

Circular Barter & Gift

By: Circular Circle

Team members :

Ian Cowan (Product Owner)

Kenneth Gee (Initial Scrum Master)

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*Sponsored
by no one*

3/24/2023

The Problem

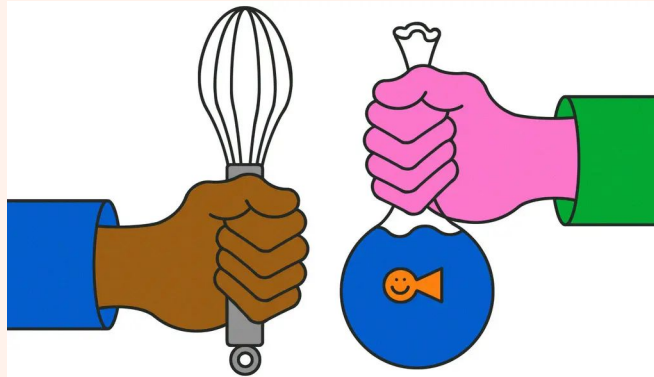
- Consumer economy
 - Buy new, toss “old”
 - Carbon emissions at production
 - Fills landfills and oceans
 - Minimize impact by buying used, reselling?
- When money is involved
 - Gouging
 - Dropshipping
 - Harmful profiteering
 - Better way?



Laura Sullivan/NPR

The Solution

- Solution: Circular economy
 - Moneyless exchange:
 - Barter not for profit but for mutual benefit
 - Give out of generosity & goodwill
 - A local online platform for both



Fran Caballero via NYTimes

Our Goals

We Set Out to Achieve

1. Users can create an account and log in
2. Users can post items they wish to trade
3. Other users can browse items available
4. and send offers of what they want to trade for the item
5. Users can message each other to coordinate where they conduct the trade
6. Users can include a preferred meeting location and filter posts by location radius

Final Version

We Were Able to Achieve:

1. You can log in with a UCSC Google account
2. Post items you wish to trade or give
3. Browse items available in Santa Cruz
4. Send offers of what you would trade for an item
5. You can see the email address for someone who made an offer, so you can accept the offer and plan the trade.
6. You can't include a preferred meeting location and filter by other locations

Biggest Challenges

- Completing all the user stories for a sprint consistently
- Learning the technologies required to implement certain features while having a busy schedule
- Keeping the scrum board and burn up chart up-to-date
- Finding times to meet



PSV

Gift - no exchange necessary



XBOXX

Requesting: Gaming chair



Headphones

Requesting: A nice computer keyboard



Infinity Table

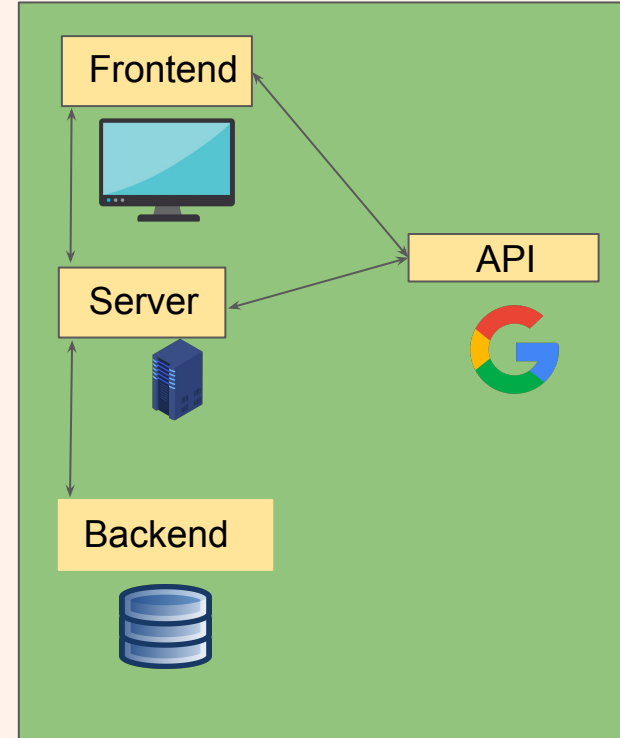
Requesting: Chairs



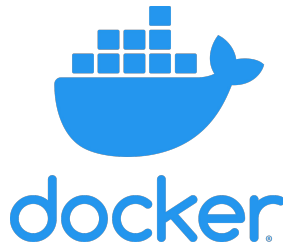
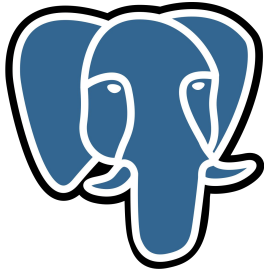
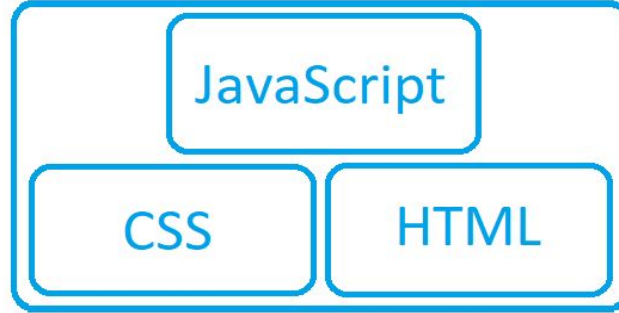
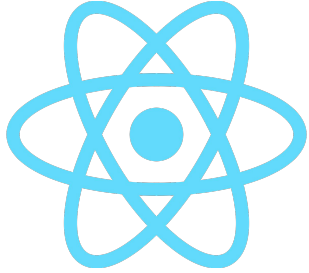
Architecture

- OpenAPI validation
 - Backend
 - Docker, Postgresql, Geocode Google API
 - Server
 - Node.js
 - Frontend
 - React, Material UI, Google API

OpenAPI Validation

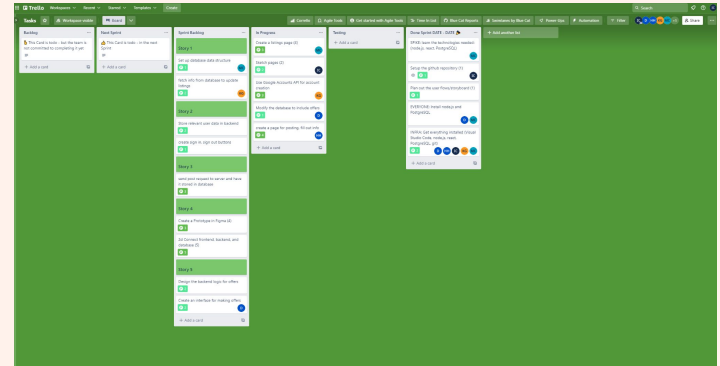
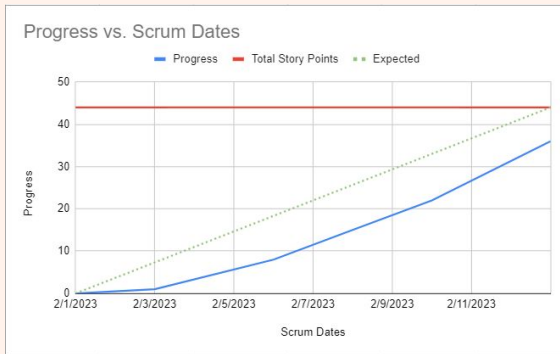


Technologies



Project Management Techniques

- Scrum:
 - 4 iterative sprints, 3 weekly stand-up meetings
- Agile Project Management
- Burnup Chart
- Scrum board:
 - uses cards to represent tasks and their progress on Trello



Things We Enjoyed and Didn't

- Enjoyed
 - Seeing a functional webapp we built that at least satisfies the MVP
 - Learning more about web development and the technologies required
 - Practicing Scrum which can be useful
 - Helping each other out when we got stuck
- Didn't Enjoy
 - Bugs
 - Merging our work (sometimes introduced bugs)

Lessons Learned

- What worked
 - Keeping a consistent communication with the team helped with development of code.
- What didn't work
 - Having scrum meetings in person, scrum updates given online
- Things we wished we had done
 - Implement automated unit testing for completion
 - Formatted our code to better follow style guidelines

Questions?