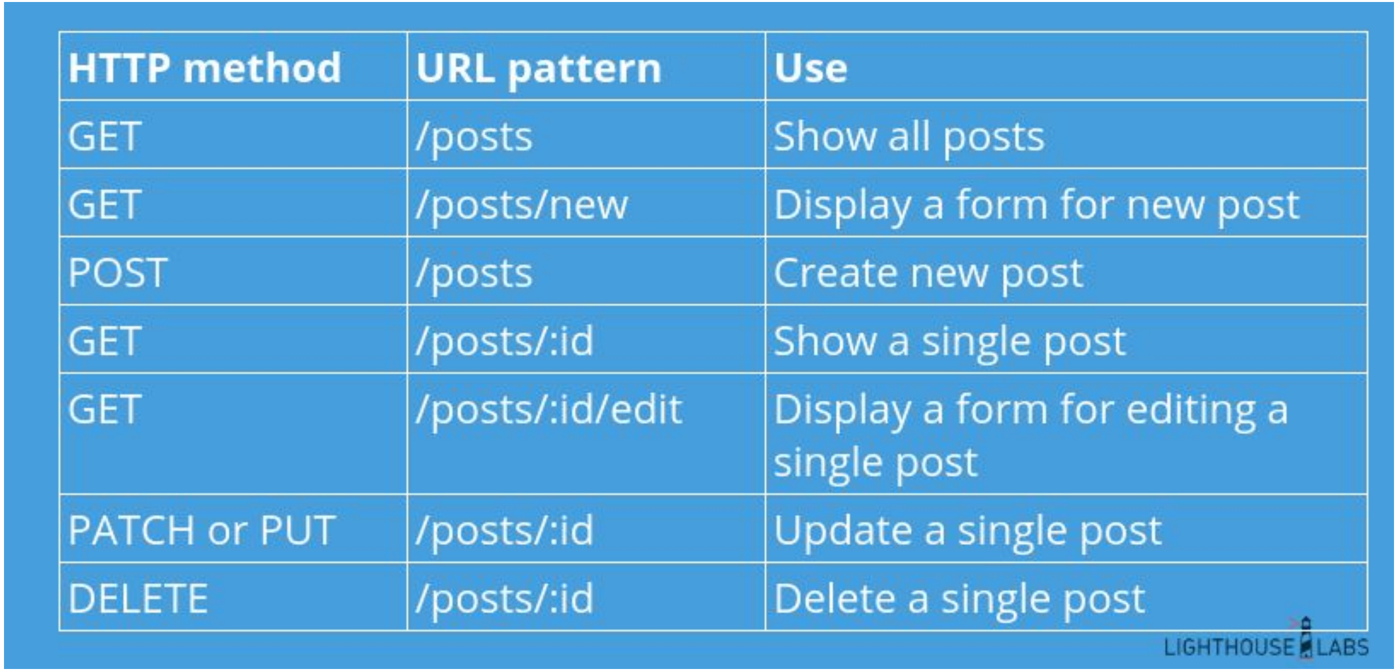
- Table names are plural

- Primary key is `id`

- Foreign key is `tablename_id`

ROUTES

Follow REST



HTTP method	URL pattern	Use
GET	/posts	Show all posts
GET	/posts/new	Display a form for new post
POST	/posts	Create new post
GET	/posts/:id	Show a single post
GET	/posts/:id/edit	Display a form for editing a single post
PATCH or PUT	/posts/:id	Update a single post
DELETE	/posts/:id	Delete a single post

LIGHTHOUSE LABS

Stack Choices

Bootstrap

jQuery

Sass

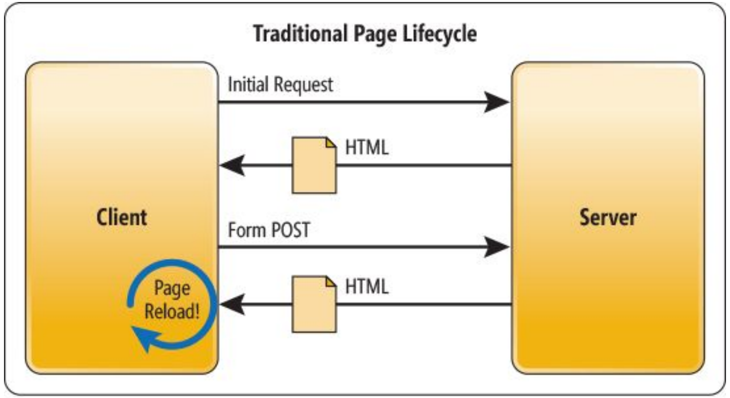
node JS

+

Express

PostgreSQL

Single Page vs Multi-Page App



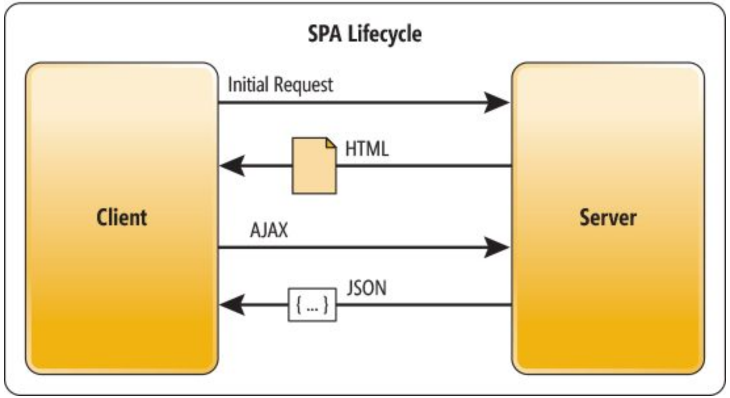


Photo Credit: https://msdn.microsoft.com/en-us/magazine/dn463786.aspx

MPA (Like Tiny App)

- HTML by the server using Embedded JavaScript (EJS)
- The back-end server sends the response as full HTML pages
- Triggers a page reload

SPA (Like Tweeter)

- HTML generated dynamically by JavaScript on the client
- Requests to the server are done with Ajax requests
- The back-end server sends the data in a JSON format
- Does not trigger a page reload

DIVIDING TASKS

Dividing Tasks

There is no perfect way to do this. You need to figure this out within your team.
Here are some options.

Vertical

- Break the project out into features
- Prioritize the features
- Each developer would build a feature full stack

Horizontal

- Break the project down into technical domains
- One or more developers will be responsible for an entire domain
- Domains could be ui, api (routes), db

You might do more pair programming at the beginning.

COMMUNICATION

Communication is critical no matter which way you divide the tasks.

Communication

Project Follow-Ups

#east-aug16-midterm-scrum

To ensure better follow ups, a midterm project channel in Slack has been created. Every day, each member of the team will post a scrum update according to the following template:

T: Today - You worked on what (describe what you've been working on).
R: Roadblocks - (describe any roadblocks if any).
W: Wins - (describe what you accomplished successfully).
%: Estimated percentage of completion.

Instructors will monitor the channel to follow up on your progress.

Teamwork

Use tools

Trello

- Be involved and excited
- Be supportive of each other’s ideas
- Be willing to let some things go
- Follow the agreed-upon processes
- Show up
- Do what you say you’ll do
- If you can’t, communicate with your team
- Own up to your mistakes
- Give feedback kindly
- It’s only a midterm project.

PROJECT WORKFLOW

Project Setup

- Do the activities in Compass for database and git setup
- Clone the node skeleton

1. create exactly one GitHub repository
2. add all your team members as collaborators
3. one person clone the skeleton
4. change the remote to the new repo
5. push to the new repo
6. everybody else clone the new repo
7. do the "getting started" section of the readme on one person's computer, as well

Git Workflow

NEVER CODE ON MASTER

- Agree on a git workflow
- Follow the same workflow
- Let’s review the suggested workflow...

Database Setup

- Look at today’s activities in Compass for database setup
- Create sql scripts to create tables, populate the database
- You will maintain your own version of the database

Tools

- List of suggested tools available here:

  https://gist.github.com/DominicTremblay/b8e0acc66c45f412abe4d92b7268b3cd

Now we **code!** 🚀