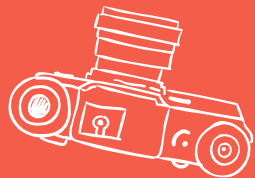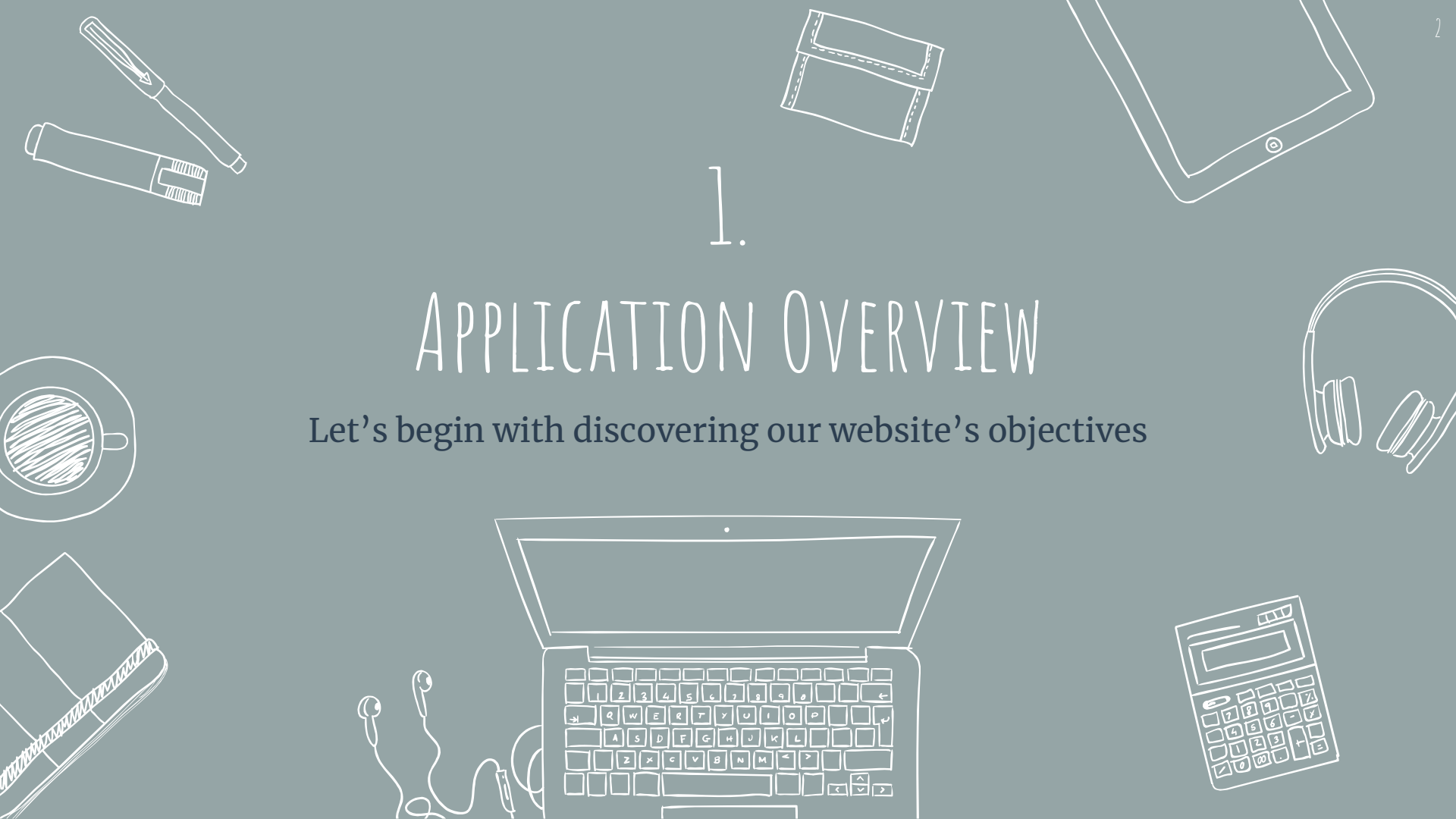# The Tech Library

Project by: Andrew Connell, Ben kohav, Charlotte Gorgemans, roxanne manthy, ryan hannigan, sean shi

1.

Application Overview

Let's begin with discovering our website's objectives
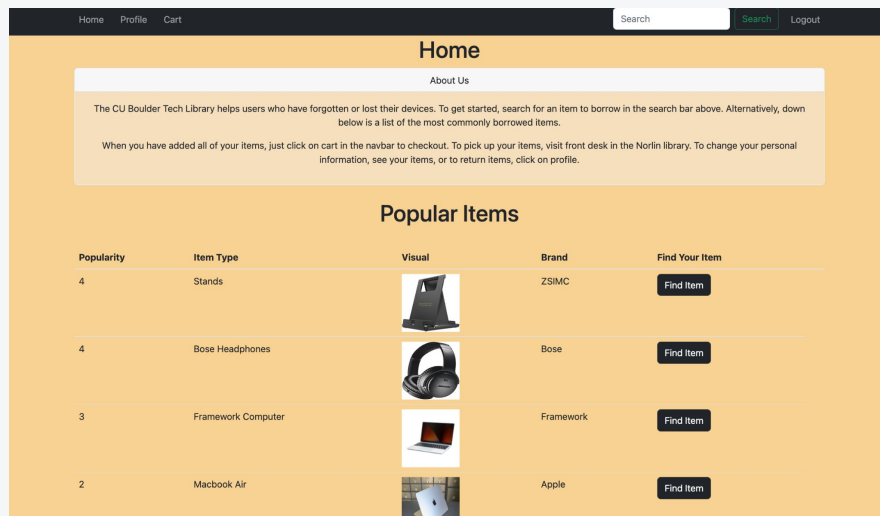
Application Overview

OBJECTIVE

Provide a forum for students to borrow essential school materials and equipment for day use.

Scenario: Anna is a commuting student and has left her laptop charger at home. Our Tech Library application allows Anna to connect with a resource center on campus to borrow a charger for the day.

Application Overview & Website Flow

MISSION EXECUTION

1. Register & Log In
   a. User gains access to nav bar and home page
2. Home
   a. User browses popular items & can select an item
3. Search
   a. User can search for a specific item
4. Cart
   a. User is redirected to a page, displaying their cart & selected items
5. Profile
   a. User can modify their profile info and view what they have checked out.
6. Logout
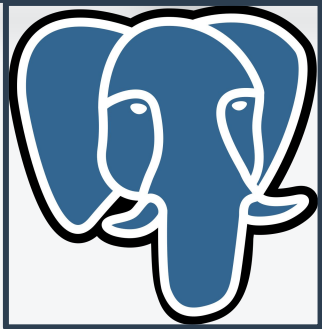   a. User logs out of website & secures their account
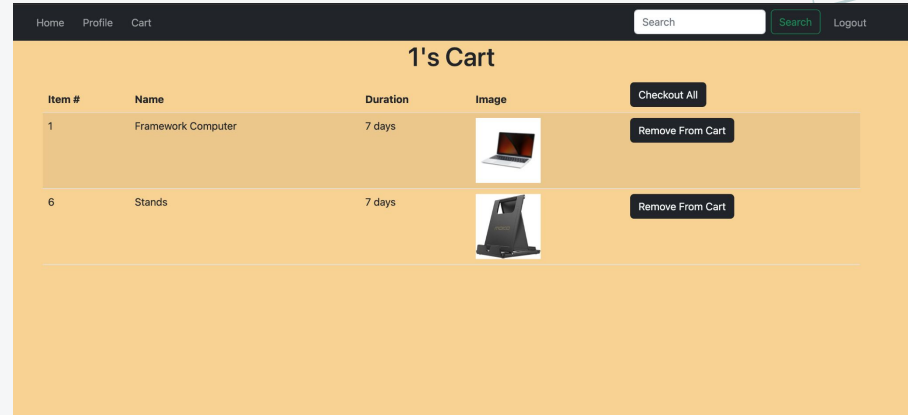
2.

Tools & Methodologies

Let's discuss the tools & methodologies we implemented in our website

<%= EJS %>

B
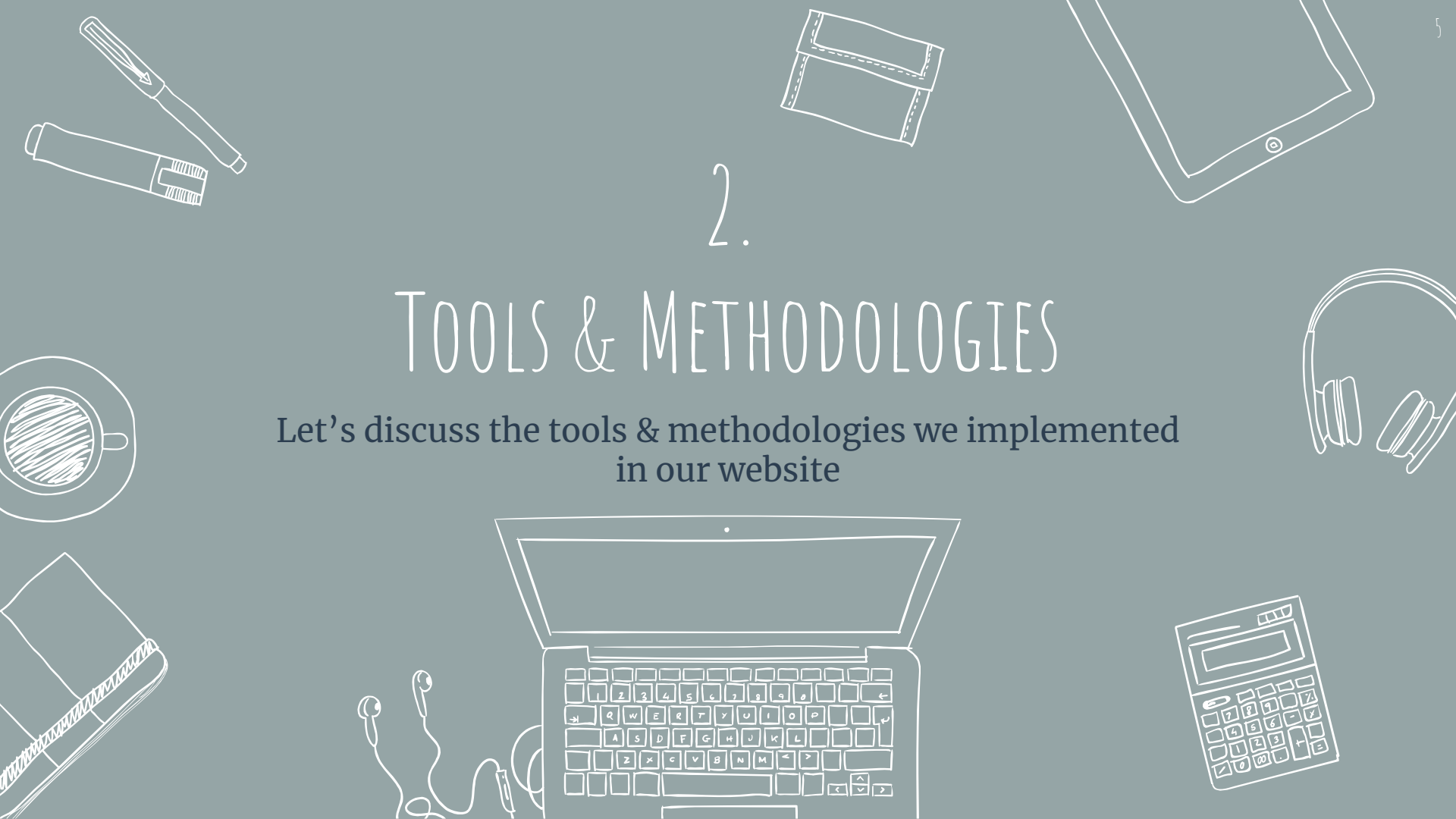
Tools Used In Deployment

The
Tech
Stack

OVERVIEW

- EJS: 3.5/5
  - Easier creation of pages
  - Easier rendering of backend to frontend
  - Issues with syntax and unexpected behavior(html vs js)
- NodeJs: 4/5
  - APIs
  - Minor issues with syntax
- Postgres: 4.5/5
  - Functions
  - Useful data types
  - Easy data manipulation
- Docker: 3.75/5
  - Great service for running our application.
  - Issues with opening & initially running Docker.

Tools Used In The Development Stage

OVERVIEW

- GitHub: 4.2/5
  - Great service for version control.
  - Merge Conflicts

- VS Code: 4.5/5
  - Code is presented in a readable format, smoother programming process.
  - Easier Merge Conflicts

- GroupMe: 4/5
  - Easy to view all members' views.
  - No meeting support
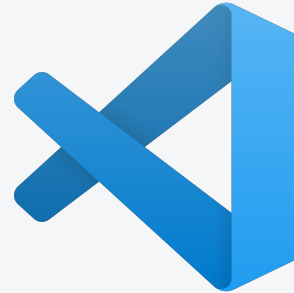
Methodologies Overview (Agile)

🌐 **techLibrary Board**

📊

| 🗔 View 1 ▾ | ➕ New view |

☰ Filter by keyword or by field

Ice-Box 2 ···

◉ groupProject #36 •••
Rendering pages between actions work without error and data is updated between them

◉ groupProject #46
Help Page
Support 5

Todo 2 ···

◉ groupProject #47
Data for profile page (first name, last name, username, etc) should render
Profile 3

◉ groupProject #67
modals for profile page should be updated
Profile

In Progress 5 ···

◉ groupProject #5
Profile
Profile 6

◉ groupProject #3
Home Page

◉ groupProject #71
Item Information After Search
Search 4

◉ groupProject #87
Profile allows edits to name and such
Profile 4

Done 26 ···

◉ groupProject #90
Check for overdue items before checkout
Checkout 3

◉ groupProject #17
Cart page - Get the base functionality shown up on our local host

◉ groupProject #43
Make the data of users items render
Checkout 4

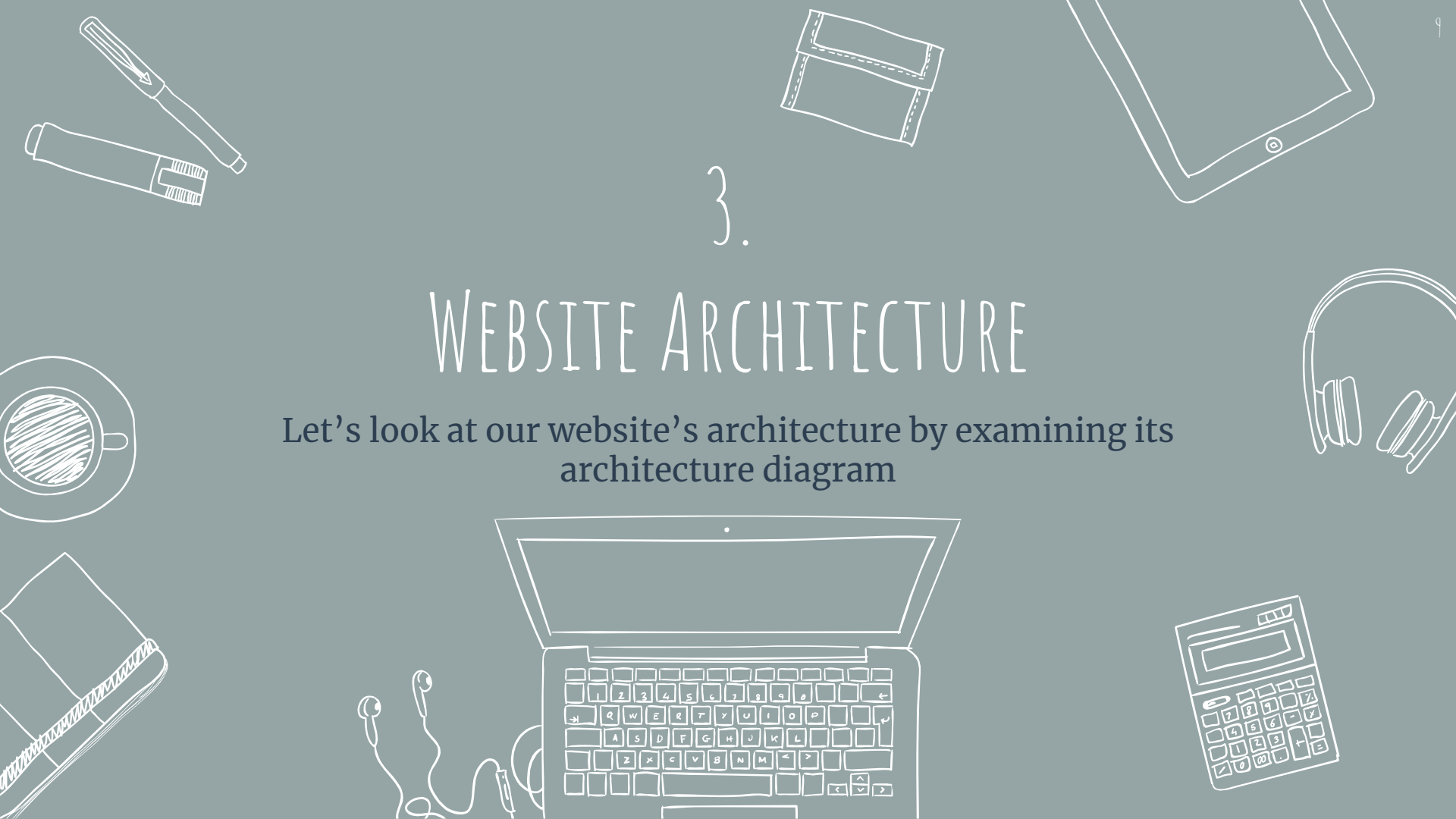**◉ groupProject #63**
Return Item
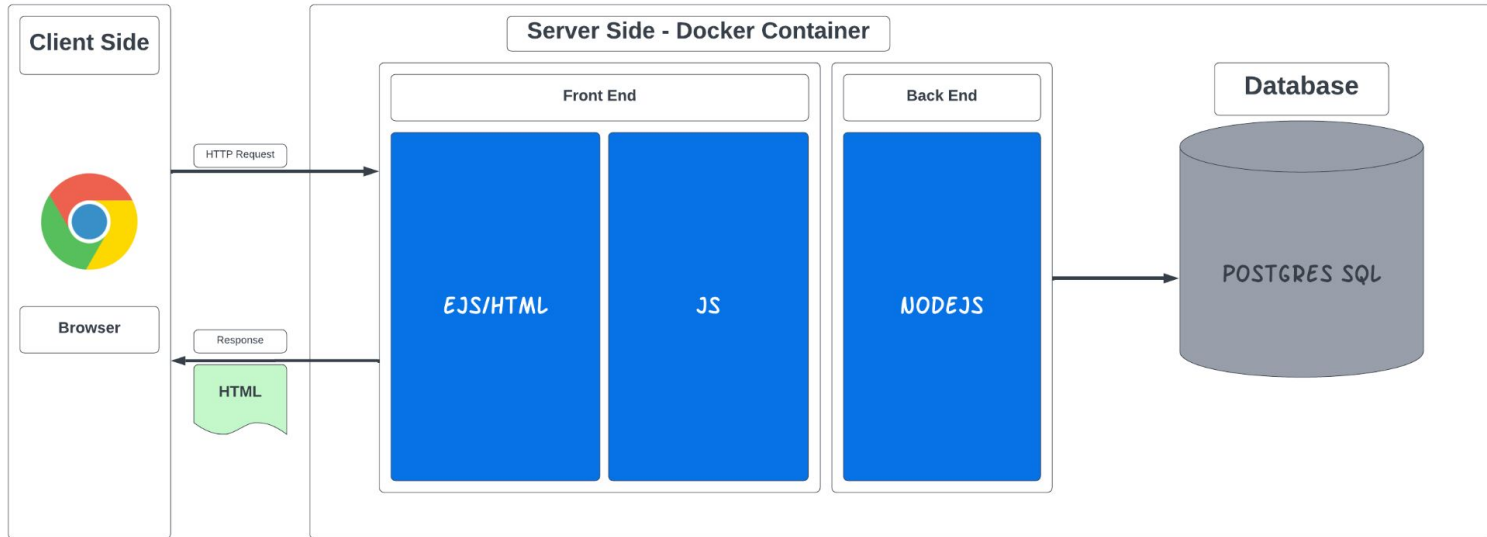Profile 8

➕ Add item

3.

Website Architecture

Let's look at our website's architecture by examining its architecture diagram
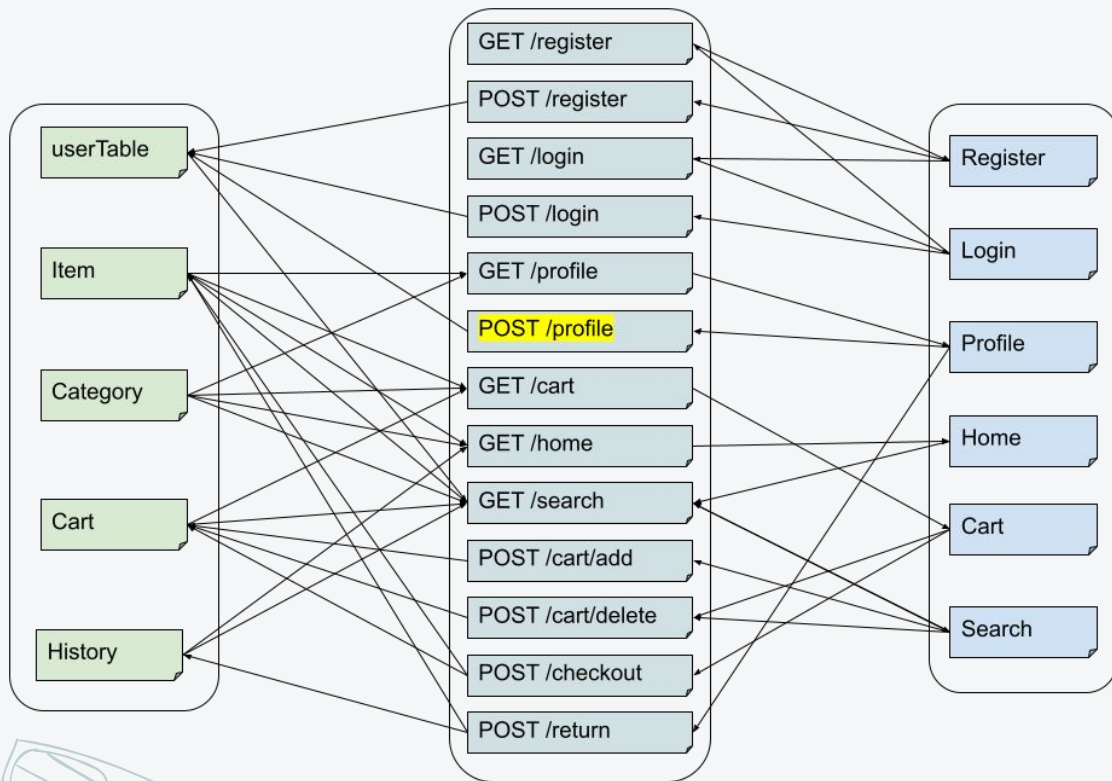
Website Architecture

Website Architecture

Database (Postgres)

API (Node JS)

Pages (EJS)

userTable

Item

Category

Cart

History

GET /register

POST /register

GET /login

POST /login

GET /profile

POST /profile

GET /cart

GET /home

GET /search

POST /cart/add

POST /cart/delete

POST /checkout

POST /return

Register

Login

Profile

Home

Cart

Search

4.

Challenges

We'll analyze the development of this website by debriefing our challenges

Challenges During Development

RESOLUTIONS

CHALLENGES

- Deciding on a database & its organization

- Integrating our pages & combining all code together

- Determining where to store the data for the cart

- Discovering methods to develop a search functionality

- Maintaining open communication
  - Frequent updates via groupme
  - Asking for team's suggestions on questions
  - Clearly defined roles & responsibilities

- Seeking help & resources when needed
  - Visiting office hours
  - Collaborating with team members on tasks

5.

Future Enhancements

Let's discover a few options for future enhancements to our application
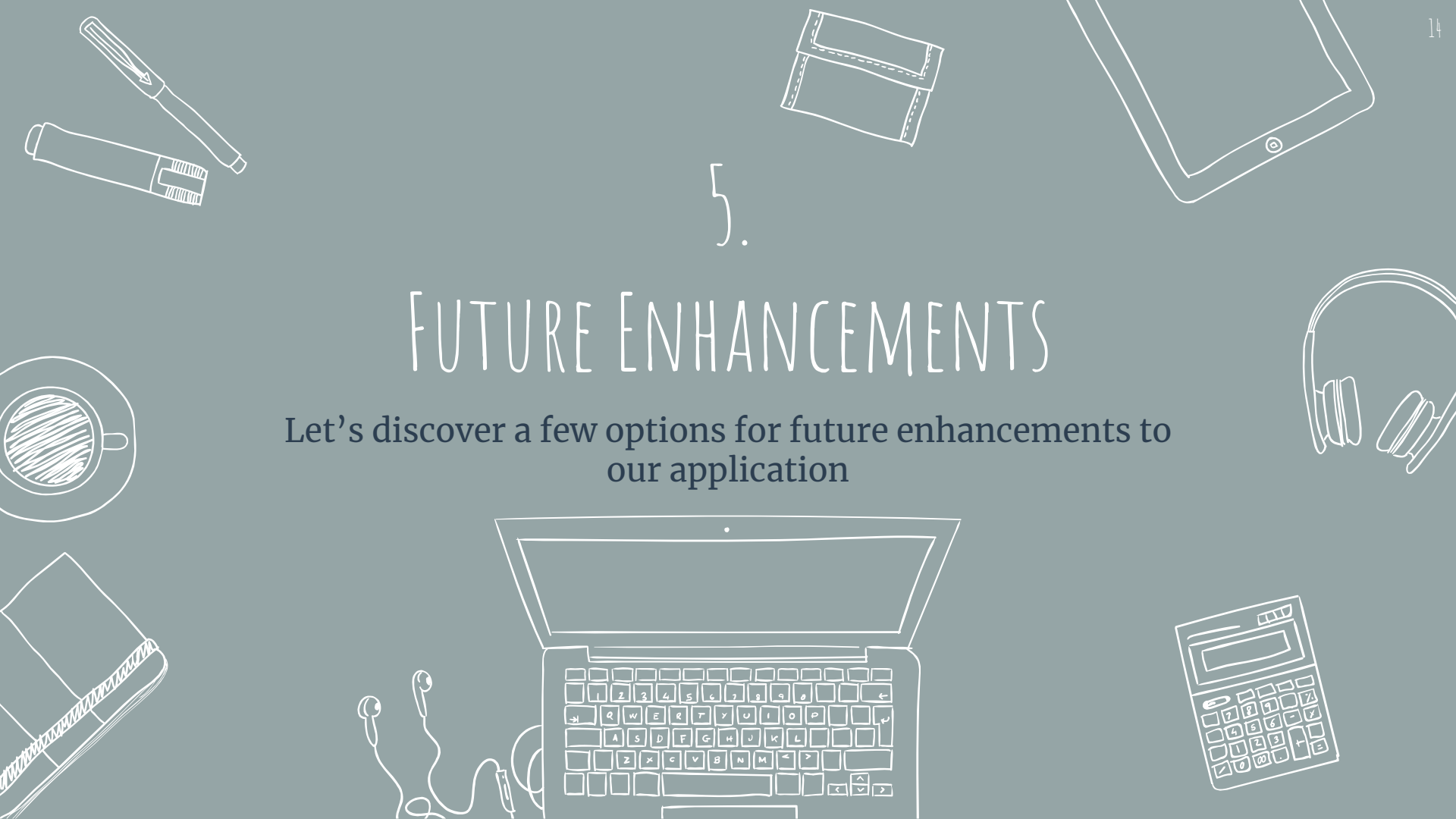
Future Enhancements

- Implementing return locations
    - User selects a time to drop off item
    - Return location dependent on item selected

- Feature to purchase/report a lost item.
    - Walmart API to find product replacement

- Additional filters for search
    - Organize by popularity, item condition, item brand

- Streamlining website UI

Live Demo!

We'll discover our website's full functionalities by a live demo!