

FooCycle

DS4300

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Goal of FooCycle

To promote food sustainability by encouraging food waste reduction and facilitating food exchange.



Food Waste in the United States



40%

Of food products in the US
is wasted each year



\$160B

Amount of money wasted in food in the
US annually, and it's too busy to stop



OUR GOALS



Help

...everyone to have access to quality, convenient meals.



Save

...our planet by reducing food waste, one of the main causes of climate change.



Eat

...delicious meals for a great price and a great cause!

TECHNICAL SPECIFICATIONS



MongoDB

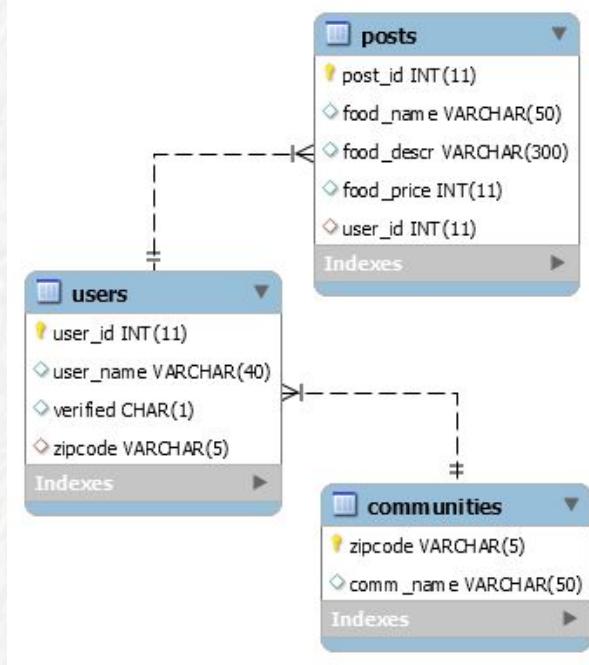
- NoSQL database
- Great for scalability (especially for the large amount of data that we are going to have)
- Dynamic queries
- Omits using schemas

Python

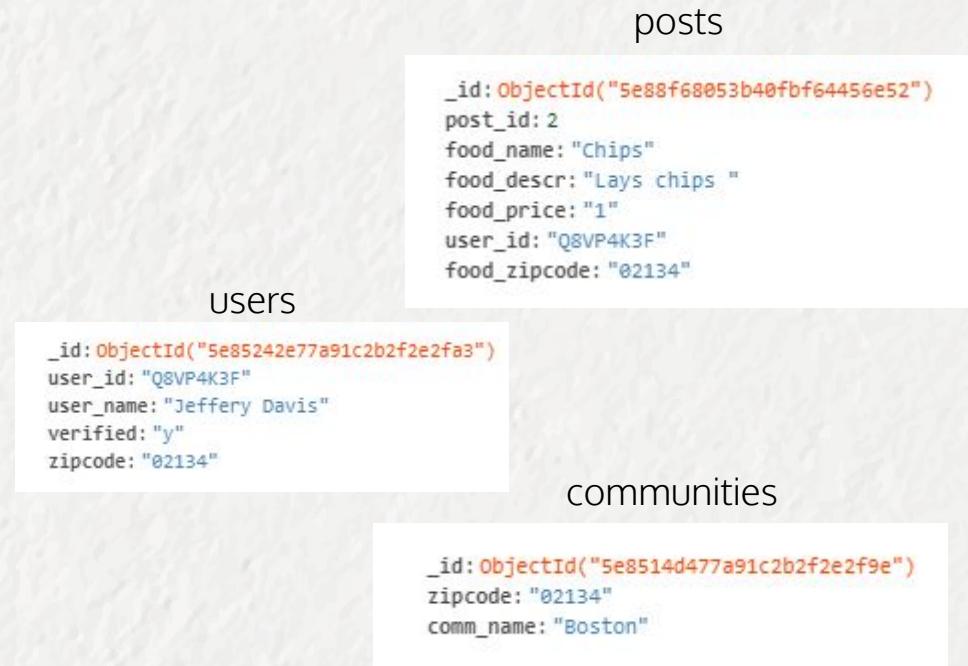
- Connects back-end to front-end
- Flask: Micro web framework written in Python

UML Diagram of SQL VS Mongo

MySQL (SQL/Relational)



Mongo (NoSQL/Non-Relational)



CRUD Functionality

(C)reate

- Creating a user account
- Posting a new food item

(R)ead

- View different posts within a community (zip code)
- View different users (by any of its attributes i.e., user ID, name, etc.)
- View account details

(U)pdate

- Update whether an item has been donated or not
- Update basic profile attributes (i.e., age of user, name, etc.)

(D)elete

- Delete a user profile
- Delete a food posting

02

Interesting Results & Challenges



Interesting Results & Challenges

Session Variable

Keep track of logged in user to be able to change their posts



Password

Passwords needed to be hashed when stored

User vs. Admin

We need to have special privileges for admin users



Communities

Each zipcode is a community

Future of FooCycle



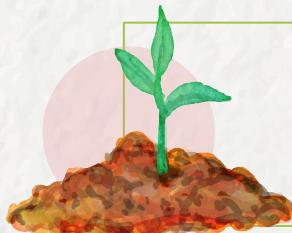
BASIC

Current state of FooCycle, users can post/edit/view/delete food posts.



PRO

Distinguish between Admins & Users to moderate the site as we expand.
Implement a "Communities" feature to allow users to search for and exchange foods with great convenience.



PREMIUM

Implement in-app communication within FooCycle to facilitate exchanges.

03

FooCycle Demo



THANKS!

