

# OPEN SOURCE UNIVERSE

FREE AND ALWAYS WILL BE!



welcome

**OPEN** **SOFTWARE** **OPEN-SOURCE** **FREE SOURCE** **CULTURE**

**ACCESS** DESIGN INCLUDING SCIENTIFIC WORLD PROJECTS POTENTIAL COMMUNITIES DISTRIBUTED PRODUCT MANUFACTURERS SIMILAR TECHNOLOGY COSTS EVEN MOVEMENT ANOTHER WORKS PLATFORM MESSAGEBOARDS POLITICAL NEW ARTICLE MAKING COMPUTER WORK CITATION SOCIETY PROCESS COMPANIES COMMUNITY WELL INTERNET DIGITAL SOCIAL USING TERM DATA SYSTEMS ONLINE LICENSE

**COST** PUBLIC COPYRIGHT SHARED EXAMPLE INDIVIDUALS BEER LINUX SYSTEM ETHICS CASE IDEA TECHNOLOGIES MANY MADE CONTENT INFORMATION BLOGS OPERATING COMMONS CENTURY PROJECT NETWORK BUSINESS CREATIVE MODEL PRODUCTS PRODUCTION SHARING USERS RAYMOND ONE CULTURAL HARDWARE INNOVATION AVAILABLE RESEARCH FILE CODE INTELLECTUAL EXAMPLES FIRST SCIENCE CREATED PROPERTY

# FOSS and US

- Free and open source – it's free(99.999999999....%) and its code is easily available on the internet.
- Your internet is driven by FOSS
- 3/4<sup>th</sup> of your devices are based on it

Cost comparison between Microsoft and FOSS Solutions			
	Microsoft Solution	Linux/FOSS Solution	Savings
Company A: 50 Users	\$87,988	\$80	\$87,908
Company B: 100 Users	\$136,734	\$80	\$136,654
Company C: 250 Users	\$282,974	\$80	\$282,894

“

“IN THE REAL OPEN SOURCE YOU HAVE THE RIGHT TO  
CONTROL YOUR OWN DESTINY AND YOUR CODE.”

—LINUS TORVALDS, LINUX

# Closed Source

VS

# Open Source





# Open Source Hardware



- Allow anyone to study, modify, distribute, make, and sell the hardware.
- Provide publicly accessible design files and documentation (the source).
- Clearly specify what portion of the design, if not all, is being released under the license.
- Not imply that derivatives are manufactured, sold, warrantied, or otherwise sanctioned by the original designer.
- Not use the trademarks of other companies without permission.
- Not be released as non-commercial or no derivatives.

# FREE – PAID WAR

So all of the open source is not free but most free apps come from open source base code.

Whaaaaat....??

## **Hey you are contradicting yourself**

Open source software is made up of "K's" of contributors worldwide and not a single person job, but many a times a part of the general code is released as free where as some may be restricted to some extent.

I said and you read MAY BE

## **So what do we conclude**

Well it's free as long as when end user and also developers are concerned.

- Android
- For that Linux
- Now comes the editor
- So does the programmer
- Well now people donate(yeah some do).
- Customers pay for the software and not the code(come on!)

# Some FOSS Equivalents to Proprietary Softwares

Category	Proprietary	FOSS
Office	Microsoft Office, iWork	OpenOffice, KOffice, Abiword, Gnumeric, Lotus Symphony
Desktop Publishing	Adobe PageMaker	Scribus
Image Manipulation/Graphics Production	Adobe Photoshop	GIMP, Inkscape
Email	Microsoft Outlook, Outlook Express	Thunderbird
Web Browser	Internet Explorer	Firefox
Voice Over IP	Skype	Ekiga
Database	Microsoft Access, SQL Server	OpenOffice Base, PostgreSQL, MySQL
Media Player	Microsoft Media Player, Power DVD	Totem, VLC, Mplayer
Chat	Yahoo Messenger	Pidgin, Empathy
Video Editing	Adobe Premier, Final Cut	Cinelerra, Kino

# PREPARE

**Build your own Open Source way, what are you waiting for  
open up your laptops now!**

## "Let's play a game"

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Well encryption matters does it, not so sure or think what do I do such that I would need encryption , well let's play a game.

Open up  
[codemoji.org](http://codemoji.org)

## "API – Application Programming Interface"

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How to prevent Donkey coding!

## "More coding less chit chat"

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We will develop a browser extension and an Software Bot ,  
**FUN** isn't it!

**API**

Way to code smarter, efficient and stop  
worrying about “why the heck it isn’t  
compiling”



# What even are API's?

In computer programming, an **application programming interface (API)** is a set of subroutine definitions, protocols, and tools for building application software. In general terms, it is a set of clearly defined methods of communication between various software components. A good API makes it easier to develop a computer program by providing all the building blocks, which are then put together by the programmer. An API may be for a web-based system, operating system, database system, computer hardware or software library.

# The three basic types of APIs

APIs take three basic forms: local, web-like and program-like. Here's a look at each type.

## Local APIs

The original API, created to provide operating system or middleware services to application programs.

## Web APIs

Designed to represent widely used resources like HTML pages and are accessed using a simple HTTP protocol. Often called REST APIs or RESTful APIs.

## Program APIs

Based on RPC technology that makes a remote program component appear to be local to the rest of the software.



API's basically allow your product or service to talk to another product or service...



Where will you find  
them?



<https://apilist.fun/>

# THE STAGE HAS BEEN SET

## Now let's create a software bot , a chat bot(!)

**1**

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So what are chat  
bots?

**2**

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How do you  
deploy a app for  
it.

**3**

---

Now let's create  
a Telegram  
account and a  
pythonanywhere.  
com account.

**4**

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Let's put in some  
tad bits of code  
to make the bot  
working.

**5**

---

Chat infinitely  
and show off  
among your  
friends.

# **FACT**

**Chat Bots are now used not even to make  
chatting more relaxing and happy maker way  
but also to relieve stress and cover up loneliness  
among elderly, to teach students , carry  
meetings**

1

Create a Telegram account.



Telegram Desktop

Welcome to the official [Telegram](#) desktop app.  
It's **fast** and **secure**.

Telegram Desktop

START MESSAGING

Start a new console:

With your current PythonAnywhere account you can have up to 2 consoles. You can have more if you [upgrade your account](#) — go on, we could do with the spare cash.

Your consoles:

Bash console 66007 - [kill](#)

foo.py (Python2.7) - [kill](#)

Consoles shared with you

No-one has shared any consoles with you :-(

2

Create a Python Cloud account

[pythonanywhere.com](http://pythonanywhere.com)

# Let's Code It!



# How will you contribute?

If you have never contributed to an open source project before and you're just getting started, consider exploring these resources.

- <http://up-for-grabs.net> is a site that aggregates (rolls up and makes easy to explore) projects that actively *want* help. They label those projects with things like “up-for-grabs”, “jump-in” or “help wanted.”
- Read blog posts and guides on how to contribute to an open source project, then pick one!
- If you’re just getting started with tech and are considering being a social developer, we’ve made a documentary training movie for you! Get Involved in Tech walks you through setting up your GitHub account, exploring Stack Overflow, setting up a blog and starting to tweet!
- Wondering what someone else’s first contribution was? You can easily find out any GitHub username’s [“First Pull Request”](#).
- We think that open source projects [should value civility and kindness and be patient with new developers](#) and we encourage you to explore projects that have a published [Code of Conduct](#) and we hope you do too!

# Mozilla

Contributing to Mozilla is extremely simple , just follow these instructions and soon you will be a developer contributing to Mozilla.

## What can I do for Mozilla?

**This site suggests you projects based on the programming skill you select. Once you choose your project, it takes you to the respective Mozilla project.**

## Bugs Ahoy!

**Bugs Ahoy is a site particularly for the new contributors. The website categorizes the 'Easy bugs' and 'Mentored Bugs' based on the various projects like JS Engine, Dev tools, Firefox OS etc.**

**Bugs Ahoy also categorizes the easy bugs based on the programming languages too. These are primarily in Python, Java, Shell, JS, C/C++ and HTML/CSS. One can choose a combination of filters to choose the perfect bug to get started.**

The mentors who can be contacted

- Bugzilla page
- IRC channel name
- List of mentored bugs
- Getting Involved Dev Tools – <https://wiki.mozilla.org/DevTools/GetInvolved>
- Getting Involved Mozilla.org - <https://wiki.mozilla.org/Webdev/GetInvolved/mozilla.org>
- Getting Involved AMO - <https://wiki.mozilla.org/Webdev/GetInvolved/addons.mozilla.org>
- Getting Involved SUMO - <https://wiki.mozilla.org/Webdev/GetInvolved/support.mozilla.org>
- Getting Involved MDN - <https://wiki.mozilla.org/Webdev/GetInvolved/developer.mozilla.org>
- Getting Involved Socorro - <https://wiki.mozilla.org/Webdev/GetInvolved/crash-stats.mozilla.org>
- Getting Involved Mozillians - <https://wiki.mozilla.org/Webdev/GetInvolved/mozillians.org>
- Getting Involved ReMo - <https://wiki.mozilla.org/Webdev/GetInvolved/reps.mozilla.org>
- Getting Involved input.mozilla.org - <https://wiki.mozilla.org/Webdev/GetInvolved/reps.mozilla.org>
- Getting Involved careers.mozilla.org - <https://wiki.mozilla.org/Webdev/GetInvolved/careers.mozilla.org>
- Getting Involved QMO - <https://quality.mozilla.org/docs/webqa/get-involved/>
- Here is another link for Bugzilla Mentored Bugs list - <https://bugzil.la/sw:mentor>



## KDE

If you want to start contributing to KDE, look out for the Junior Jobs tag. Like each organization, KDE contains a section on how to get started with the KDE projects.

Getting Started - <http://techbase.kde.org/Contribute>.

Building a KDE Application - [http://techbase.kde.org/Getting\\_Started/Build](http://techbase.kde.org/Getting_Started/Build).

KDE Guide for a new contributor - <http://flossmanuals.net/kde-guide/>.

IRC - #kde-devel on Freenode.

Mailing List - <https://mail.kde.org/mailman/listinfo/kde-devel>.

## OpenStack

OpenStack is also a great project to start out with. The OpenStack project is divided into various components: Swift, Glance, Nova, Horizon, Keystone etc. Each of these components have their own page. If you head over to the [OpenStack Wiki Main page](#), you can see the components listed separately.

Each Component page contains the link to repository, bug tracker(Launchpad), Documentation etc. OpenStack call their beginner bugs as "Low Hanging Fruits".

Getting Started - [https://wiki.openstack.org/wiki/How\\_To\\_Contribute](https://wiki.openstack.org/wiki/How_To_Contribute)

If you are a developer - [https://wiki.openstack.org/wiki/How\\_To\\_Contribute#If you're a developer](https://wiki.openstack.org/wiki/How_To_Contribute#If you're a developer)

Documentation - [docs.openstack.org](http://docs.openstack.org)

IRC - #openstack-101, #openstack on Freenode





## Wikipedia

Most of the people on the planet have heard of the name Wikipedia but how many have ever thought of contributing to it? Wikipedia is supported by Wikimedia Foundation. Mediawiki tag their easy bugs with the easy tag. [Click!](#)

Getting Started - [http://www.mediawiki.org/wiki/Gerrit/Getting\\_started](http://www.mediawiki.org/wiki/Gerrit/Getting_started).

How to become a Mediawiki Hacker -

[http://www.mediawiki.org/wiki/How\\_to\\_become\\_a\\_MediaWiki\\_hacker](http://www.mediawiki.org/wiki/How_to_become_a_MediaWiki_hacker).

Installing Mediawiki on local system - <http://www.mediawiki.org/wiki/MediaWiki-Vagrant>.

IRC - #mediawiki. Now this link is important.

Annoying little bugs - [http://www.mediawiki.org/wiki/Annoying\\_little\\_bugs](http://www.mediawiki.org/wiki/Annoying_little_bugs).



# GNOME



'Gnome-love' is the loving tag for the easy bugs who want to get started with GNOME. If you ever visit the GNOME homepage: the "Getting Involved" link is clearly visible in header's menubar. Anyways here is the link you don't want to search for it.

GNOME maintains a guide for newcomers: <https://wiki.gnome.org/NewcomersTutorial>.

If you want to know on how to submit your first patch, read this:  
<https://wiki.gnome.org/GnomeLove/SubmittingPatches>.

If you want to build the code, then just build it from here:  
<https://wiki.gnome.org/GnomeLove/JhbuildIntroduction>.

Documentation: <https://developer.gnome.org/>.

# django



## Django

Django is a Python based web-framework used by some really big companies e.g. Disqus, Instagram, Transifex etc. To start contributing to Django, head over to the page [Contributing to Django](#).

This page lists down the links to mailing list, IRC channel, Issue Tracker.

Getting Involved in Django: <https://code.djangoproject.com/#Gettinginvolved> Like most of the open source projects, Django has easy fixes for the new contributors too.

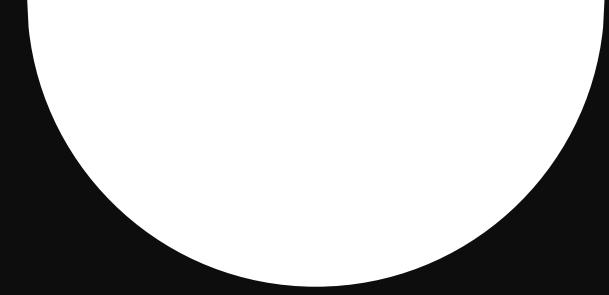
Little Easy Improvement - <https://code.djangoproject.com/wiki/LittleEasyImprovements>.

Easy pickings - <https://code.djangoproject.com/query?status=!closed&easy=1>.

The "Little Easy Improvement" also mentions issues for which one can send patches for documentation, writing tests, or improving the codebase.

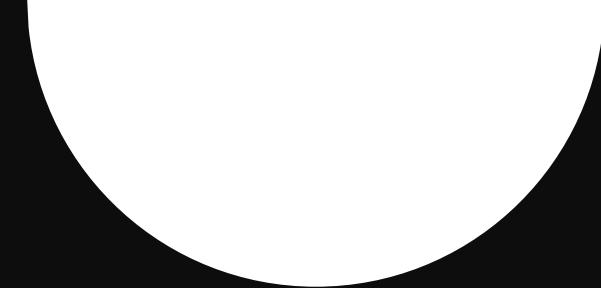
Django maintains a page to advise new contributors:

<https://docs.djangoproject.com/en/1.9/internals/contributing/new-contributors/>



Journey does not end here ,

Look the presenter is telling you something  
more ☺



**Ashwin Phadke**  
Mozilla Regional Coordinator  
FOSS platform contributor  
Website: [ashwin-Phadke.github.io](https://ashwin-Phadke.github.io)



THANK YOU!