0. Name of the group members and CNetID

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1. A brief overview of the final project (200 words maximum)

Across the nonprofit sector, staff spend countless hours completing grant applications for funding. This time spent rewriting and reformatting grant applications for wealthy philanthropists and government grants limits the effectiveness of the organization. Our project is a start to simplify the grant application by providing funders with a simple, free search portal that confirms tax-exempt status, obtains verified and up-to-date community statistics, and any other information about the nonprofit publicly available. It allows users to query a database of IRS forms that, while publicly available on the official IRS website, are not easily understood or placed into the context of the community the organization operates within. We then combine this data with U.S. Census data from the ACS 5-Year Data Profiles, released 2018, through the Census API. Lastly, we use a Flask GUI for users to search and visualize the data found about the nonprofit and relevant community statistics, as well as comparisons nationally.

2. The overall structure of the software (1-page maximum)

README.txt -> This file.

acs.py -> This module contains a file that queries the Census API and cleans the data. It also makes graphs and calculates percentiles.

app.py -> This module controls the webpage and allows us to display the results of a user's search.

create_database.py -> This module creates an sqlite3 database out of the XML files from the IRS.

database_functions.py -> This module cleans the sqlite3 database and can search it.

download_data.py -> This module downloads the XML files from the IRS.

read_xmls.py -> This module cleans the XML files from the IRS database

requirements.txt -> This file contains the required python libraries

sample.sqlite3 -> This database contains the sample info for grading (if desired).

start.sh -> This file runs download_data, create_database, and app.

/templates -> This folder contains the webpages that are displayed

/templates/index.html -> This file contains the homepage

/templates/results.html -> This file contains search results

/templates/thanks.html -> This file contains a page that I think won't ever appear

/static -> This folder contains files that supplement the HTML documents in

../templates

/static/style.css -> This file contains css for the webpages

/static/templogo.png -> This photo is the GrantDev logo

3. What the project tried to accomplish and what it actually accomplished (200 words)

We started out with the goal to prototype a easily accessible software that allows users to search nonprofit organizations and obtain relevant community statistics about the areas where they operate. On the surface level, we accomplished this, demonstrating that we can obtain publicly available data from multiple sources and combine queries to visualize information for the user. A few key obstacles prevented us from improving this project: no knowledge of using Flask or any other user interface prior to this project, which limits how well we can format the data online and plug in interactive elements; lack of comprehensive IRS data (for many organizations, the amount of information publicly accessible is scarce), limiting in-depth analysis and how well we could incorporate general statistics like median to the nonprofits themselves (for instance, the outputs of a nonprofit are not required to be on any IRS data) or suggest similar nonprofits based on location and mission/focus; and lastly, time. We would like to implement a search that allows users to have the non-exact name of a nonprofit and for our software to suggest results. We would also like to allow users to easily obtain a printable report from the search results page. Additionally, much of this data is messy. For example, zip codes listed on IRS forms could not be in the ACS data because their are PO box zips only and have no community statistics available or human error on the part of those filling out IRS forms could lead to incorrect information.