

The Green Thumb

Group 22, Presentation 15/04/2019, CSE

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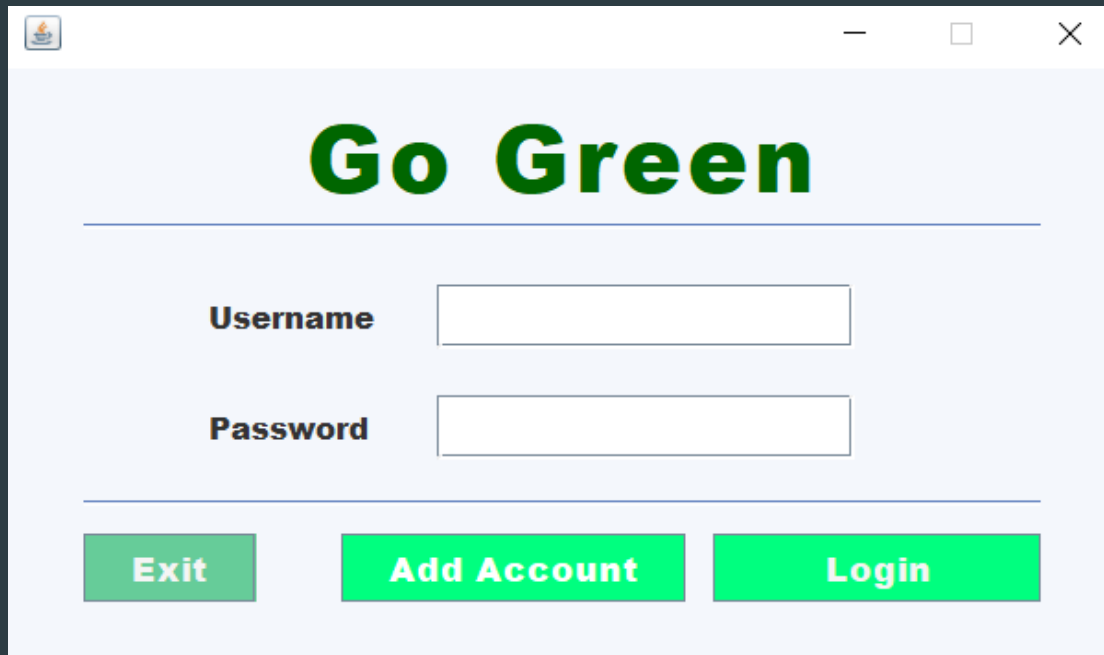
The concept

- ▶ Designing for effectiveness and environmental-mindfulness
- ▶ Giving the user a clear overview of their CO2 emissions
- ▶ Making it easy to use
- ▶ Giving the user the ability to add friends and see their results as well

The login

- ▶ The login screen consists of two different parts, namely the main screen and the add account screen

The login



A screenshot of a web application window titled "Go Green". The window has a light blue header with the title "Go Green" in large, bold, green letters. Below the header, there are two text input fields: "Username" and "Password". At the bottom of the window, there are three buttons: "Exit" (light green), "Add Account" (bright green), and "Login" (bright green). The window has standard OS window controls (minimize, maximize, close) in the top right corner.

Go Green

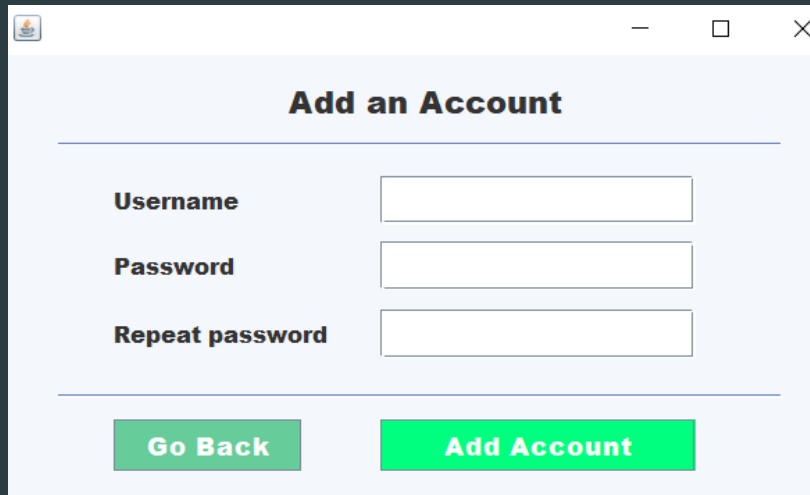
Username

Password

Exit **Add Account** **Login**

- ▶ The main log in screen consists of two text fields, an exit button, an add account button and the login button

Add an Account



A screenshot of a web browser window displaying a form titled "Add an Account". The form has a light blue header with the title. Below the header, there are three input fields: "Username", "Password", and "Repeat password". Each field is a simple white rectangle with a thin border. At the bottom of the form, there are two buttons: a green "Go Back" button and a red "Add Account" button. The browser window has standard OS controls (minimize, maximize, close) in the top right corner.

Add an Account

Username

Password

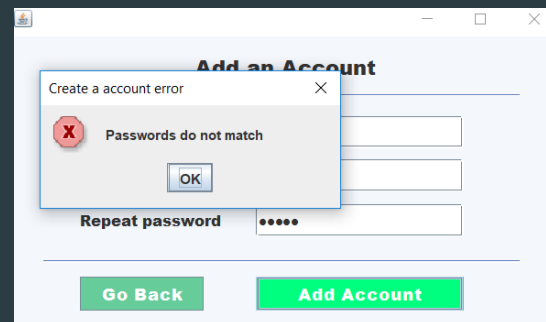
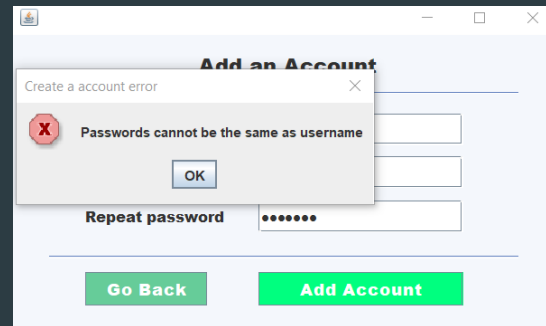
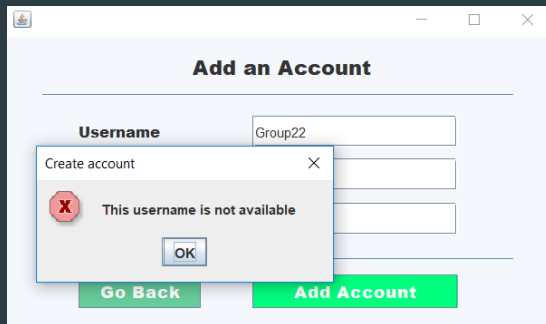
Repeat password

Go Back **Add Account**

- ▶ The information is checked for a unique username and whether the user inputted the same password as the username
- ▶ The password is checked to be the same both times

Add an Account

- ▶ Violating these terms will lead to an error pop-up



The GUI main screen

- ▶ Main screen
- ▶ My profile
- ▶ My friends
- ▶ Leaderboard
- ▶ Add a friend
- ▶ Features and point system

Main screen

My Profile

My Friends

Log out

Welcome nataxcan

Your Level is 2

The amount of CO2 you have saved so far is 2918 decagrams

Your total CO2 emission is now 2101 decagrams

What kind of meal did you have today?

Vegetarian meal

Non-vegetarian meal

What type of produce did you buy today?

Local Produce

Global Produce

How far did you travel today?

km

What was the method of transportation?

Car

Public Transportation

Bike


By how much is your temperature lowered now?

Degree Celsius









How many installed solar panels do you own?

Solar Panels

You only need 399 points to the next level!



Achievement Bar



Leaderboard Top 10 CO2 Used

Rank 1: lukas, 19270
Rank 2: ardy, 4011
Rank 3: You, 2101

Switch Leaderboard

Add a friend

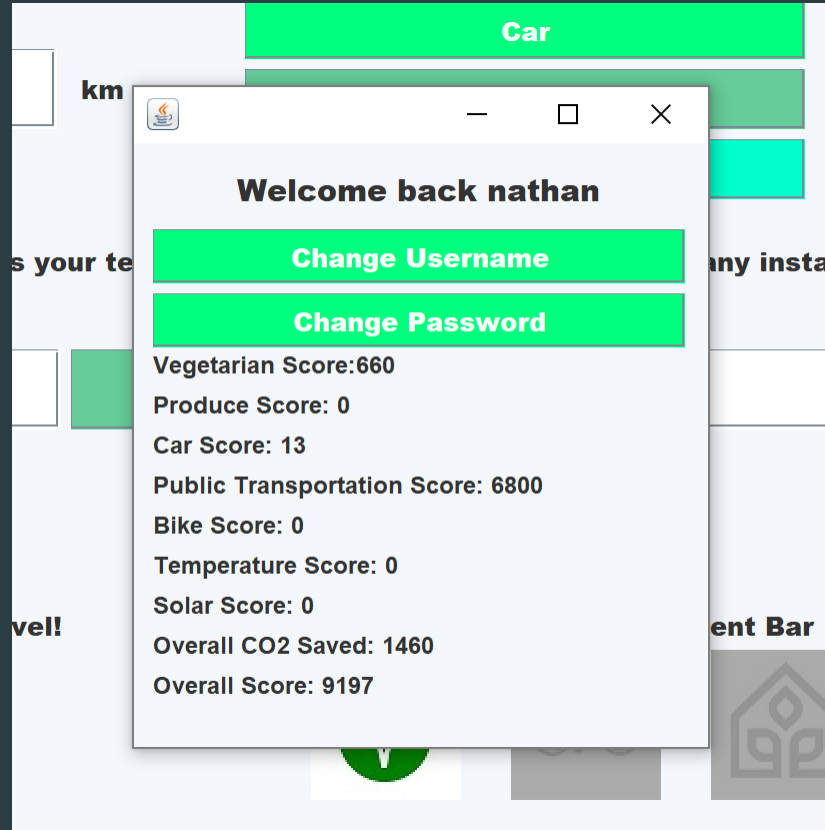
Global Chat

nathan123jari: hi, hello guys
jari: let's save the planet!
nataxcan: I love nature!

Post

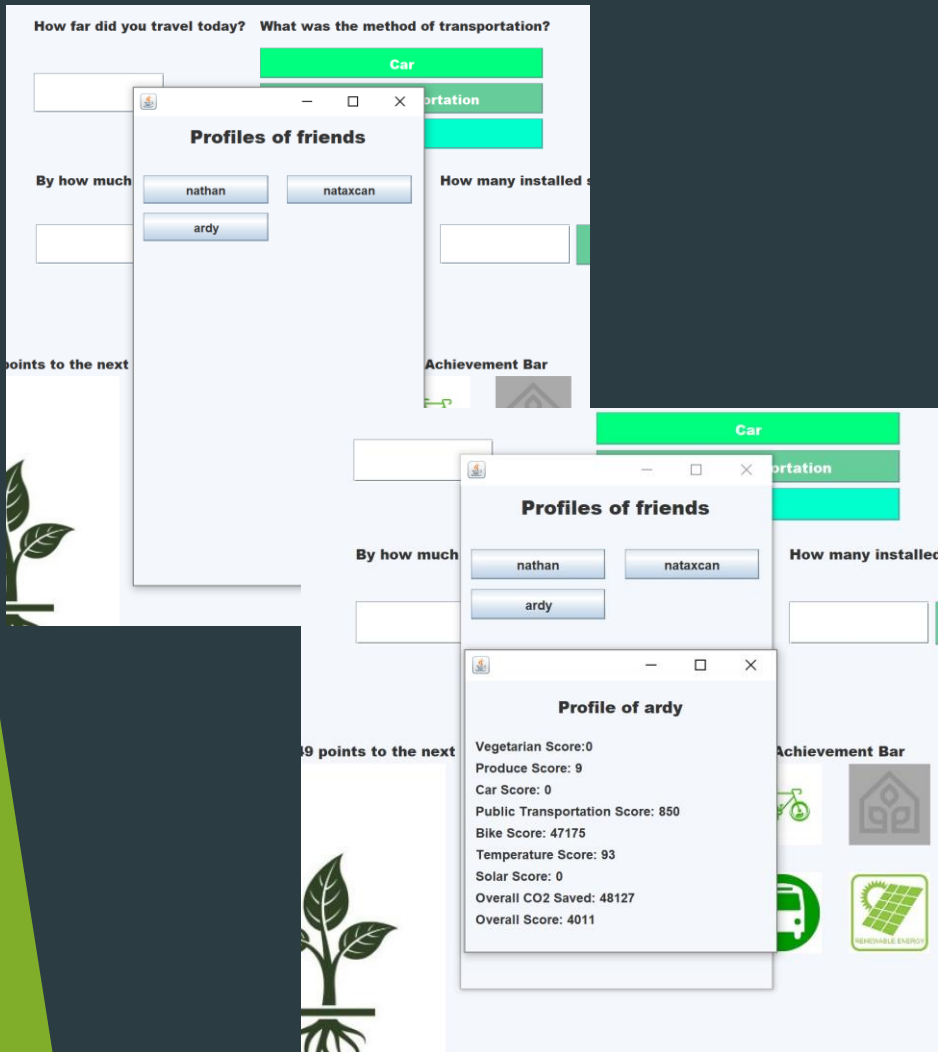
- ▶ Each feature awards a different amount of points, depending on their real-life CO2 emissions
- ▶ Every 1000 points your level will increase

My profile



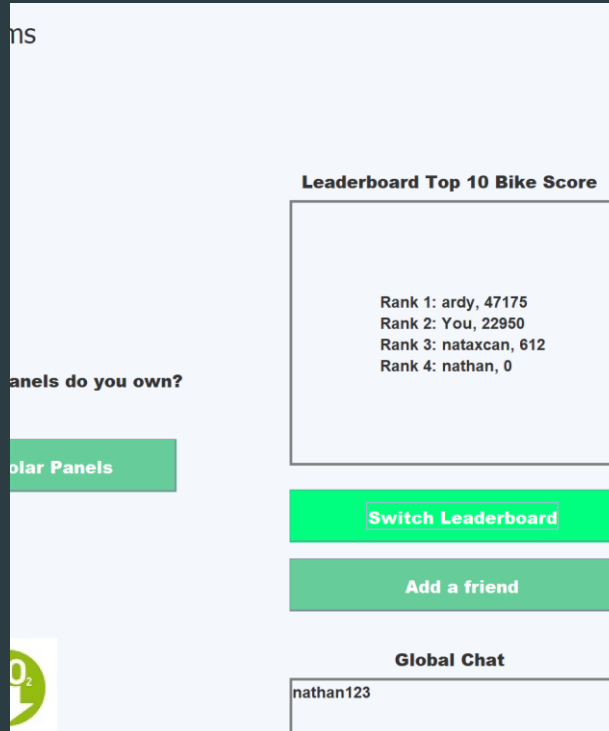
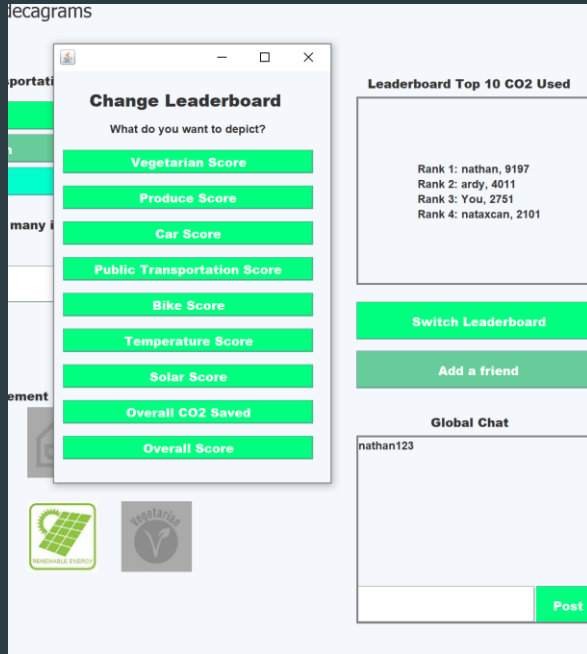
- ▶ The user can change their username and their password
- ▶ The user receives a detailed overview of how much they are saving and using

My friends



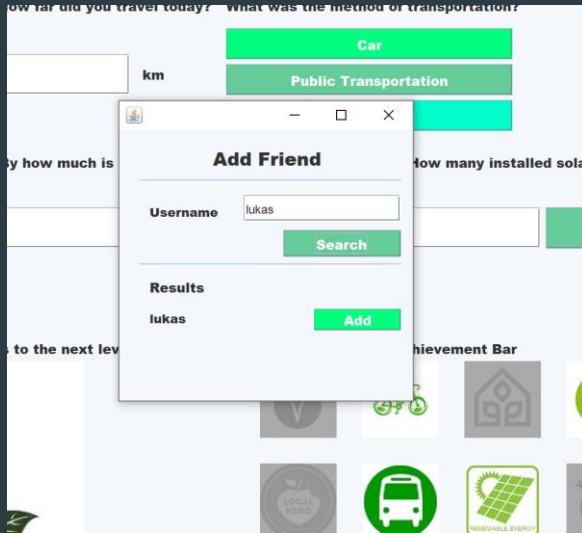
- Opens a pop-up with a list of all the users friends

The leaderboard



- The user can choose a category on which the leaderboard is ordered

Add a friend



- ▶ The user can search for another user, the results give the three usernames that have the most in common with the given search.

Leaderboard Top 10 CO2 Used

Rank 1: lukas, 19270
Rank 2: ardy, 4011
Rank 3: You, 2101



The features

What kind of meal did you have today? <input type="radio"/> Vegetarian meal <input type="radio"/> Non-vegetarian meal	How far did you travel today ? <input type="text"/> km	What was the method of transportation? <input type="radio"/> Car <input type="radio"/> Public Transportation <input type="radio"/> Bike
What type of produce did you buy today? <input type="radio"/> Local Produce <input type="radio"/> Global Produce	By how much is your temperature lowered now? <input type="text"/> Degree Celsius	How many installed solar panels do you own? <input type="text"/> Solar Panels

- Each feature consumes and saves a set amount of points.

The amount of CO2 you have saved so far is 2918 decagrams
Your total CO2 emission is now 2101 decagrams

The bonus feature



Switch Leaderboard

Add a friend

Global Chat

nathan123jari: hi, hello guys
jari: let's save the planet!
nataxcn: I love nature!

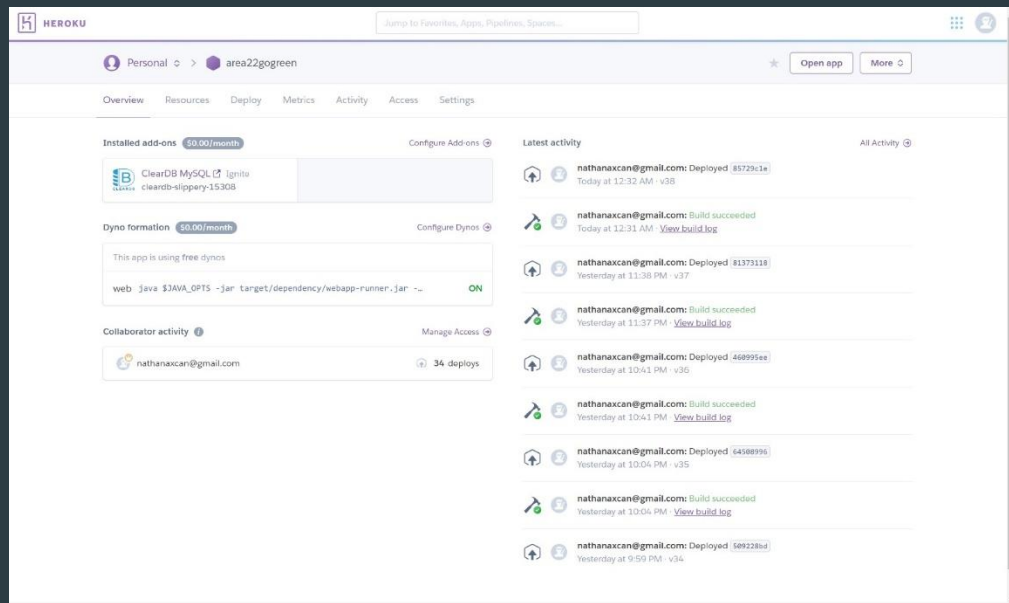
Post

► **The Chat**

The server

- ▶ We made use of the SPRING framework to create our server
- ▶ The server and client communicate via JSON
- ▶ The server is running via TomCat

Heroku



- Gitlab automatically deploys to a Heroku app, which connects to a ClearDB MySQL instance.

The database

Table: **user**

Columns:

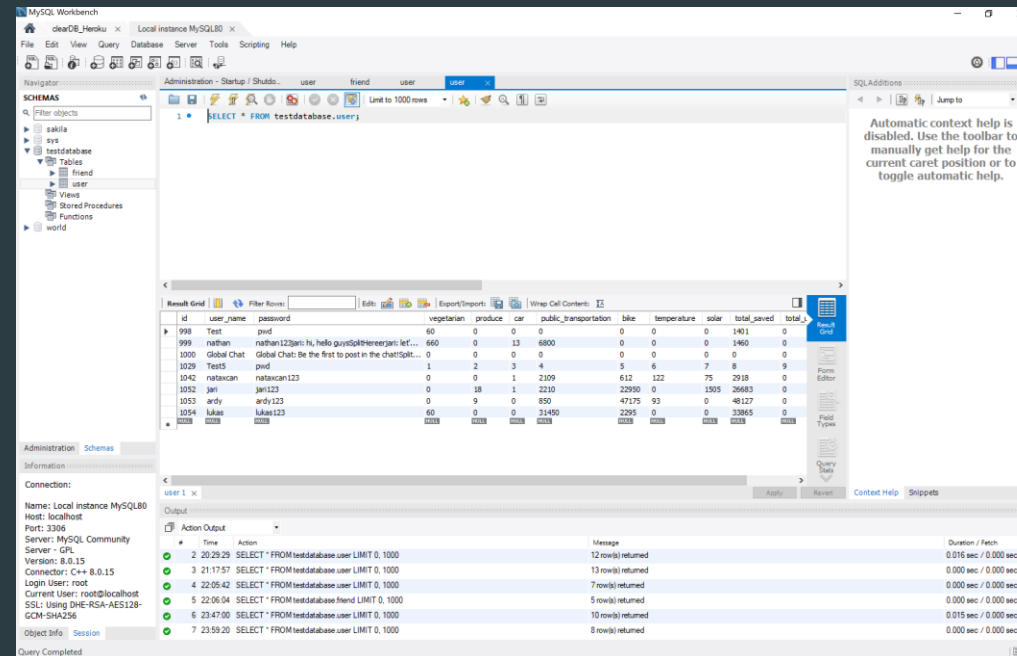
id	int(11) AI PK
user_name	varchar(45)
password	varchar(45)
vegetarian	int(11)
produce	int(11)
car	int(11)
public_transportation	int(11)
bike	int(11)
temperature	int(11)
solar	int(11)
total_saved	int(11)
total_used	int(11)
total	int(11)

Table: **friend**

Columns:

id	int(11) AI PK
user_name_entry	varchar(45)
friend_name	varchar(45)

- ▶ We are using a MySQL database
- ▶ Our database contains two tables, user and friends



Libraries/tools

- ▶ The SPRING Framework
- ▶ TomCat Server
- ▶ Swing elements

Team process

- ▶ During the project we have noticeably grown in our usage of Git and our teamwork
- ▶ While all work was always satisfactory, the level of code that we wanted to produce definitely increased during the project, especially the final weeks