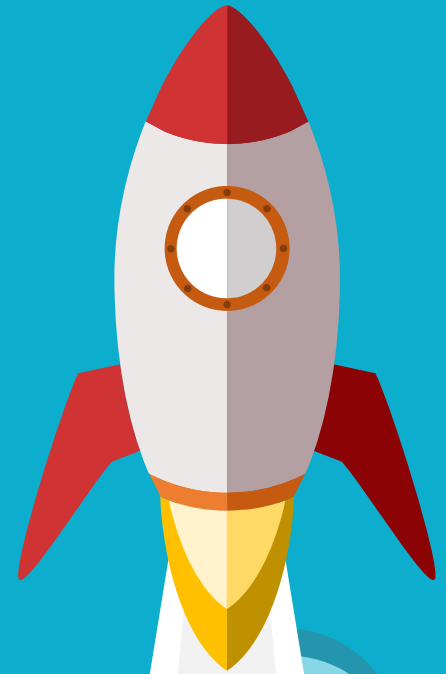# LIGHTHOUSE LABS

Final Project

- Kick Off !

Project Planning

Project Description
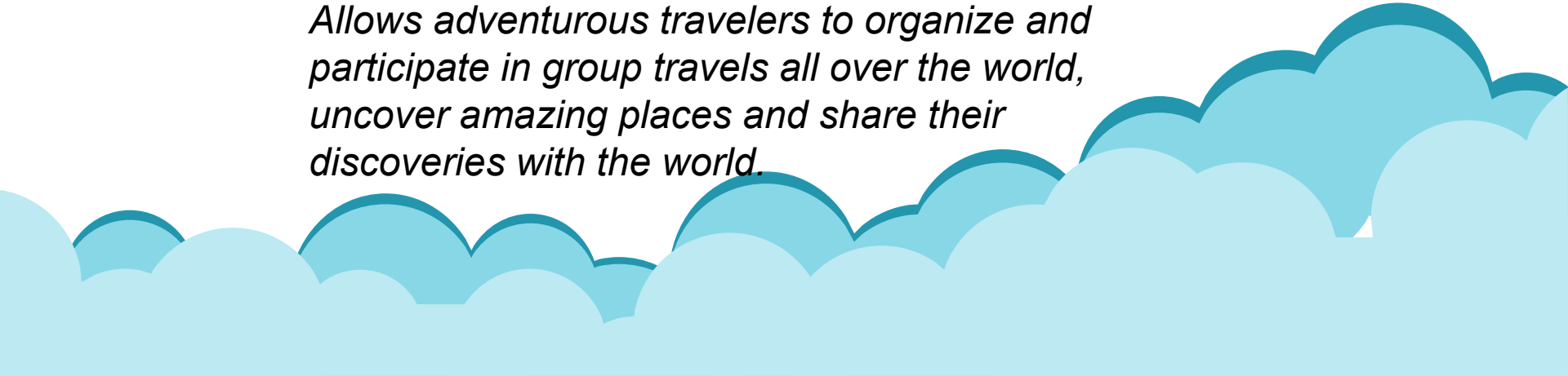
What's the purpose of your app?

- What problem does your app solves?
- Who is your target audience?
  - Type of user
  - Geography
  - Age

> You should be able to describe you app in a sentence or a short paragraph.

Ex:

Create the travel of your life!

Allows adventurous travelers to organize and participate in group travels all over the world, uncover amazing places and share their discoveries with the world.

Defining an MVP (Minimum Viable Product)

A minimum viable product has just those *core features sufficient to deploy* the product, and no more

- Get the product to early customers as soon as possible
- Test the product before investing more
- Base future development on feedback from users

For the bootcamp:

- Develop the core features to showcase the app to potential employers.

Defining an MVP (Minimum Viable Product)

- List of core features

- List of additional features

- Requirements (ex. Does it need to be responsive?)

User Stories

1. Assuming you know what's best and ignoring the user

2. Doing exactly what the user ask

Design your app by focusing on users' needs!

User Stories

User should be able to add an event to the group trip calendar

As a user I want to add an event to the group calendar because I want to invite my fellow travelers to do something cool together such visiting a sight worth seeing or participate in an activity.

WELL, WHAT DO WE DO ?!

User Stories

Title:

User should be able to add an event to the group trip calendar

User Story:

As a user I want to add a event to the group calendar because I want to invite my fellow travelers to do something interesting together such visiting a sight worth seeing or participate in an activity.

- User **should**… in the title

- As a user, I want to (goals, desire)   because (benefit)

Additional reading:

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

User Stories

Who is the user?

- Create a user persona

Demographics
- 27 years old
- Single
- Earns 55k a year

Goals
- Build a stong portfolio
- Get involved in a large project
- Acquire more skills

Behaviors & Beliefs
- Obsessive about code refactoring
- Very details oriented
- Wants to be involved in the development process

Attributes
- Tech Savviness: 5
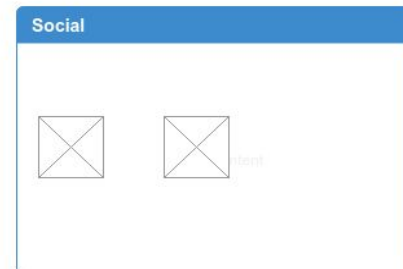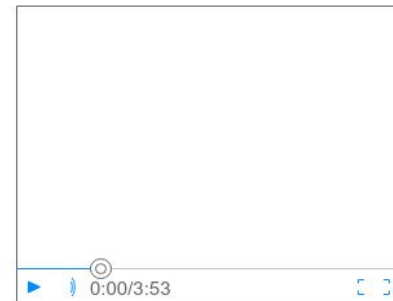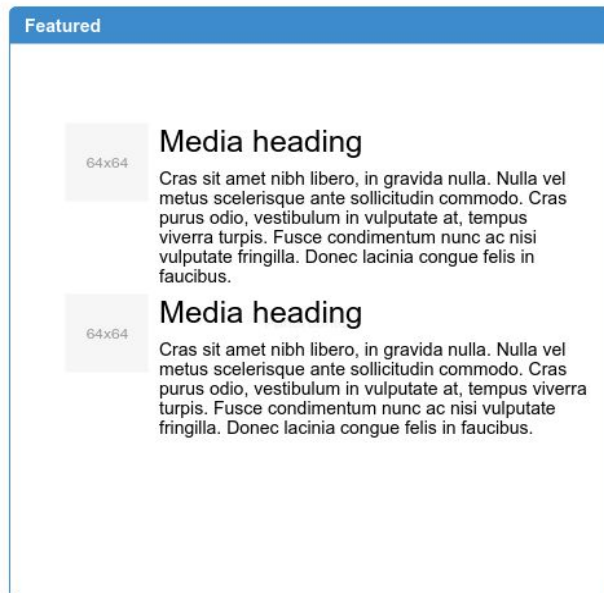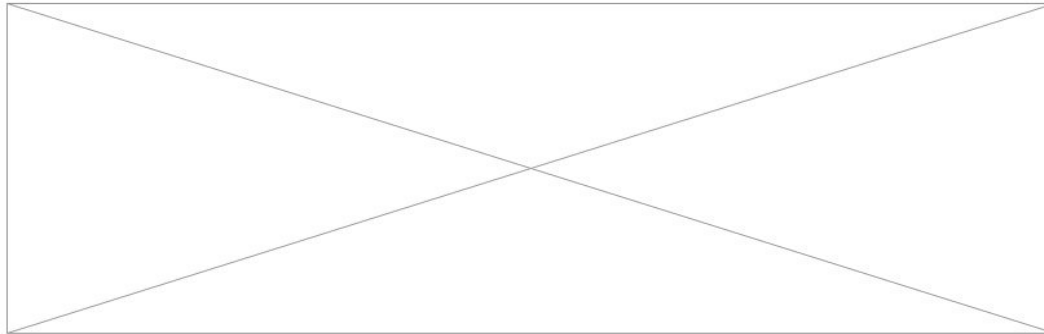- Education: 4
- Ambition: 5
- Experience: 3

Wireframes/Mockups

A Wireframe is a simplified visual representation of the user interface

- Based on the user flow from the user stories

- Do spend the time to create good wireframes/mockups for your Web app. *Get inspired with site like Behance.net or Dribble*

- Use a design software like Figma, Adobe XD, Mockflow, Balsamiq, or draw.io

A good UI design will help you a lot during development!

Wireframes

Technology Stack

Front End

Back End

Choosing Your Front-End

UI Framework

- BootStrap, Foundation, Material UI, Semantic UI
- Responsiveness?
- Sass, JQuery?

Front-End Framework
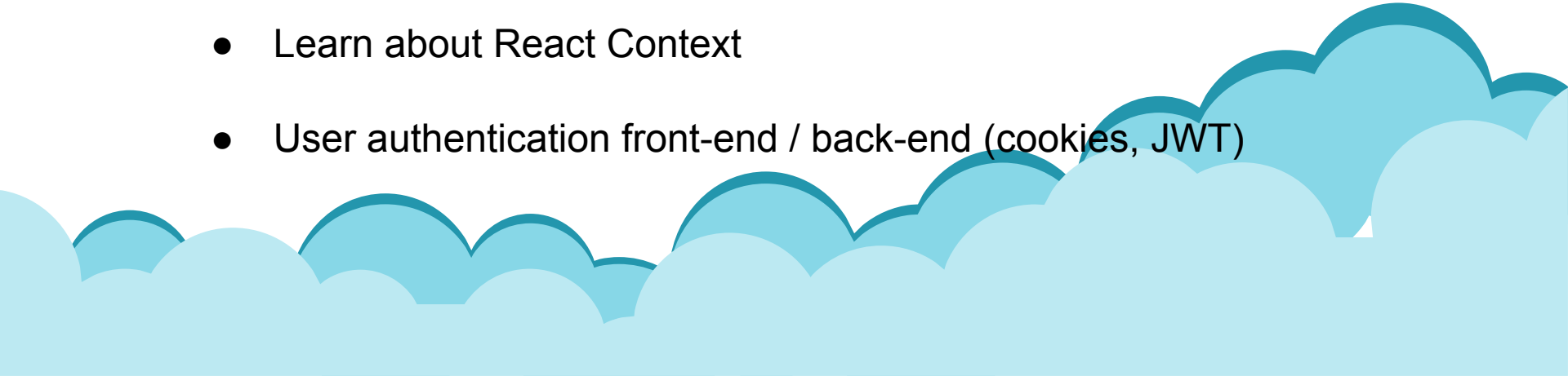
- React, Angular, VueJS, Meteor

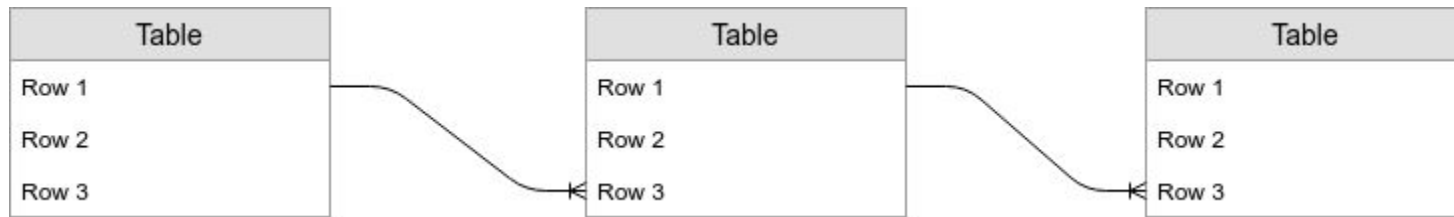## Choosing Your Back-End

- Rails, Express, Sails

Choosing Your Database

- SQLite, Postgresql, Mongodb

Some of the tools you might need to be more familiar with

- CSS framework specific (React Bootstrap)

- Front-end Routing (React Router)

- Revisit hooks that your already know (custom hooks, useEffect, useReducer)

- Learn about React Context

- User authentication front-end / back-end (cookies, JWT)

ERD

- What data does your app need?

- Use a software (draw.io, lucidChart, etc)

Project Workflow

Project Planning Document in Compass

Project Milestones

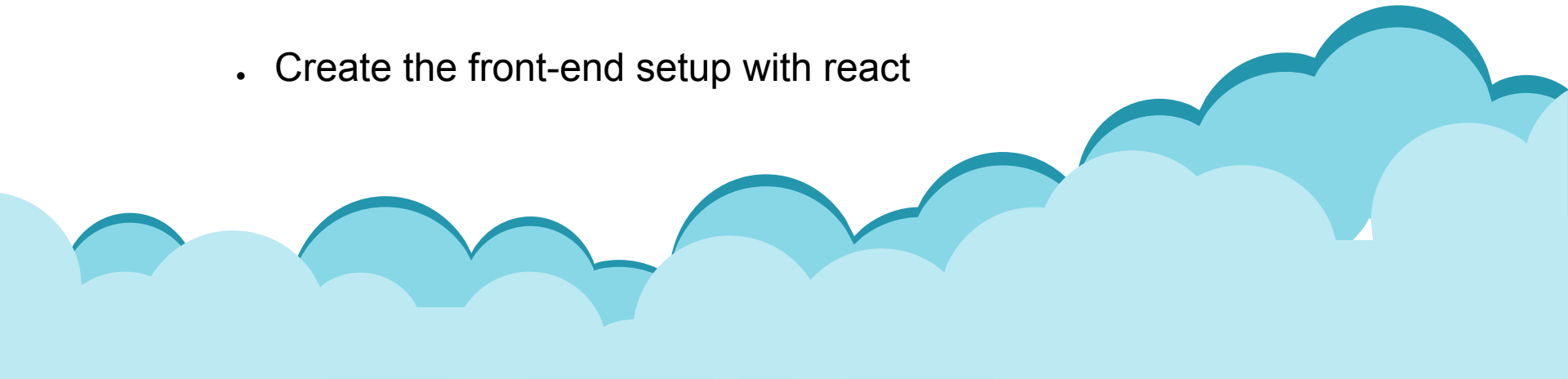Create list of project milestones

- Be specific
- Have deadlines

Example:

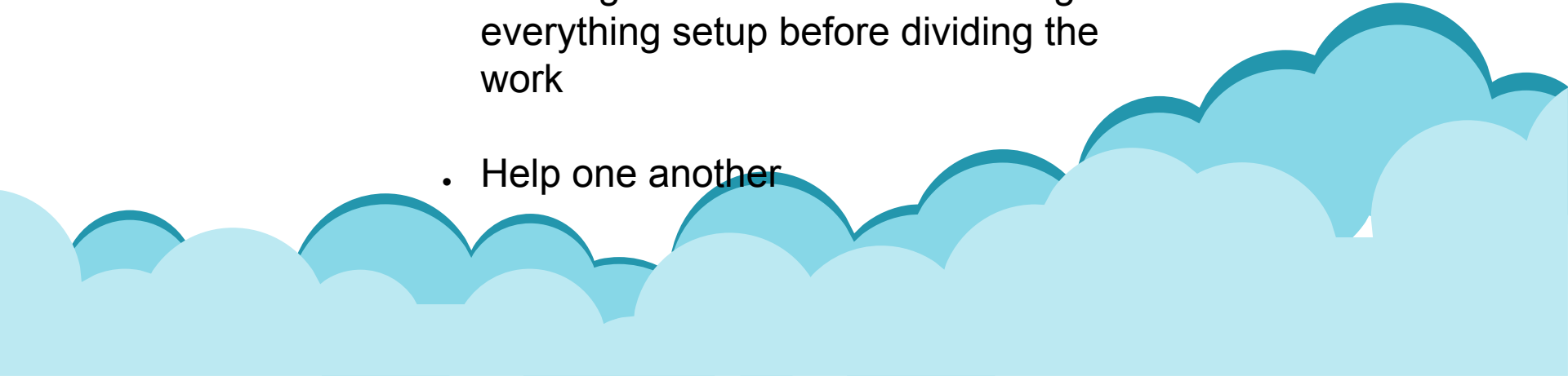**Have the project setup by Thursday 11 am:**

- Create the initial migrations and seed file for the database based on the ERD

- Create the back-end setup with express and knex

- Create the front-end setup with react

Dayboard

Distribute Work

- Distribute work by feature?

- Preference for front-end, back-end?
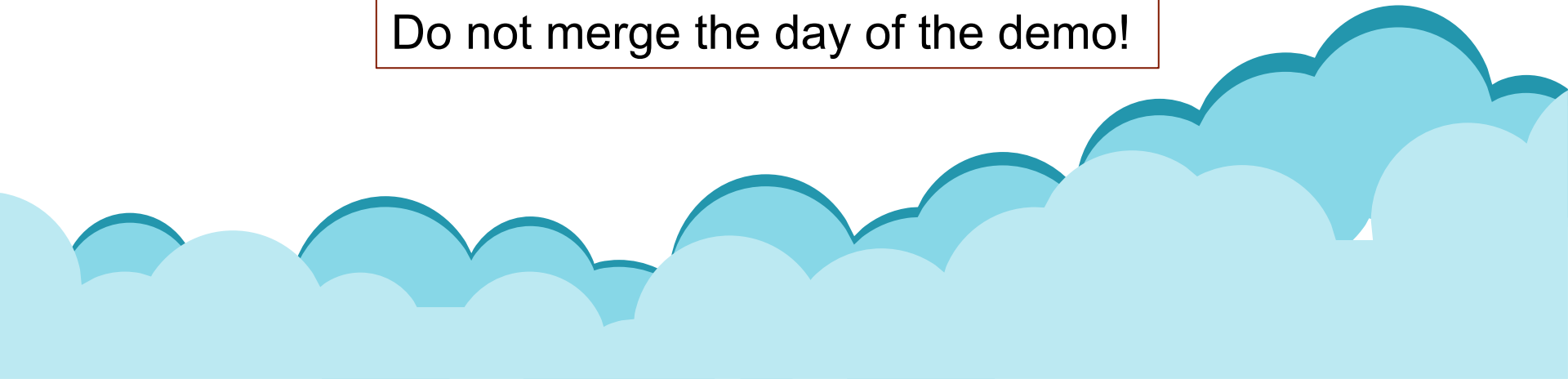
- Some pair coding?

Keep in mind:

- Work should be equally divided

- You might want to consider having everything setup before dividing the work

- Help one another

How to Work

Agree on:

- Coding Style to ensure consistency (prettier, eslint)

- GIT Workflow

  - Never code on master!
  - Feature workflow
  - How to merge
  - Merge more often that not!

Do not merge the day of the demo!

Communication

Communication skills are as important as technical skills

Daily Stand-Ups

In front of the *stand up master*, each team member will disclose:

- What has been accomplished

- What they will be working on

- What hurdles they are facing
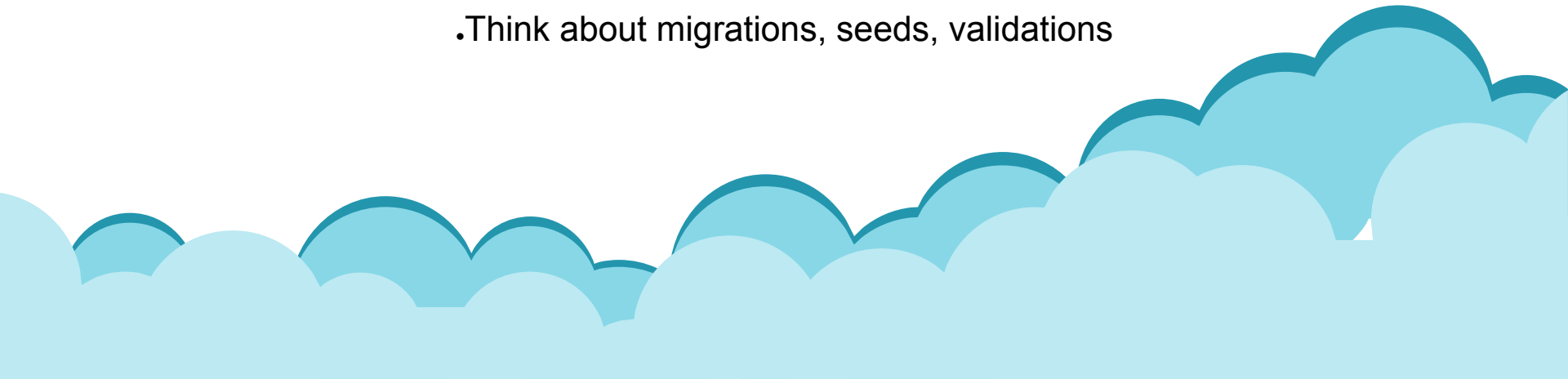
Improve communication and better follow-ups

Development

Project Setup

Scaffolding

- Use an existing boilerplate

- Use a generator

- Front-End & Back-End Scaffolding

  - Build static page at first?

  - Make CSS work

  - Think about migrations, seeds, validations

Routing

- Front-end and Back-end routing

- Design your routes according to REST

- API on the back-end?

  /api/v1/

Test your API withPostman or Insomnia (or Curl)

Deployment

- Have a working version ready on localhost

- Decide on what computer you will demo the app

- Have a backup computer ready

Deploy Heroku

- Make sure you have the time

- Work on a separate branch

Things to keep in mind

- If you try something new, focus on just one new thing. Think about documentation and support.

- Diminish uncertainties: test your setup, the DB, migrations, seeds, AJAX calls, test external APIs, etc.

- Async can be tricky!

- Use helper functions

- Don't wait too long before integrating your features

Things to keep in mind

- Login for SPAs might need to be implemented differently: JWT, oauth

- Focus on the important features. Don't spend a lot of time on features that are not super important (ex. Login)

- Think about the user experience. Have a good UI.

Have a good team spirit and keep it fun!

Questions ?

Let's do this!