11/29

* finished the basic flask tutorial;
* created my own folder including app.py and the template for my homepage.
  + Created a flask route for my homepage, following tutorial to fist simply make something displayed successfully on my page.
  + **@app.route**("/")
  + def **age\_at\_marriage**():
* Ask ChatGPT to convert rows and columns of my table: instead of having ‘Gender’ as a column, now my csv has ‘Female’ and ‘Male’ as separate genders with cells displaying their age respectively.

12/2

* I decided to create a search box with a dropdown menu where a user is able to see both females’ and males’ age at first marriage in a specific country.
  + Adding the search method:
    - **@app.route**("/", methods=["GET"])
  + Asked help from my classmate and customized my form in the html template.
* A template for each country’s data created: ‘individual\_age.html’.
  + Loop through both female’s and male’s age for all countries
* Working on a new flask route:
  + **@app.route**("/<country\_name>")
  + def **age\_by\_country**(country\_name):
  + watched the jinja tutorial in order to get my loops running
  + initially couldn’t get my page jumping to each country’s individual page because normally in the URL we'd do something like /country/afghanistan and put it as part of the route. But since I am using formm it's /ages?country=afghanistan, I accessed the 'country' variable with request.args.get("country")
  + learnt how to create an ‘option’ in my html template by asking ChatGPT

12/9

* A new flask route was built in order to make my data searchable by gender as well.
  + **@app.route**("/<gender>", methods=["GET"])
  + def **age\_by\_gender**(gender):
* added a new search box in my flask route for homepage. Same logic here, I accessed both genders’ variables with select\_gender = request.args.**get**("gender")
* due to time constraint, I decided to create a table for each gender. I was trying to use gender a secondary filter. I might work on this next semester.
* ‘select\_gender.html’ template built

12/13

* Tried to insert a bar chart in order to compare gender differences visually but failed eventually. I will definitely work on this next semester.
* My failed code:
* fig, ax = plt.subplots(figsize=(6, 4))
* if female\_age is not None and male\_age is not None:
* ax.bar(['Female', 'Male'], [female\_age, male\_age], color=['pink', 'blue'])
* elif female\_age is not None:
* ax.bar(['Female'], [female\_age], color='pink')
* elif male\_age is not None:
* ax.bar(['Male'], [male\_age], color='blue')
* else:
* ax.text(0.5, 0.5, 'Data not available', horizontalalignment='center', verticalalignment='center', transform=ax.transAxes)
* ax.set\_xlabel('Gender')
* ax.set\_ylabel('Age at First Marriage')
* ax.set\_title(f'Age at First Marriage in {country\_name}')
* plot\_filename = os.path.join("static", f"{country\_name}\_plot.png")
* fig.savefig(plot\_filename)
* plt.close(fig)
* return plot\_filename

12/14

* Prettified everything.