

POST-PYTHON COURSE GRADUATE GUIDE

A blurred background image showing a person from the side, wearing glasses and a hoodie, sitting at a desk and working on a computer. The computer screen displays what appears to be Python code or a terminal window. The overall color palette is blue and grey.

A refresher on all the topics you've learned,
and helpful tips on landing your first job
after graduating Coding Temple

JOB POSTING PLATFORMS

Once you have updated your resume. Please go ahead and make a profile at the following job platforms:

- o <http://www.indeed.com/>
- o <http://www.careerbuilder.com/>
- o <https://angel.co/> (start-up jobs)
- o <http://www.dice.com/>
- o <https://hired.com/>
- o <https://www.launchcode.org/>
- o <http://www.builtinchicago.org/>
- o <https://www.glassdoor.com/index.htm>
- o <https://www.roberthalf.com/>
- o <https://www.linkedin.com/>
- o <https://www.ziprecruiter.com/>
- o <http://jobs.mashable.com/>
- o <https://www.jobcamp.io/>
- o <https://www.vetter.com>
- o <https://www.indeed.com/prime>

WHERE YOU SHOULD APPLY

Many people have trouble of understanding what kind of job they should be searching for. Below is a list of job searches everyone in this course qualifies for.

- Javascript Developer
- Front-End Developer
- Software Developer
- Back-End Developer
- SQL Developer
- Jr. Web Developer
- Python Developer
- Jr. Python Developer
- Software Engineer
- Web Development
- Full-Stack Developer
- Full-Stack Python Developer
- React.JS
- Jr. Project Manager
- Consultant
- IT Consultant

TYPICAL INTERVIEW QUESTIONS

- 1) Name and describe the 4 fundamental concepts of object-oriented programming:
inheritance, encapsulation, abstraction, and polymorphism.
- 2) What is a primary key?
- 3) What is a foreign key?
- 4) Name and describe all SQL joins.
- 5) What is the difference between union and union all in sql?
- 6) What is the difference between a clustered index and non-clustered index in sql?
- 7) What is the key difference between truncate and delete in sql?
- 8) What are the ACID properties that guarantee database transactions are processed reliably?
- 9) What is the difference between ref parameters and out parameters?
- 10) What is the difference between method overloading and method overriding?
- 11) How Python is interpreted?
- 12) What are Python Decorators?
- 13) How have you used Python?
- 14) How does Python garbage collection work?
- 15) What's the difference between a list, dictionary, and array in Python?
- 16) Do arguments in Python get passed by reference or by value?
- 17) Why are functions considered first class objects in Python?
- 18) What tools do you use for linting, debugging and profiling?
- 19) Tell me something you do not like about Python?
- 20) List the features of Python?
- 21) What is a closure in JavaScript?
- 22) What does NaN mean?
- 23) JQuery - how do you call/count (forgot which was said) classes with JQuery?
- 24) Difference between HTML 4 and HTML 5?
- 25) Do you know the difference between Angular and React?
- 26) Are you ADA compliant?
- 27) What is JavaScript?
- 28) What is JQuery stand for?
- 29) What are the two ways to center an element in CSS?
- 30) How do you make a webpage responsive?
- 31) If you are coding a site - and your elements are not lining up correctly - How would you go about solving the problem? (They were looking for google developer tools)

WHAT DID YOU DO AT CODING TEMPLE?

This is a common question that will be asked to you by everyone you speak with! Ways to answer this question!

- Coding Temple is a work experience
- You were a software developer here at Coding Temple, building web applications
- Talk about pair programming, and maybe you took charge in a project
- Have them click on a link to see your profile and e-commerce application.

Visit these sites for more interview questions:

- <https://bit.ly/2LNnYvM> (Interview Questions)
- <https://bit.ly/2jdwbOF> (Interview Questions)
- <https://bit.ly/2QiVE5o> (Interview Questions)
- <https://bit.ly/2s5h0t5> (Python programming exercises)

DRESSING FOR THE INTERVIEW



Button up dress shirt

Subtle jewelry

Belt

Black dress pants/khakis

Comfortable dress shoes



QUESTIONS TO ASK EMPLOYER

1. What is the company culture like?
2. How many people will be working on the team with me?
3. Will there be mentoring involved?
4. Can you tell me more about the day-to-day responsibilities of this job?
5. What do you like best about working for this company?
6. What is the typical career path for someone in this role?
7. What are the next steps in the interview process?
8. What might I expect in a typical day?

Example LinkedIn Pages

- <https://www.linkedin.com/in/ryan-bacastow/>
- <https://www.linkedin.com/in/brandan-miller-17552bba/>
- <https://www.linkedin.com/in/guoqi228/>

PROJECT #1

Name: NZA Law

Description: Recreate a replica of the www.nzalaw.com website, using placeholders for any logos/images/text. The purpose of this project is to showcase your ability to write code to reproduce an exact copy of an already created website. Website includes functionality of forms, links, and the use of Bootstrap styling.

Technology:

- HTML5
- CSS3
- Bootstrap3 & Bootstrap4
- Atom (IDE)
- Chrome/Firefox (Debugger Tools)
- Git & Github
- Command Line

PROJECT #2

Name: Shopping Cart (Python)

Description: Using Jupyter Notebook produce a working program that will ask the user to add/delete/check items within a “shopping cart” and perform the various tasks. Depending on how in depth each student went, they could have used loops, functions, classes, lists, dictionaries, etc. to design the program.

Technology:

- Python3
- Jupyter Notebook
- Anaconda
- Git & Github
- Command Line

PROJECT #3

Name: Shopping Cart (Python)

Description: Within JupyterNotebook create a functioning hangman game, where the user can guess letters on a word picked from a category. Depending on how in depth each student went they would have used classes, dictionaries, and loops in order to produce a program that allowed the user to continue playing and never have to guess on the same word twice.

Technology:

- Python3
- Jupyter Notebook
- Anaconda
- Git & Github
- Command Line

PROJECT #4

Name: Dungeon Masters (Python)

Description: Using Jupyter Notebook create a video game that makes the user pick up a number of items before being allowed to go through a door in the grid; however, randomly generate monsters to either chase or appear in certain grid cells to add more complexity to the game. Depending on how in depth each student went they could have included multiple levels that gradually became difficult. This project showcased their ability to use classes, lists, loops, and create a grid like style video game.

Technology:

- Python3
- Jupyter Notebook
- Anaconda
- Git & Github
- Command Line

PROJECT #5

Name: BlackJack (Python)

Description: Recreate the ever so popular betting card game within Jupyter Notebook. Make sure the game follows exact rules, including double-down, split and going over 21. Depending on how in-depth each student went they could have included multiple decks to be shuffled instead of random numbers or cards pulled, and they also may have included the ability to bet with fake currency. Some were even able to save and retrieve high scores by posting to a .txt file. Students were able to showcase their ability to use classes, write/open files, loops, and functions during this project.

Technology:

- Python3
- Jupyter Notebook
- Anaconda
- Git & Github
- Command Line

PROJECT #6

Name: NZA Law with Flask

Description: Taking the previously made project, convert the entirety of the site over to Flask using Python3 and Jinja2 technology. Site includes ability to query an SQLite database and have user authentication using various Flask packages. Students were able to showcase their ability to work with the Flask microframework, many libraries that Flask includes, and being able to convert a previously made project to another language/framework while using either an Anaconda or virtual environment.

Technology:

- HTML5& CSS3
- Bootstrap3 & Bootstrap4
- Flask-Bootstrap
- Atom (IDE)
- Chrome/Firefox (Debugger Tools)
- Flask
- Python3

PROJECT #7

Name: Car Dealership (PostgreSQL)

Description: Given a sheet of information and a task to create a database for an in-town car dealership, design and create a PostgreSQL database that would allow the company to store their companies' personal and client information easily. This project showcased the student's ability to design a minimum 3NF level database and then create it within PgAdmin using SQL.

Technology:

- SQL
- PostgreSQL
- PgAdmin4

PROJECT #8

Name: Shopping Cart (Javascript)

Description: Using Atom as an IDE produce a working program that will generate an e-commerce style website using JSON files and allow the user to add/delete/see items within a store page. This project would showcase the ability to use Javascript/jQuery to produce an e-commerce website design through looping over a JSON formatted file using AJAX.

Technology:

- HTML5 & CSS
- Javascript
- Atom
- jQuery
- Bootstrap4
- JSON
- Git & Github
- Command Line

PROJECT #9

Name: Shoe Store (React)

Description: Using Atom as an IDE produce a working program that will generate an e-commerce style website using the React framework. This site would be a fully functioning e-commerce website with integrated payment systems, and real-time database storage using Google's Firebase platform. This project showcased the students' ability to use a front-end framework and the node technologies.

Technology:

- HTML5 & CSS
- Javascript
- Atom
- jQuery
- Bootstrap4
- JSON
- Git & Github
- Command Line
- React
- Node
- Firebase
- Stripe

PROJECT #10

Name: Capstone Project

Description: At the end of the course we have each student create a capstone that depicts their ability to create a program based on their project idea. Each student has their own idea that they choose to use either the React framework or Flask microframework, and showcase their ability of what they've learned. These projects may range from data science/analysis to front-end and CSS focused. The student's focused on contouring the project towards the job they wanted at the end. The technologies used varied drastically between each student, but all projects included, but weren't limited to many of the technologies used below...

Technology:

- HTML5 & CSS
- Javascript
- Atom
- jQuery
- Bootstrap4
- JSON
- Git & Github
- Command Line
- React
- Jupyter Notebook
- Python3
- Flask & Flask Libraries
- Numpy
- Pandas
- Matplotlib
- BeautifulSoup
- NLTK