Report -2

PYTHON WEB FRAMEWORKS

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# PYTHON

* Python offers many frameworks from which to choose from including bottle.py, Flask, CherryPy, Pyramid, Django and web2py.
* These frameworks have been used to power some of the world’s most popular sites such as Spotify, Mozilla, Reddit, the Washington Post and Yelp.

# Advantages of using a framework

* The pro on using framework instead of a library is its flexibility which helps us use necessary tools with its extended features.
* Also while using functionalities, we don’t have to know about each and every one of them, we just need to direct our operations using those functionalities in the existing framework.

## Popular full-stack frameworks

* Django - Django makes it easier to build better Web apps more quickly and with less code and is a high-level Python Web framework that encourages rapid development and clean, pragmatic design.
* TurboGears – It is a rapid web development framework. Helps Create a database-driven, ready-to-extend application with designer friendly templates, easy AJAX on the browser side and on the server side, with an incredibly powerful and flexible Object Relational Mapper (ORM).
* Web2py - a free, open-source web framework for agile development which involves database-driven web applications. It is written and programmable in Python. It includes SQL database integration and multi-threaded web server for designing a program. It follows the **Model(logic)-View (rendering the data display to end users)- Controller (handling of user interaction)** pattern of running web applications unlike traditional patterns.

## Popular NON full-stack frameworks

* Flask - A microframework for Python based on Werkzeug, Jinja 2 and good intentions. It Includes a built-in development server, unit tesing support, and is fully Unicode-enabled with RESTful request dispatching and WSGI compliance.
* Pyramid – It is fast, down-to-earth, open source Python web development framework. It makes real-world web application development and deployment more fun, more predictable, and more productive. Pyramid is a Pylons Project, and is the successor to the Pylons web framework.

## FULL-STACK Vs Micro web frameworks

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| FULL -STACK | MICRO-FRAMEWORK |
| Easy to use | Complex and does the heavy lifting |
| Not necessarily RESTful | Url routing is RESTful often |
| Can be used to make any applications | Is helpful for small applications |
| Provide libraries, template engines, database management etc. | Use WSGI and work through HTTP request/response. |