# Project report:

Building a Website with CherryPy

# Prepared By

Davis Richardson

Brett Piatek

Malorie Lara

Marla Boeer

# Introduction

**CherryPy** is

* [object-oriented](https://en.wikipedia.org/wiki/Object-oriented)
* [web application framework](https://en.wikipedia.org/wiki/Web_application_framework)
* a pure Python library.

So it can run anywhere Python runs, and on implementations of the Python language (CPython, IronPython, Jython and PyPy)

* an open-source project, you can fork on GitHub .
* founded by [Remi Delon](https://en.wikipedia.org/w/index.php?title=Remi_Delon&action=edit&redlink=1) more than ten years ago and distributed under a [BSD license](https://github.com/cherrypy/cherrypy/blob/master/cherrypy/LICENSE.txt).

**CherryPy** does

* [rapid development](https://en.wikipedia.org/wiki/Rapid_application_development) of [web applications](https://en.wikipedia.org/wiki/Web_application) in same way you would build any other object-oriented Python program. Less code developed in less time.
* can be a web server itself or one can launch it via any [WSGI](https://en.wikipedia.org/wiki/Web_Server_Gateway_Interface) compatible environment. Easy to [run multiple HTTP servers](http://docs.cherrypy.org/en/latest/advanced.html#multiple-http-servers-support) at once.

([HTTP/1.1-compliant](http://www.w3.org/Protocols/rfc2616/rfc2616-sec1.html#sec1.2), [WSGI](http://www.wsgi.org/en/latest/index.html) thread-pooled webserver)

* built-in [profiling](http://docs.cherrypy.org/en/latest/pkg/cherrypy.lib.html?highlight=profiler#module-cherrypy.lib.profiler), [coverage](http://docs.cherrypy.org/en/latest/pkg/cherrypy.lib.html?highlight=cover#module-cherrypy.lib.covercp), and testing support.

(https://travis-ci.org/cherrypy/cherrypy)

* Built-in tools for [caching](http://docs.cherrypy.org/en/latest/pkg/cherrypy.lib.html#module-cherrypy.lib.caching), encoding, [sessions](http://docs.cherrypy.org/en/latest/basics.html#using-sessions), [cookies](https://cherrypy.readthedocs.io/en/3.3.0/progguide/cookies.html), [authorization](http://docs.cherrypy.org/en/latest/basics.html#authentication), [static content](http://docs.cherrypy.org/en/latest/basics.html#static-content-serving), and [many more](http://docs.cherrypy.org/en/latest/extend.html#per-request-functions).
* A [flexible plugin system](http://docs.cherrypy.org/en/latest/extend.html#server-wide-functions).

**CherryPy** **does** **not**

* deal with tasks such as templating for output rendering or backend access. The framework is extensible with filters, which are called at defined points in the request/response processing.
* CherryPy does not fill out HTML forms for you.
* CherryPy is not a database or ORM. CherryPy allows you to choose your own.

## Projects using CherryPy:

|  |
| --- |
| Aculab Cloud is a cloud-based telecoms platform API  * A simple telephony API for Python, C#, C++, VB, etc... The website and all front-end and back-end web services are built with CherryPy. |
|  |
| CherryMusic is a free, open source a standalone music server written in Python and based on CherryPy and jPlayer.  * works on all HTML5 compliant devices * built in database to index your music |
|  |

# Installation

To **install** CherryPy, follow these steps.

1. In your Command Prompt or Terminal type in:

either $ easy\_install cherrypy or $ pip install cherrypy

--OR---

1. Download it from this website (if those don't work):  <https://pypi.python.org/pypi/CherryPy/3.2.3>

You want to **test** the installation after downloading.

1. To test it, type in:

$ python -m cherrypy.tutorial.tut01\_helloworld

1. After you run it, you should receive a list of logs that start with ENGINE and that means the server is ready to process and receive your requests.
2. After testing, go ahead and run your code. Your code will run just fine if your code defines a '\_\_main\_\_'.

# Experiment

What did you set up to show how this package works.

# Source code

This section should include any code you used to do your experiment. Ideally, this code should be demonstrated in class on the last day (see below).

# Conclusions

What do you think about the package. Is it useful, and where might it help you in your academic or job related work.

# Sources

https://en.wikipedia.org/wiki/CherryPy

http://www.cherrypy.org/