# GreenChallenge

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### **Description**

- Application
  - users log activities and get a carbon emission amount
  - o carbon amount/activity computes a value that is used to manipulate user carbon score
- Carbon score: credit-score like system
  - o higher: worse; lower: better
- Goal: promote sustainability by helping people reduce carbon emissions
  - o game-ify user's goal
  - adds competitive reward

### **Tools**

















#### **Version Control**

• Git/Github (3)

#### UI/UX

- HTML (5)
- CSS (4)
- Javascript (4)
- EJS (3.5)
- Bootstrap (5)
- Adobe Al (4)

#### Server/DB

- Node.js (4)
- PostgreSQL (4)





#### API

- Express JS (4)
- ClimatlQ (3)
- Axios (4)

#### **Environment**

• Docker (4)

#### **Documentation**

• Google Drive (5)





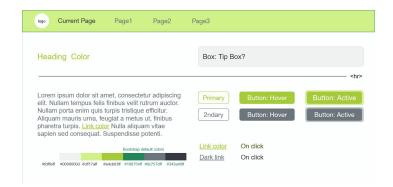
### **Tools (Cont)**

#### **Planning**

- MySQL Workbench (4)
- Google Drawings (3)
- Github Projects (5)
- LucidChart (2)

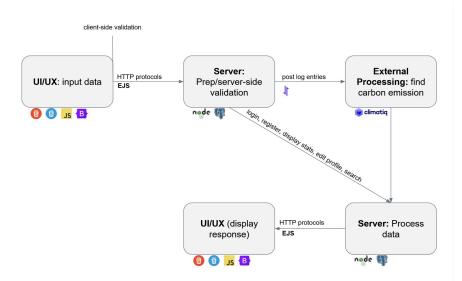
#### Methodologies

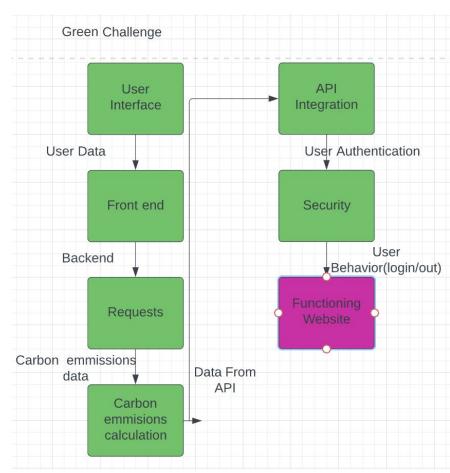
- Agile (1)
- Iterative (5)
- Peer code reviews (5)





# **Architecture Diagram**





### Challenges

- Task management/culling to meet deadline
  - Data graph
  - User profile picture upload
- Carbon score algorithm balance
  - Balance real data with reasonable scores
  - Create meaningful scores
- Convoluted API calls
  - o effectively utilizing API with limited information reasonably expected of a user

# **Functional Demo**