

A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front one is blue and the back one is a light green color. They are positioned diagonally, with the blue one in front of the green one.

StackExchange auto-lookup

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Background

- When programming, it's a common procedure to look up an error that you are facing when you don't know what is inherently wrong with your code.
- It is time consuming to open up a new tab, find the right stackoverflow page, and switch back from your editor to the tab to implement that solution.





Data Used

Data Source: Stack Overflow

Obtained through: The StackExchange API

- Found here: <https://api.stackexchange.com/>
- Works for Stack Overflow as well as dozens of other Math, Science, and Statistics forums

Limitations

- Need authorization through special keys and long project reviews to access certain features
- Max cap on API calls to the server if no auth key is obtained
- HTML = Yuck



Use cases

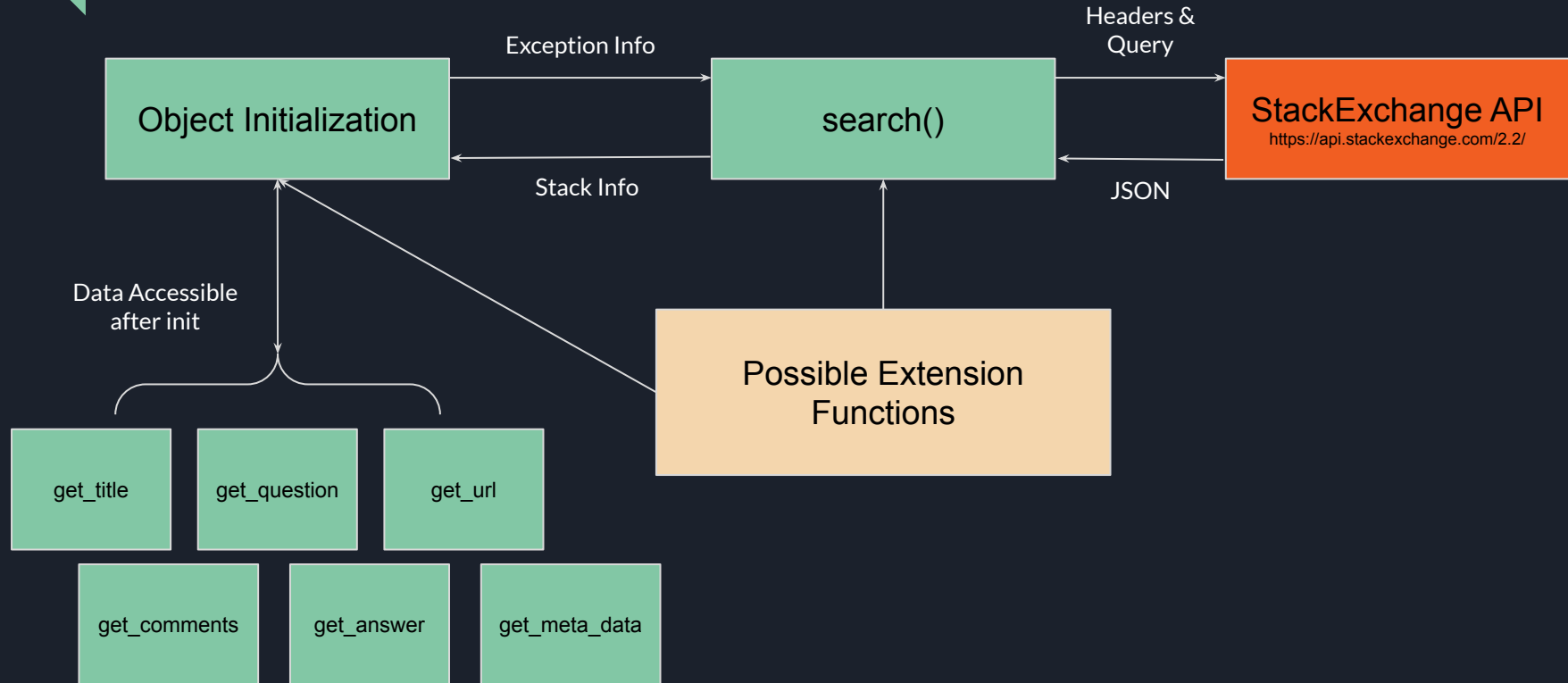
- You are coding with a library you have never used before and BAM:
 - `ValueError: The truth value of an array with more than one element is ambiguous, use a.any() or a.all()`
 - What if you could read an explanation on stackoverflow without leaving the IDE?
- How StackExchange auto-lookup nests around your code
 - If name == “__main__”:
 Try:
 #your code here
 Except(e)
 StackOverflowAPI(e)
- Integration with try, catch statement allows you to auto-lookup only when you want to.



Demo



Design





Project Structure

- Doc
 - Example.mp4
 - StackExchange.PNG
 - Diagram.jpg
 - documentation.md
- LICENSE.txt
- README.md
- StackOverflow.py
- test_stack.py



Lessons learned and future work.

- Lessons
 - Writing method stubs save time down the road
 - Write your comments before you write the code
 - Decide how the user will work with the library, before you write the library
 - Eg: try catch statement vs running in background vs changing the builtin python library `stacktrace.py`
 - API >>> web scraping
- Future work
 - Auto-detect ASCII codes within `<code>` blocks
 - Improve readability of Stack Overflow responses
 - Possibly open up a browser within CMD with the page included (Rich HTML element)
 - Expand library to work with other StackExchange websites as well
 - Auto-detect what library an error came with and add special tags to create more accurate searches