Artificial Band Biography Generation

Mani, Ishaan, Arman, James

Goal

Create a realistic sounding band

- Complete with a band name, members and a 2-3 paragraph biography.
- How did they meet?
- What did they go through?
- How did that one member die of a drug overdose?
- Did the win any awards?
- Did they get inducted into a hall of fame?

Team + Division of Labor

Arman Rafian, 4th Yr CS

- Scraping Wikipedia for lists of bands
- Inserting placeholders for band name, years, months, person names, and genre
- Generating realistic replacements for the the above placeholders
  - Used Ishaan's code to generate replacement band name
  - Wrote code to replace years, months, and person names by gender
  - Cleaned and replaced genres from complete list of genres

Team + Division of Labor

Mani Movva, 4th Yr CS

- Overall web scraping and data processing architecture
  - Connecting pieces of our pipeline
- Scraping Wikipedia pages for intro paragraphs
  - Recreating Wikipedia section/subsection structure from HTML
    - Converting data to a reusable JSON format
  - Aggregating data from each band to create overall lists of names, genres, etc.
- Flask + React setup
  - Transmitting data from backend
  - Accepting HTTP requests to display data

Team + Division of Labor

James Ngo, 4th Yr CS

- Scraping lists of bands for band links.
- Scraping discographies from Wikipedia pages.
- Inserting placeholders for albums and songs into biographies.
- Generating fake album and song names and replacing album and song placeholders.
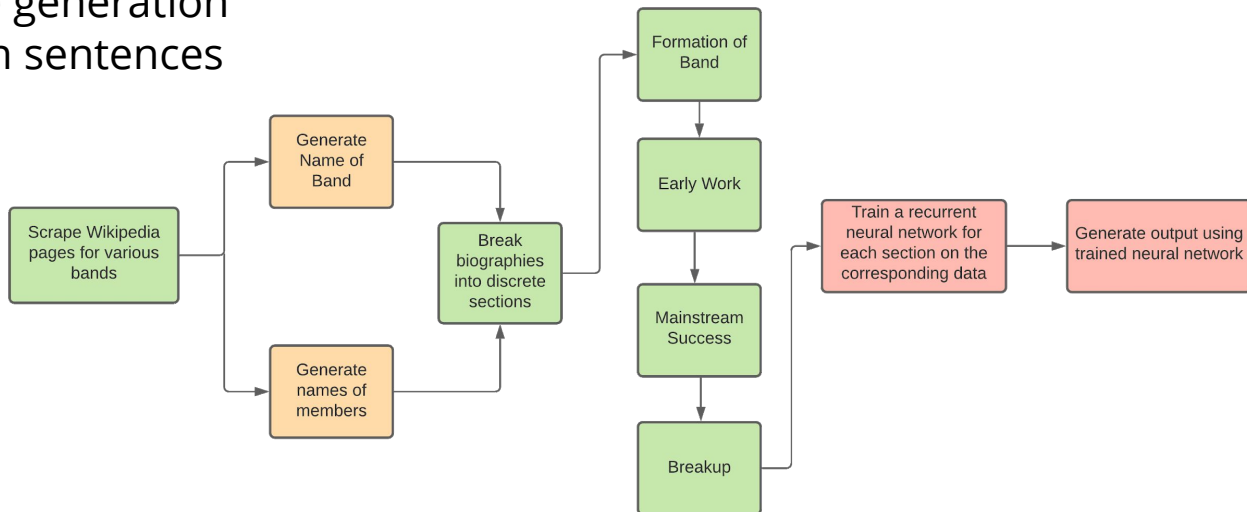
Team + Division of Labor

Ishaan Jain, 4th Yr CS

- Scraping of Wikipedia infoboxes to generate a Python dictionary of relevant categorical information, such as band members, genres, location of origin
- Combining names of different bands together by swapping out different nouns and verbs using nltk's POS recognition
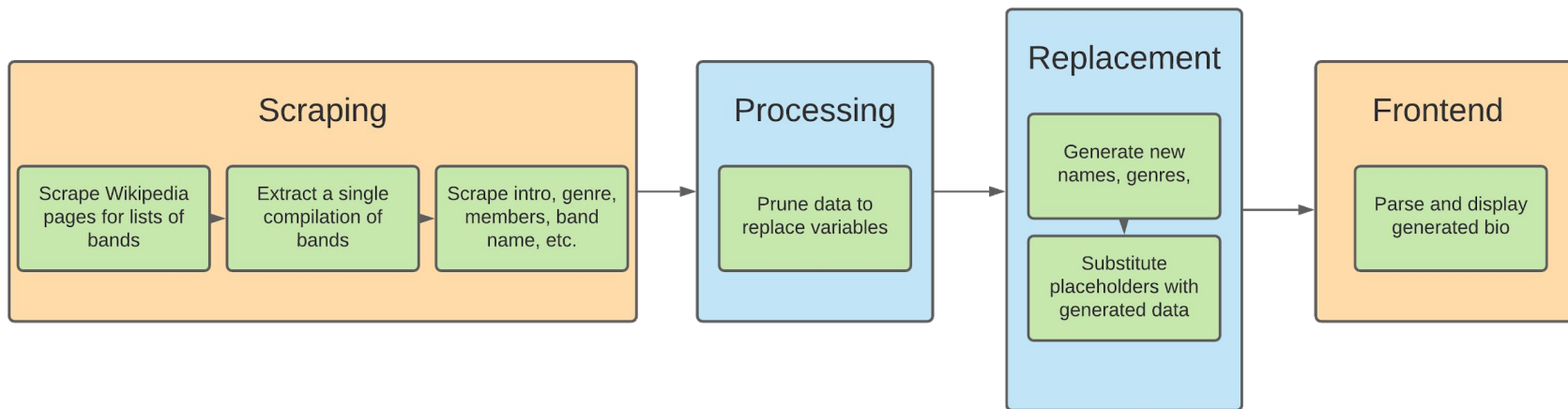
Architecture (Original Plan)

Difficulties:

- Inconsistent Sections
  - Very short articles (stubs)
- Incoherent sentence generation
- Lack of flow between sentences
- Time constraints

```
                                    ┌─────────────┐
                                    │ Formation of│
                                    │    Band     │
                                    └─────────────┘
                                          │
              ┌─────────────┐             ▼
              │  Generate   │      ┌─────────────┐
         ┌───▶│  Name of    │───┐  │ Early Work  │
         │    │   Band      │   │  └─────────────┘
         │    └─────────────┘   │        │
┌──────────────┐         ┌──────────────┐ ▼      ┌──────────────────┐   ┌──────────────────┐
│Scrape Wikipedia│       │    Break     │ │Mainstream│Train a recurrent │   │Generate output   │
│pages for various│──────│ biographies  │─│Success  │neural network for │──▶│using trained     │
│   bands        │       │into discrete │ │         │each section on the│   │neural network    │
└──────────────┘         │  sections    │ │         │corresponding data │   └──────────────────┘
         │    ┌─────────────┐   │  └──────────────┘        └──────────────────┘
         │    │  Generate   │   │         │
         └───▶│  names of   │───┘     ┌─────────────┐
              │  members    │         │   Breakup   │
              └─────────────┘         └─────────────┘
```

Architecture (Demo Implementation)

Scraping
- Scrape Wikipedia pages for lists of bands
- Extract a single compilation of bands
- Scrape intro, genre, members, band name, etc.

Processing
- Prune data to replace variables

Replacement
- Generate new names, genres,
- Substitute placeholders with generated data

Frontend
- Parse and display generated bio

Data Collection

1. Finding collections of bands
2. Scraping lists of bands for individual bands
3. Parsing out intro paragraphs from band wikipedia pages
4. Parse "info box" for names, origin, genres, etc
5. Parse discography for names of albums

Japanese Breakfast

Zauner performing live in 2017

Background information

Birth name	Michelle Zauner
Born	March 29, 1989 (age 31)[1][2] Seoul, South Korea
Origin	Philadelphia, Pennsylvania Eugene, Oregon
Genres	Indie rock · indie pop · experimental pop · lo-fi
Years active	2013–present
Labels	Yellow K · Dead Oceans · W Hotels
Associated acts	Jay Som · Little Big League · Mitski
Website	japanesebreakfast.rocks

Japanese Breakfast is the solo musical project of musician **Michelle Zauner** (born March 29, 1989). Under the alias, Zauner has released two studio albums: *Psychopomp* (2016) and *Soft Sounds from Another Planet* (2017), with a third, *Jubilee*, announced for release in June 2021.

Background [edit]

Michelle Zauner was born in Seoul, South Korea.[2] Her family moved to Eugene, Oregon when she was nine months old.[2]

Before Japanese Breakfast, Zauner fronted a solo project under the moniker Little Girl, Big Spoon. As a student at Bryn Mawr College, Zauner fronted Post Post, an indie pop band with other students from Bryn Mawr and Haverford Colleges.[3] Later, she started the Philadelphian emo band Little Big League.[4] Zauner fronted the band between 2011 and 2014, before returning to her hometown of Eugene, Oregon in 2013 as her mother was diagnosed with cancer.[4]

Data Processing

Tagging and Substituting words w/ placeholders

>> 7 Year Bitch was an American punk rock band from Seattle, Washington.

>> [BAND_NAME] was an [GENRE] band from Seattle, Washington.

- Band Name
- Person Names
  - Gender Matching
- Genres
- Album Names
- Song Names
- Dates

What is RegEx?

THIS: `str.match(/\d+\.\d+|\d+|[-+*/\(\)]/g);`

whaaaaat?????

Interface

Flask backend generating and sending biographies on request

React + Evergreen UI frontend

Artificial Band Biography Generator

ISHAAN, JAMES, ARMAN, MANI

The Acoustic Bob

The Acoustic Bob is an progressive punk band from Walnut Creek, California, formed in 1976. They are currently signed to Pure Noise Records and have released 4 studio albums.

Technical Achievements

- Scraping 1000+ band biographies from Wikipedia
    - Collecting useful information including core 3 paragraphs and infobox for each band (genre, members, past members, etc.)
- Creating placeholders for different classes in each bio
    - Some are relatively easy (year, month, band name) while some are much trickier (person names, albums, songs)
- Replacing placeholders with generated information
    - Generating band names by combining nouns, verbs, and adjectives from actual band names

Demo & Results

The Black Trench

The Black Trench (earlier stylized as The Black Trench!) were a Indie Band band, formed in London in Mar 1971 as Tiger Lily. Between 1975 and 1976, they scored seven Top Ten albums and seventeen Top 40 singles in the UK, the most successful of which was their 1981 hit "Vienna".

The Big Stoopid City

The Big Stoopid City was a Hip hop band formed in Denver, Colorado. The band consisted of Reese The Big Stoopid City (lead singer of Five Iron Frenzy) on lead vocals, Clifford Hofer on lead guitar, Clifford Till on bass, Richard Gookin on rhythm guitar, and Nick White on drums.

The 4-4-1 Hayseed

The 4-4-1 Hayseed (長岡 亮介, Nagaoka Ryōsuke, born Dec 7, 1991), is a Grindcore band Petrolz. Under the stage name Ukigmo (浮雲, Ukigumo, "drifting cloud"), he was the second guitarist for Kevin Linthicum's band Tokyo Jihen from 1996 until 2001. In 2006, Nagoka joined the band Gokumontō Ikka, a new project for Queen Bee leader Avu-chan.

Demo & Results

The Hot F Circus

The Hot F Circus was an proto-punk band formed in 2006 by Black Crowes singer David Weaver while the Crowes were on hiatus. The original lineup consisted of Weaver (vocals, guitar), James Kappel (lead guitar, backing vocals), Octk Dutton (bass guitar, backing vocals), George Sluppick (drums), and Justin Loveland (keyboards). Since 2011, the band had undergone various personnel changes with Weaver and Kappel remaining the only constant members. Following the death of James Kappel in December 2015 the The Hot F Circus announced it would disband.

The Nuclear Lotion

GitoGito Hustler (ギトギトハスラ→ in Japanese; also spelled Gitogito Hustler) is a biker metal band.

Results

The Blacktown Shadowy Mecca

The Blacktown Shadowy Mecca were an funk band from USA, active in Southern California in the 2006s. They played live mostly in California and Arizona. They recorded for Del-Fi records with production from Bob Keane. They recorded mostly cover songs, but there were a few originals.

Their 2011 song "Surf Rider" (written by Nokie Edwards from The Ventures) was featured in the final sequence as well as the end credits of Quentin Tarantino's 2016 film Pulp Fiction.

They are best known with these members:

Thank You

Any questions?