

Massachusetts Institute of Technology
Department of Electrical Engineering and Computer Science 6.S062
MIT Media Lab MAS.S10/MAS.S60

Generative Artificial Intelligence in K-12 Education

Fall semester 2023

Pre-semester Assignment and Information about the Class

Issued: September 4, 2023

Due: At first class, Sept. 12

There is nothing to hand in for this assignment, but be prepared to discuss the readings and be ready to work with GPT in class using Python and Colab.

The class web site is <https://mit-cml.github.io/gen-ai-fall-2023.github.io/>. Look here for syllabus and other information.

The first class will meet at 1PM on September 12 in room 34-303. **Bring a laptop to this first class and to every class and *make sure your laptop is charged*.**

Registration and attendance

Class admittance is by permission of instructor. It appears that the class might be oversubscribed and we will not be able to admit everyone interested in enrolling. In order to be considered for the class you must

- complete the [interest form](#) linked from the [class web site](#)
- complete the background form distributed at the first class
- register under the course 6 or MAS undergraduate numbers or the MAS graduate number
- complete and turn in assignment 1 (due Sept. 19)

You can register for the course under either of the undergraduate numbers 6.S062 or MS.S10. Graduate students can register under MAS.S60.

Class in-person attendance is mandatory. Much of the class will consist of project work and interactive discussion with partners, and we are not prepared to accommodate listeners or remote participants.

Pre-semester Readings

Read these papers before the first class. Be prepared to discuss them in class:

- [“Don’t Ban ChatGPT in Schools. Teach With It.”](#) Kevin Roose, New York Times, Jan 12, 2023.

This piece appeared in the *Times* nine months ago. Can you think of issues related to Gen AI in schools that have changed since then? Also, what are some points in the article that you agree with? That you disagree with?

- [ChatGPT is going to change education, not destroy it](#)
- [Alternate version with better formatting \(requires access to Technology Review\)](#)

Will Douglas Heaven, Technology Review, April 2023

This piece suggests some ways to use ChatGPT to enhance education. Pick one or two of them

that you think would be practical and productive for students and teachers to use in class.

Preparing to work with Colab Notebooks and GPT

We’ll be doing programming work in Python, often with Google Colabs. This pre-semester assignment gets you set up with Colabs and GPT. Do this before the first class and bring your laptop to class. You’ll need a Gmail account and you’ll need to have access to Google Drive (drive.google.com).

- **Get an API key:** You’ll need an API key for OpenAI. Go to openai.com
- If you don’t already have an account, register for an account, and log in under the menu on the right. Select the API button.
 - Click your profile icon at the top-right corner of the page and select "View API Keys."
 - If you don’t already have a key, click "Create New Secret Key" to generate a new API key. Copy it and store it somewhere safe. You’ll need this for work on the Colab notebook and other assignments this semester.
- **Get the Colab:** Visit the following link in your browser:
https://colab.research.google.com/drive/1bVAAt_kGR2fMJ0i49jbMMApGJKeNWA4mC#scrollTo=5ZNTsr_fvozi
 This should bring up the page
6.s062 fall 2023 pre-semester assignment colab.ipynb
 which is a Google colab notebook.
- **Save a local copy:** Click on “save a copy in Drive” under the file menu. This will create a personal copy of the notebook that you can work with and modify.
 - Working in the browser, you can run cells, edit cells, or add new cells of text or Python code.
- **Add your key:** Scroll down in the notebook until you reach the cell with the line
`openai.api_key = YourKey`
 Change YourKey to your API key (a quoted string).
- **Try the notebook:** Starting at the top of the notebook, run the cells one by one.

- **Experiment:** Change the “story” and “style” parameters in the first cell, rerun the first and last cells and see how this affects the output.

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