Building Careers withFree/Libre and Open Source Software

Version 1.0
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Why me?

- Free Software enthusiast
- Book: "i want 2 do project. tell me wat 2 do." http://shakthimaan.com/what-to-do.html
- Gallery https://gallery.shakthimaan.com
 - Conferences, events, meet-ups, workshops, talks
- Volunteer and Mentor
 - ILUG-C, dgplug, Summer of Code programs
- Writer
 - OSFY, EFY
- Blog: http://www.shakthimaan.com/news.xml
- · Community: linuxforums, Fedora project, GNU Emacs etc.
- MS (IT), Rochester Institute of Technology



Why?

- Recognition
- Open communication
- Feedback
- Continuous learning
- Improve skills
- Career growth
- Diversity
- Network



Source: http://planet.gnome.org/heads/

Perks: Fame, money, travel etc.

Who?

Academia

- Students
 - School: https://opensource.com/article/18/3/linux-forward-schools
 - College: GSoC, Mozilla, KDE etc.
- Faculty
- Management
- Industry
- Government
- NGO
- Hobby



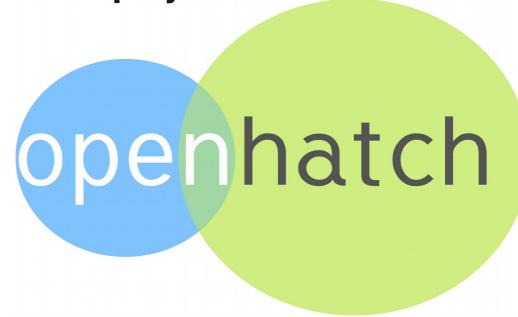
Source: Science Hack Day, Belgaum 2017

When?

What?

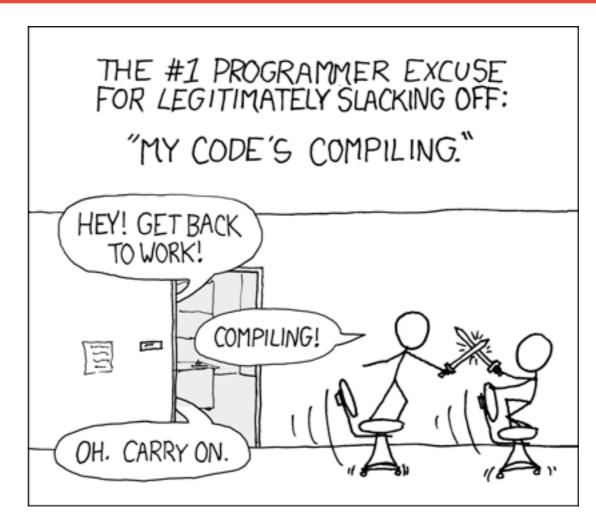
Free/Libre Open Source Software projects

- Source Control Account
 - GitLab, GitHub, Bitbucket etc.
- Blog
- Social media
- Communication channels
 - Internet Relay Chat, Gitter etc.
- Conferences
 - PyCon, RubyConfIndia, GopherCon, FunctionalConf, HasGeek
- Meet-ups
- User Group meetings



Project Areas

- Documentation
- Translation
- Marketing
- Artwork
- Infrastructure
- Websites
- Internationalization
- News
- Packaging
- Development
- Testing



Source: https://xkcd.com/371/

Domain and Job Designation

DevSecOps

Gaming

Computer networks

Telecommunications

Research

Service industry

Embedded systems/VLSI

Teaching

Operating Systems

Systems development

Bioinformatics

DevOps engineer

Freelance writer

Embedded Systems engineer

Application developer

Database administrator

Professor/researcher

Web developer

Graphics designer

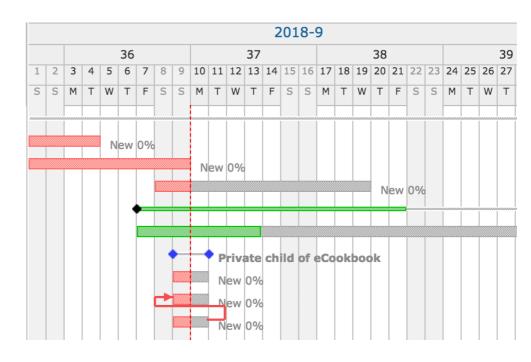
Consultant

Data Scientist

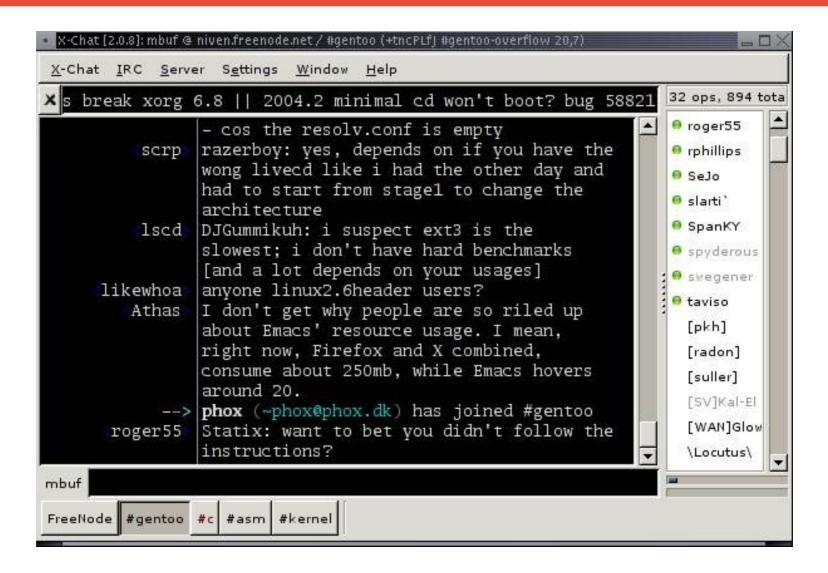
UI/UX designer

Where?

- Forums
- Mailing list
- Internet Relay Chat (IRC)
 - irc.freenode.node (##linux-india, #dgplug, #emacs etc.)
- Bugs tracker
 - Bugzilla, MantisBT, Trac, Fossil etc.
- Project task management:
 - Redmine, OpenProject, TaskJuggler etc.
- Wiki
 - Mediawiki, DokuWiki, MoinMoin etc.
- Source control
 - Gitlab, GitHub, Bitbucket etc.

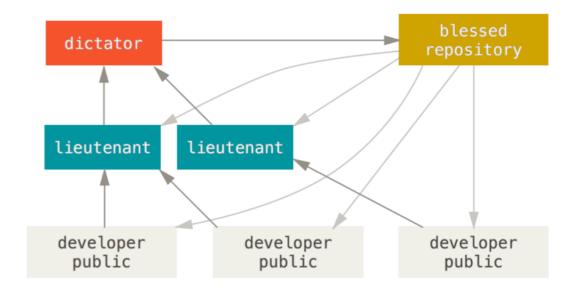


Internet Relay Chat



How?

- Use the software
- Understand project tools used
- Join communication channels
- Read project documentation
- Use and test the software
- Find a mentor
- Fix bugs, documentation
- Participate in team meetings
- Peer reviews



Source: Git SCM book

Example: Operation Blue Moon

https://gitlab.com/shakthimaan/operation-blue-moon

Bugzilla

KDE Bugtracking System — Bug List							
Home New Browse Search				Search [?] Reports Requests Help New Account Log In			
Thu Jan 3 2019 11:46:57 UTC Hide Search Description							
Changed: (is greater than or equal to) 24h							
34 bugs found.							
<u>ID</u>	Product	Comp	<u>Assignee</u> ▲	<u>Status</u> ▲	Resolution	Summary	Changed
40279	9 kdeconne	common	albertvaka	REP0		KDE connect Segmentation Fault.	20:26:49
40278	7 framewor	Baloo Fi	baloo-bugs-null	REP0		Baloo crashed	Wed 13:36
40280	0 digikam	Albums-M	digikam-bugs-null	REP0		Main album view does not update when moving images between albums	21:14:35
40280	7 digikam	Progress	digikam-bugs-null	REP0		Progress manager doesn't seem to be involved in the fingerprint scanning (v6.0 beta 3)	04:35:42
<u>40280</u>	9 digikam	Import-A	digikam-bugs-null	REP0		Clicking on "Import" toolbar button in import preview does nothing	08:56:59
40281	<u>l</u> digikam	Geolocat	digikam-bugs-null	REP0		<u>Drag-n-drop disabled in</u> <u>Geolocation editor</u>	09:07:55

Change Request

```
View file @ 8f8f9f14
Sprints/2018/dec-22-2018-jan-6-2019.org
            @ -77,28 +77,39 @
                - [ ] [[https://www.b-list.org/weblog/2018/nov/26/case/][Truths programmers should know about case]] (40m)
            ** bhavin192
79
            *** Learning Golang
          - **** Chapter 8. Goroutines and Channels [0/4]
      80 + **** IN PROGRESS Chapter 8. Goroutines and Channels [2/4]
81
      81
                 :PROPERTIES:
82
      82
                 :ESTIMATED: 1.75
83
                 : ACTUAL:
      83 +
                 :ACTUAL: 0.70
84
                 :OWNER:
                            bhavin192
85
      85
                 :ID:
                            READ.1545719105
86
      86
                 :TASKID: READ.1545719105
87
                 : END:
88
                 - [ ] 8.7 Multiplexing with select (20m)
89
                 - [ ] 8.8 Example: Concurrent Directory Traversal (40m)
      88 +
                 :LOGBOOK:
                 CLOCK: [2018-12-26 Wed 22:46]--[2018-12-26 Wed 23:06] => 0:20
                 CLOCK: [2018-12-26 Wed 21:42] -- [2018-12-26 Wed 21:50] => 0:08
                 CLOCK: [2018-12-26 Wed 19:51] -- [2018-12-26 Wed 20:05] => 0:14
      92 +
                 :END:
                 - [X] 8.7 Multiplexing with select (20m)
                 - [X] 8.8 Example: Concurrent Directory Traversal (40m)
90
      95
                 - [ ] 8.9 Cancellation (25m)
91
                 - [ ] 8.10 Example: Chat Server (20m)
      96
```

Assessment

"The only person you should try to be better than is the person you were yesterday."

Matty Mullins

Further Reading

- Free as in Freedom Richard Stallman's Crusade for Free Software https://www.oreilly.com/openbook/freedom/
- "The Cathedral and the Bazaar" http://www.catb.org/esr/writings/cathedral-bazaar/
- Revolution OS http://revolution-os.com/
- Hackers & Painters: Big Ideas from the Computer Age. Paul Graham.
- How to Become a Hacker. Eric Steven Raymond.
- The Architecture of Open Source Applications
- Linux and the Unix Philosophy. Mike Gancarz.
- Presentations http://www.shakthimaan.com/downloads.html
- Book: "i want 2 do project. tell me wat 2 do." http://shakthimaan.com/what-to-do.html
- Careers with GNU/Linux

Thank You

@shakthimaan