**DEV**PSU **Project Details**

**Social Media API**

Have you ever wondered how apps like Facebook, Instagram, and Twitter actually work? In this project, you will create your own application programming interface (API) for a social media app. An API is basically just a program that can send and receive data or information. When you post about that cute kitten you saw on Elm Street on Instagram, Instagram’s API is what actually save’s your photo and caption. Instagram’s API is also what gets that picture back to be displayed to your friends in their feeds.

Let’s get started.

**Requirements**

You will be creating and using your own social media API. The API should be able to:

1. Get all posts
2. Get a specific post
3. Save a post
4. Delete a post

**Instructions**

This may seem intimidating at first, but don’t worry. We’ll help you through it. If you are ever confused by a word, phrase, or technique, try learning about it online and if you still need help, just ask for it!

When creating an API, the hardest part is actually knowing where to start. We’ve started for you. Download **socialapi.py** and **socialinterface.py** to get started.

**socialapi.py** is the file that contains our API code. Remember, APIs are not usually accessed directly, so we need to access them from another file.

That’s where **socialinterface.py** comes in. **socialinterface.py** lets the user interact with our API. Technically, we could create an interface in multiple different languages, operating systems, and platforms (that’s what makes APIs so powerful). For this example, we are interfacing with the API using another Python file.

Run **socialinterface.py** to see what happens. Make sure that you are using Python 3, not 2.7.

You should get an error that looks something like:

ImportError: No module named 'insert\_import\_here'

This error means that you are importing the wrong folder, file, class, or function. We want to import **socialapi.py**, our API file. Try to fix that first line of code in **socialinterface.py**.

Next, fill in the code in **socialapi.py**, starting with *save\_post()*.It should only take a few lines of code in each function to get things working. After you complete each function, test the by running **socialinterface.py**. It will save you a lot of headache if you test your functions one at a time rather than trying to do everything at once.

If you get stuck, refer to **socialinterface.py** as it may give you some hints about how to structure your code.

To check if you did everything right, your output should look something like this:

What would you like to do? Type a number and press Enter.

1) Get all posts

2) Get one post

3) Save a post

4) Delete a post

5) Quit the program

3

Enter the name you want to give your post: My Post

Enter the content you want your post to contain: This is a post.

Saved!

What would you like to do? Type a number and press Enter.

1) Get all posts

2) Get one post

3) Save a post

4) Delete a post

5) Quit the program

2

Enter the name of the post you are looking for: My Post

Name: My Post

Content: This is a post.

What would you like to do? Type a number and press Enter.

1) Get all posts

2) Get one post

3) Save a post

4) Delete a post

5) Quit the program

3

Enter the name you want to give your post: ABCD

Enter the content you want your post to contain: ACBDEFGHIJKLMNOPQRSTUVWXYZ

Saved!

What would you like to do? Type a number and press Enter.

1) Get all posts

2) Get one post

3) Save a post

4) Delete a post

5) Quit the program

1

Name: My Post

Content: This is a post.

Name: ABCD

Content: ACBDEFGHIJKLMNOPQRSTUVWXYZ

What would you like to do? Type a number and press Enter.

1) Get all posts

2) Get one post

3) Save a post

4) Delete a post

5) Quit the program

4

Enter the name of the post you want to delete: ABCD

Deleted!

What would you like to do? Type a number and press Enter.

1) Get all posts

2) Get one post

3) Save a post

4) Delete a post

5) Quit the program

1

Name: My Post

Content: This is a post.

What would you like to do? Type a number and press Enter.

1) Get all posts

2) Get one post

3) Save a post

4) Delete a post

5) Quit the program

5

Goodbye!

That’s it! You’ve completed the first project. Reward yourself with a treat because you’re on your way to becoming a software dev pro!

If you want to challenge yourself, try adding more features to your API such as:

1. Limiting the length of each post
2. Restricting the format of post names (i.e. only lowercase letters allowed)
3. Adding comments to posts
4. Requiring a user login (or some other kind of authentication) to use the API
5. Saving the API data to a file so it persists when you close and reopen the app