

Brew-Venturing: North Carolina's Brewery Growth from 1990 - 2020

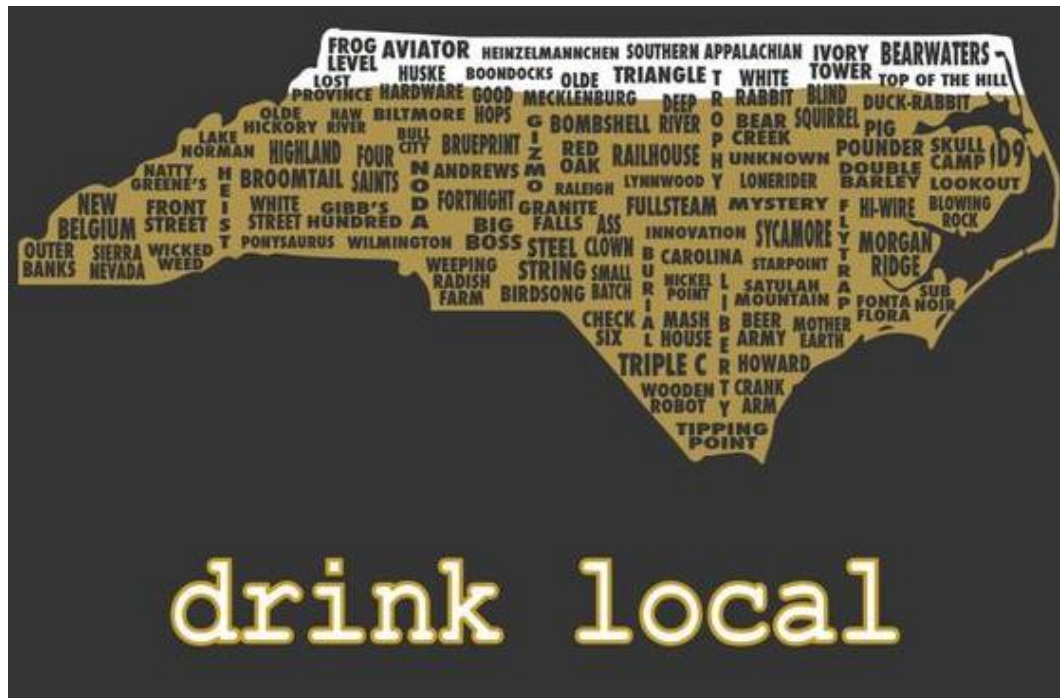
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Key Objective

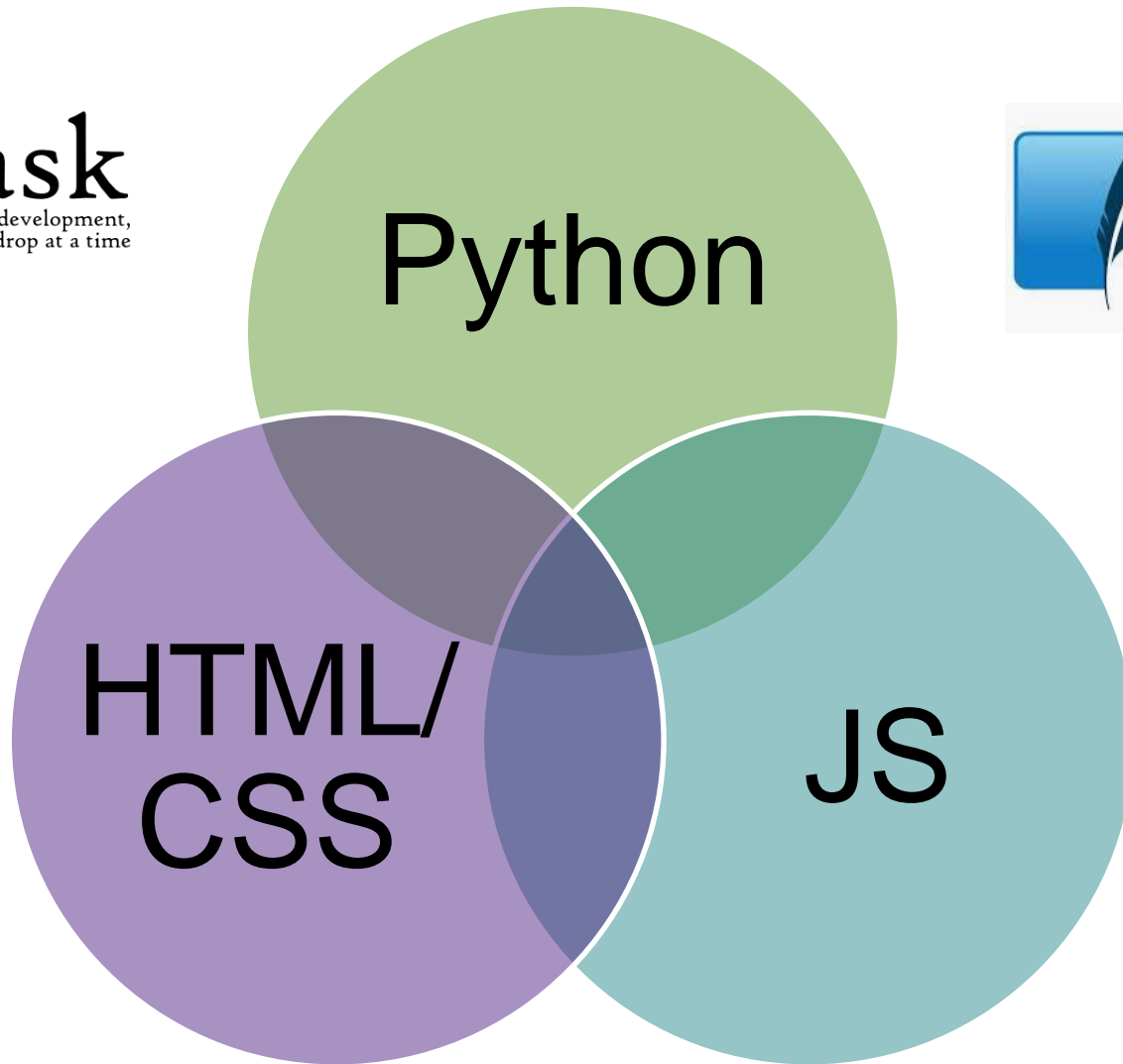
Analyze the history of brewing in North Carolina and create an **interactive** resource so viewers can see how local breweries in the Tar Heel State have grown over thirty years.



Why Look at NC Breweries?

- Craft beer a growing hobby
- # of breweries growing locally
- ETL project as starting point
- Want to identify when this trend picked up
- Create something interactive and actionable for decision makers





Data, Munging, and Coding Process

- 260+ brewery records due to the following sources:
 - NC Department of Commerce Business Data
 - Google Places API
 - Yelp API and Open Brewery DB (didn't use)
- Munging techniques and coding process
 - Flask server
 - SQLite server to store data
 - HTML/CSS for webpages
 - Leaflet for mapping
 - Data table to summarize

Brew-venturing app story...

Results Summary, Why this Matters, and Next Steps

- Breweries slowly grew from 1995 – 2007, took off after 2007, rapidly increased around 2014
- Growth in key areas such as Asheville, Charlotte, and the Triangle
- Can help new brewers identify where to set-up shop and consumers where to go
- Things we would like to try next:
 - See how employment changed
 - Add complementary businesses
 - Identify why the sharp increase in 2014

Thank you! Questions?

Appendix

Start to Finish – Scope and Structure

- Used ETL project as a starting point, developed different structure/emphasis for history and trip planning
- Refocused after data munging began to just analyzing history
- Resulted with the following structure:

HTML Pages	Data Sources/APIs	Brewery Data Used				
		Est. Date	Location	Revenue	# of Employees	Ratings
Home Page	N/A					
History	NC Department of Commerce Business Search		x			
Brewery Map	NC Department of Commerce Business Search, Yelp API, Google Places API	x	x			x
Data Table	NC Department of Commerce Business Search, Yelp API, Google Places	x	x	x	x	x

Original Data Munging Plan

Gather Data

- Gathered data/sources: Google Places API, Yelp API, Open Brewery DB, Bureau of Labor Statistics, Four Square

Identify Data

- We wanted to include brewery types, top beers/beer types, employment stats, ratings, etc.

Transform Data

- Clean data across sources, using brewery name as the point to merge on

Revised Munging Plan

Final Sources

- Re-focused sources: Google Places API, Yelp API, and NC Department of Commerce

Final Data

- Ended up with data for current revenue, employees, ratings, established data, etc. for 260+ breweries

Transform Data

- Merged data on street addresses due to continuity issues