



# Assignment 5: Python Flask Email and OpenAI Web App (locally hosted)

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**Due** Monday by 11:59pm      **Points** 100

**Submitting** a text entry box, a website url, or a file upload

**Available** Jan 31 at 12am - Feb 6 at 11:59pm

1. Do this on your personal Bitbucket workspace (not your team). Import the following repository into your personal workspace:
2. [https://bitbucket.org/txstatecs3398all/flask\\_email\\_openai\\_example/src/master](https://bitbucket.org/txstatecs3398all/flask_email_openai_example/src/master)   
([https://bitbucket.org/txstatecs3398all/flask\\_email\\_openai\\_example/src/master/](https://bitbucket.org/txstatecs3398all/flask_email_openai_example/src/master/))
3. Using GitKraken clone it to your workstation/laptop. Put it in a directory of your choosing.
4. Switch to **branch 17a-empty-env-file**
5. If you do not have Python installed on your machine, please install it:  
<https://www.python.org/downloads/>  (<https://www.python.org/downloads/>)
6. Now, using VSCode, open the folder containing the repository.
7. In VSCode, type CTRL-SHIFT-P (Windows) or CMD-SHIFT-P (Mac):
  - At the prompt at the top of your VSCode screen, type "Python Create"
  - Select the choice of "Python Create Environment" from the drop down.
  - You see three additional drop downs:
    - Select a "Venv" environment
    - Select a version of Python
      - **Mac:** Select the latest version in the list it gives you (VSCode, however, may complain later and suggest another version).
      - **Windows:** As of 6/1/23, Python 3.12 and later didn't work with openai apis. This may have changed. But you will be safe using a Python 3.11 or 3.10 version (VSCode may complain after your selection and suggest another)
    - When prompted, select the **requirements.txt** file for dependencies
8. Rename the **env-file-to-be-changed-to-dot-env** file to **.env**
9. Add the value that you have been given in class for the open ai key to the **OPENAI\_API\_KEY** value in the .env file. Place the value between the single quotes.
10. Create values for your gmail credentials:
  - **GMAIL\_USER\_NAME='someEmailAddressYouHaveOrCreatedForThisAssignment@gmail.com'**  
**GMAIL\_APP\_PASSWORD='aTemporaryString that you will replace with a Google App password you create below'**
11. Login into the Gmail account that you are using for this assignment.

- You can use your existing Gmail account if you have one create a new one only for this assignment and others like it.

12. Once you log in click on your icon and select "Manage your Google Account."

- **NOTE 1:** Google has changed this management page occasionally over the past year and they've updated their recommended application login process. This assignment uses a older process that was still recommended until a recently as fall 2023. You need to set up 2-Step Verification and App Password features. You get there by clicking on 2-step verification.
- **NOTE 2:** Soon this assignment will be updated with the steps to use the latest Google app security process.

13. The following steps seem valid as of 1/31/2024.

14. On the left panel, click on "Security."

15. Under "Signing in to Google"

1. Select 2-Step Verification
2. Turn on 2-Step Verification
3. Look for and select App passwords (this is at the bottom of the 2-Step Verification page in Dr. Lehr's view).
  - It doesn't matter what application you select (choose "Mail" if you want guidance)
  - It doesn't matter what device you select.
  - Generate the AppPassword.
4. Once the AppPassword is created, copy it.

16. Paste the appPassword between the quotes to the right of the GMAIL\_APP\_PASSWORD in the **.env** file.

- Like this: GMAIL\_APP\_PASSWORD='the random looking group of characters you generated on Google for the AppPassword'

17. Go back to VSCode and open the folder with the repo if it isn't open already.

18. Run the code.

19. Add ".env" to your .gitignore file

20. Push your code to your Bitbucket repo.

- **Submitting:**

1. Send separate emails to the DIA and graders (3 emails) You can get the graders emails from Slack.
2. Submit a screen shot to Canvas of your browser showing the server is running with a family friendly drawing you created.
3. Copy your Bitbucket repo URL into Canvas. **Note!** If the repo has the .env file in it, you will receive a zero for this assignment.

**Some Rubric**

Criteria	Ratings	Pts
All the graders and the DIA get emails		40 pts
Screen shot of app running with drawing you created		30 pts
You have published your Bitbucket URL on Canvas		30 pts
Total Points: 100		