Main Instructors

Philip Abel
Olalekan Afuye (online)
Daniel Alabi
Alida Monaco

6-hour days: 8am — 12pm (Morning Session), 1pm — 3pm (Afternoon Session)
12pm - 1pm: lunch

Before day:
Make sure they have access to collab, slack via their gmail.

Major goal:
Everyone should be able to make a game using python. Person with the best coding skills wins a prize at the end.
We need to find a way to coordinate keeping track of their progress throughout the program.

Every day: exercise to do and take home/quizzes. Start the day by grading or going through their quizzes.

Main Textbook

“Introduction to Algorithms is a book on computer programming” (first few chapters)
By Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest, and Clifford Stein.

Daily Survey

Send out google form at the end of every day!

- About Technical Parts
- About Non-Technical Parts

Week 1

August 7: Introductions and Motivations
Morning:

1) https://www.youtube.com/watch?v=OignKQOJT-U by Marian Croak @Google (VoIP legend)
2) **Crypto for the People, Invited talk at Crypto 2020 by Seny Kamara** https://www.youtube.com/watch?v=Ygq9ci0GFhA (brief discussions)
3) Computing in the Foundation Era by Kunle Olukotun
4) Lekan on EE and CS intersections
5) Discussion on computer science, data science, and mathematics networks in Nigeria
6) Make sure they can log in to computers.
7) Emphasize the goal: for them to become scientists, engineers, and mathematicians.

Afternoon:

1) Installing tools: python, github, git
2) Create a github account
3) Everyone should be able to use these tools
4) Everyone should be able to commit to https://github.com/naijacoderorg/summercode2023

August 8:
Morning and Afternoon:
https://colab.research.google.com/drive/15QzUb-368_UXscwxWfeRw4rHYB9Hd6AC?usp=sharing

August 9:
Morning and Afternoon:
https://colab.research.google.com/drive/1CddczQhXFuMXg3o6WauskiycwtHyXakk?usp=sharing

August 10:
Morning: Chapter 1 of CLRS (Role of Algorithms in Computing)
Afternoon: Chapter 2 of CLRS (Getting Started)

Give them homework from CLRS.

August 11:
Morning:
Go through some of the CLRS homework.

Afternoon:
Chapter 3 of CLRS (Growth of Functions)

Give them homework from CLRS.

Week 2

August 14
Morning:
Alida gives climate change lecture
Go through the previous CLRS exercises

Afternoon:
Go through the previous CLRS exercises

August 15
Morning:
Creating games in Python: https://github.com/grantjenks/free-python-games

Afternoon:
Project-related hacking
Answering any CLRS questions
Going through python code and explaining what's happening.

August 16
Morning:
Creating games in Python: https://github.com/grantjenks/free-python-games
Going through python code on your github

Afternoon:
Gieva Talk

August 17
Creating games in Python: https://github.com/grantjenks/free-python-games
Going through python code on your github

Afternoon:
EducationUSA Talk

August 18

Morning and Afternoon:
Demo day (w/ awards)

Resources to use to learn:
Github, Stackoverflow, ChatGPT, etc. Try it out!
Post in the slack channel too.
Welcome to the class of 2023!
https://github.com/AddisCoderStaff/addiscoder-book
https://discrete-math-puzzles.github.io/everything.html

If we have time: SQLite Databases with Python:
https://www.youtube.com/watch?v=byHcYRpMgI4

Send out a survey about how we did. How can we improve for next year?