

CFG Software Engineering: Group Project



Team Members

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CLIMATE CHANGE

- 1.1°C increase since 1850 due to human activity
 (IPCC AR6 WGI, 2021)
- transport sector now largest
 emitter of GHG in UK
 (Department for Transport, 2021)

OUR SOLUTION



- journey planning app
- calculates GHG emissions by transport type

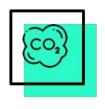
KEY FEATURES:



User Registration / Log in



Plan a Journey

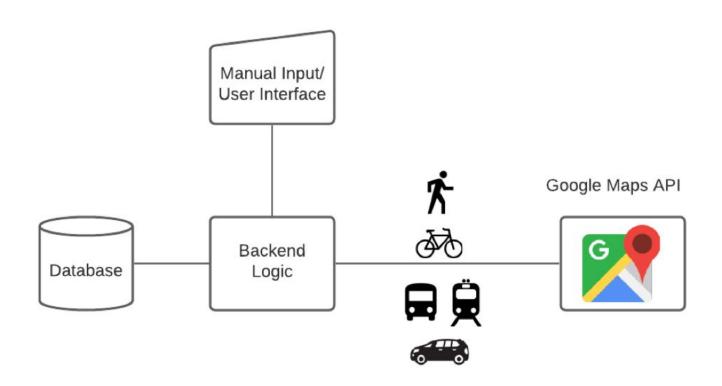


Emission Offset



Represent with Trees

SERVICE ARCHITECTURE:



DEMO

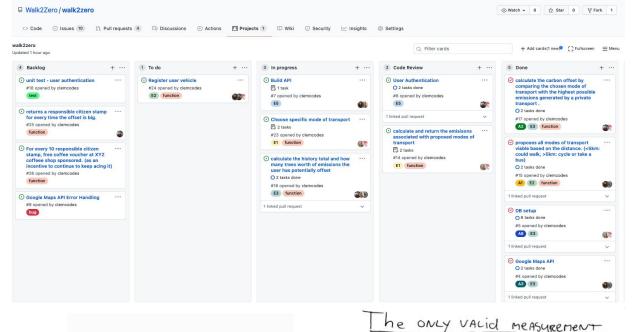
SYSTEM LIMITATIONS:

- command-line app
- average transport emissions
- doesn't break down transit
- doesn't map route

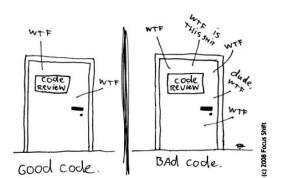


WORKING TOGETHER AS A TEAM

- -Kanban Board on Git to maintain requirements backlog
- Plenty code reviews over Slack and Google Meets
- Lots of motivation,
 proactiveness and
 consideration for each other







code QUALITY: WTFS/MINUTE

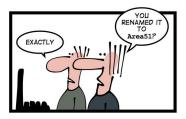
(SOME) CHALLENGES

- Initial Git collaboration
- Functions to OOP
 Architecture
- Building as we were going: adhoc changes
- Time constraint

REFACTORING IS KEY









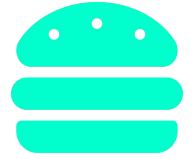
#SOLIDftw

FUTURE DEVELOPMENT:

Sophisticated GUI



Calories Burnt



Badges and Competitions



CONCLUSION & MOTTO:

Figure 3: Greenhouse gas emissions by sector, 2019, by proportion (BEIS, 2021)



- Road transport- 5th place
- User-climate friendly transport
- Motivate towards climate goals



THANK YOU FOR LISTENING!