



**MALAD KANDIVALI EDUCATION SOCIETY'S
NAGINDAS KHANDWALA COLLEGE OF COMMERCE,
ARTS & MANAGEMENT STUDIES & SHANTABEN NAGINDAS
KHANDWALA COLLEGE OF SCIENCE
MALAD [W], MUMBAI – 64
(AUTONOMOUS)**

**(Reaccredited 'A' Grade by NAAC)
(AFFILIATED TO UNIVERSITY OF MUMBAI)
(ISO 9001:2015)**

CERTIFICATE

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Roll No: ____49__ Programme: BSc IT/CS Semester: II

This is certified to be a bonafide record of practical works done by the above student in the college laboratory for the course IT platforms, Tools and Practices (Course Code: 2026UISTP) for the partial fulfillment of Second Semester of BSc IT/CS during the academic year 2020-2021.

The journal work is the original study work that has been duly approved in the year 2020-2021 by the undersigned.

External Examiner

Subject-In-Charge
(Ms.Sweetty Garg)

Date of Examination: (College Stamp)

Name: AMAN BHOLA RAI

Roll No: 46

Sr. No.	DATE	TITLE	SIGN
1.		INTRODUCTION and CONTRIBUTING TO WIKIPEDIA a) What is Wikipedia? b) Steps to Create Account on Wikipedia c) Creating Page on Wikipedia d) Edit your page	
2.		Creating account, repository on GitHub and Cloning repository in GitHub Page	
3.		BASIC UNDERSTANDING ON FREE AND OPEN-SOURCE SOFTWARE a) Describe Open-Source Software with Example. b) Describe Free Software with Example c) Difference between Free and Open-Source Software.	
4.		WRITING EMAIL	
5.		Using practical examples, describe green computing. List and explain the steps that you take to contribute to green computing	
6.		WRITING BLOGS	
7.		Implementing coding practices in Python using PEP8.	
8.		PRESENTATION: _____	

Name : AMAN BHOLA RAI

Roll no: 4 6

Class: FYCS

Practical1:

Introduction and Contribution to Wikipedia

a) Description about Wikipedia and its features:

Wikipedia is a free, open content online encyclopedia created through the collaborative effort of a community of users known as Wikipedians. Anyone registered on the site can create an article for publication. Jimmy Wales and Larry Sanger co-founded Wikipedia as an offshoot of an earlier encyclopedia project, Nupedia, in January 2001. Originally, Wikipedia was created to provide content for Nupedia. However, as the wiki site became established it soon grew beyond the scope of the earlier project.

Its features:

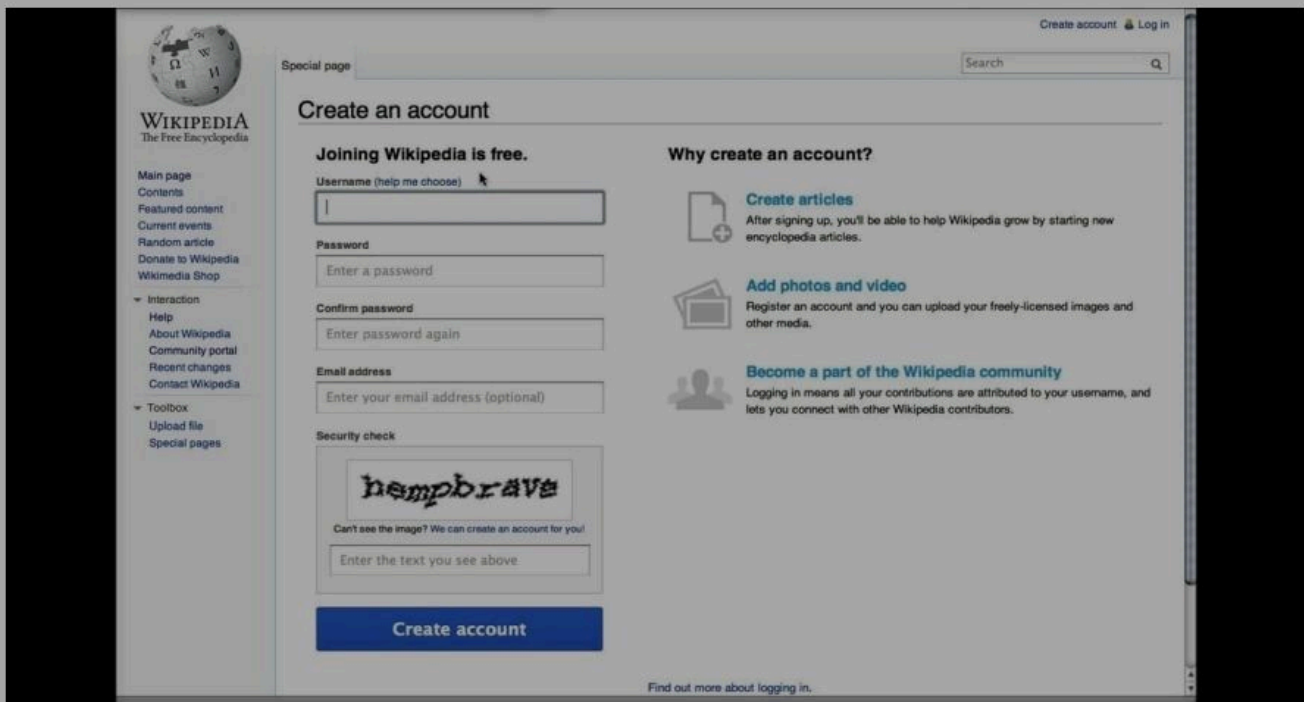
- Creating a page
- Editing a page
- Link between pages
- It is globally available on all platforms
- it can provide a large amount of information
- Users can share their own thoughts and knowledge
- It is easy to use
- Available in multiple languages

b) Creating Account on Wikipedia:

Step 1: go to <https://en.wikipedia.org/wiki/Wikipedia> click on create account



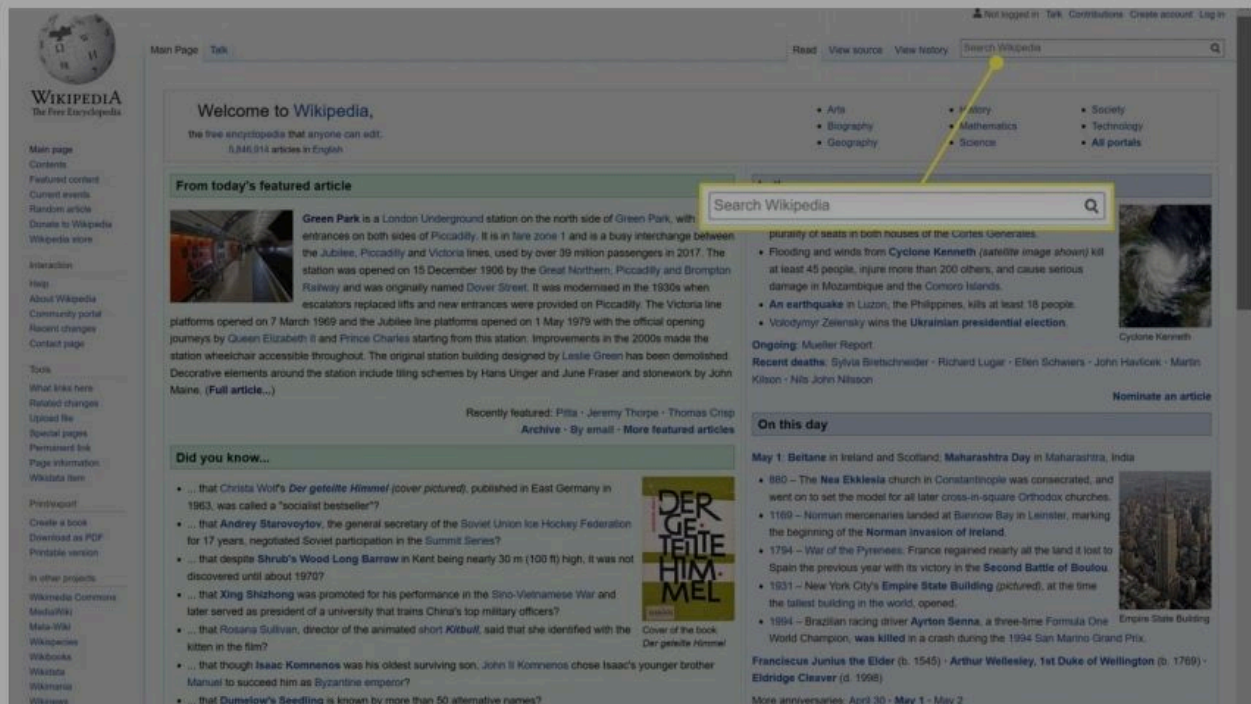
Step 2: fill in the details



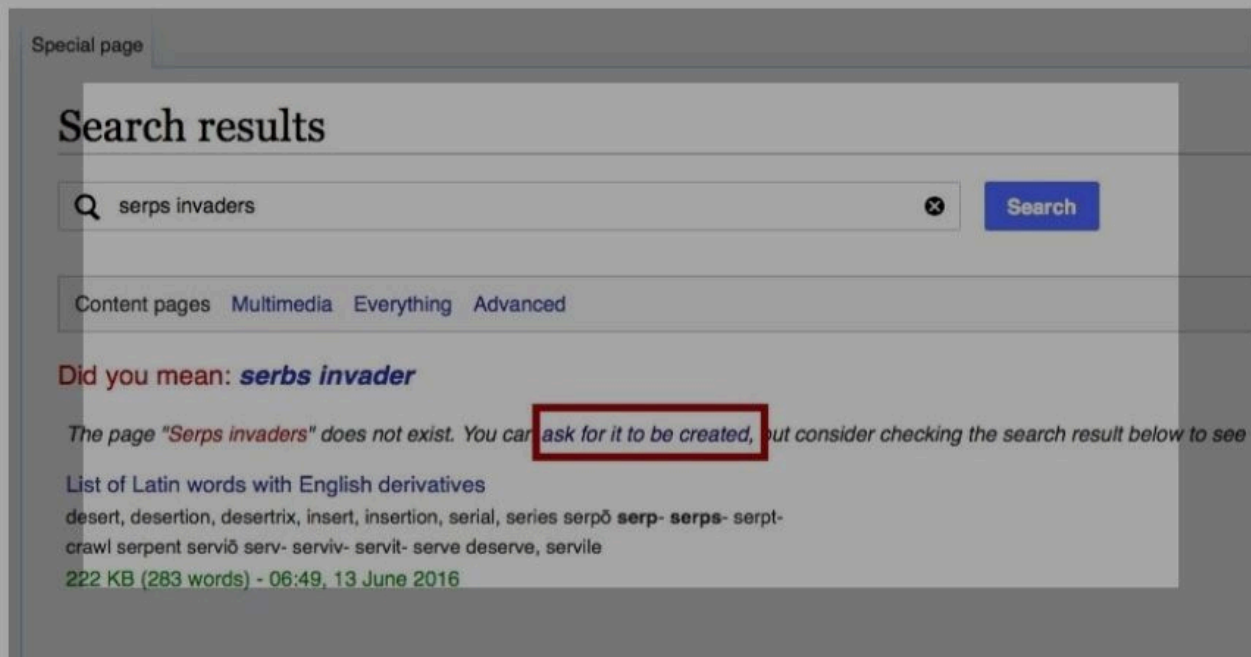
2

c) Creating your page on Wikipedia

Step 1: After creating the account for creating your own article by searching your name



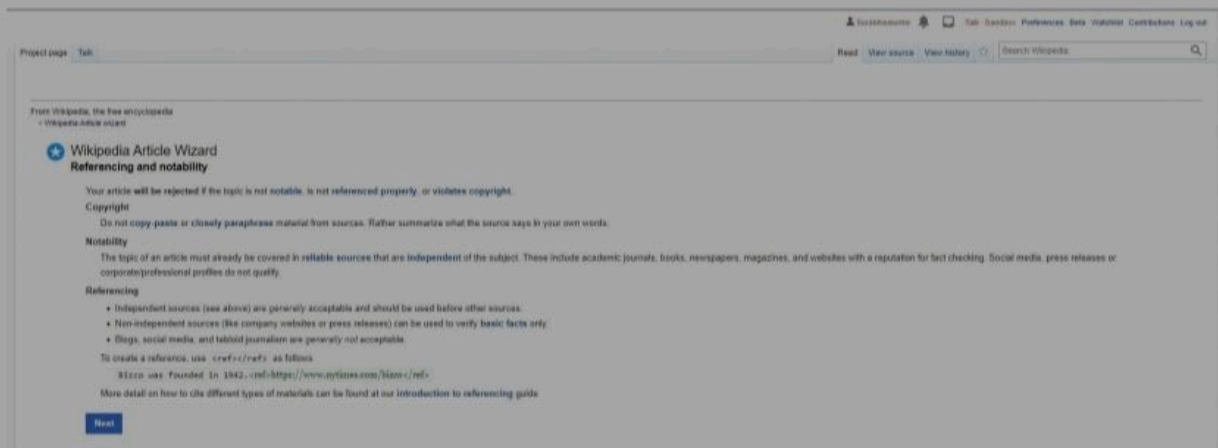
Step 2: You will be redirected to a page where it will be written “as for it to be created” click on i t



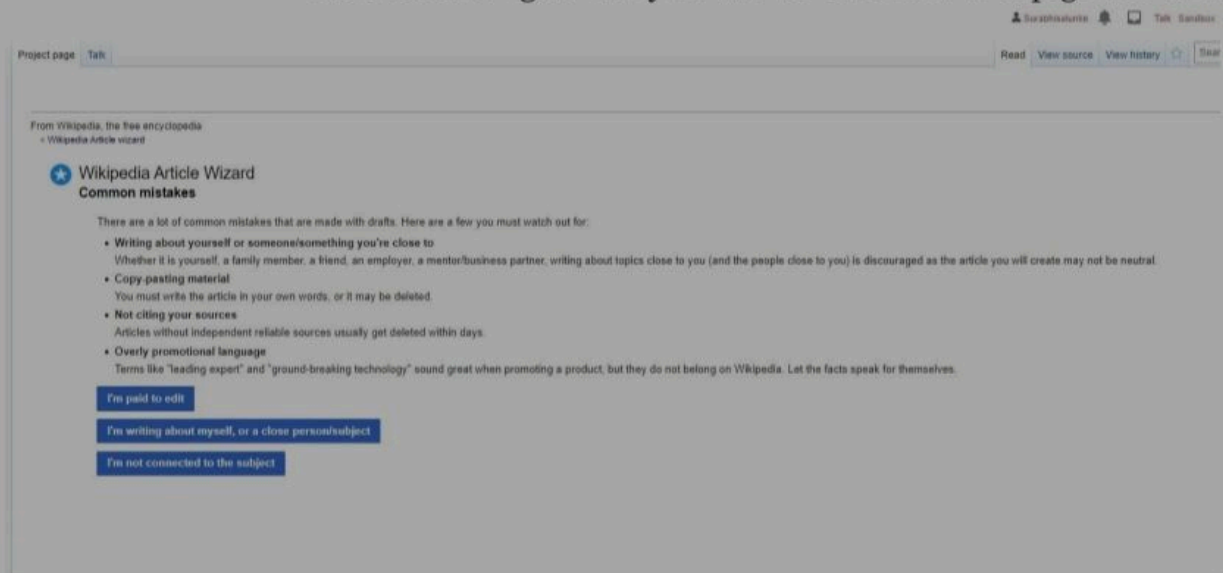
It will take to a page like this



Step 3: You can click on next to get started or practice in the sandbox for rough article writing.

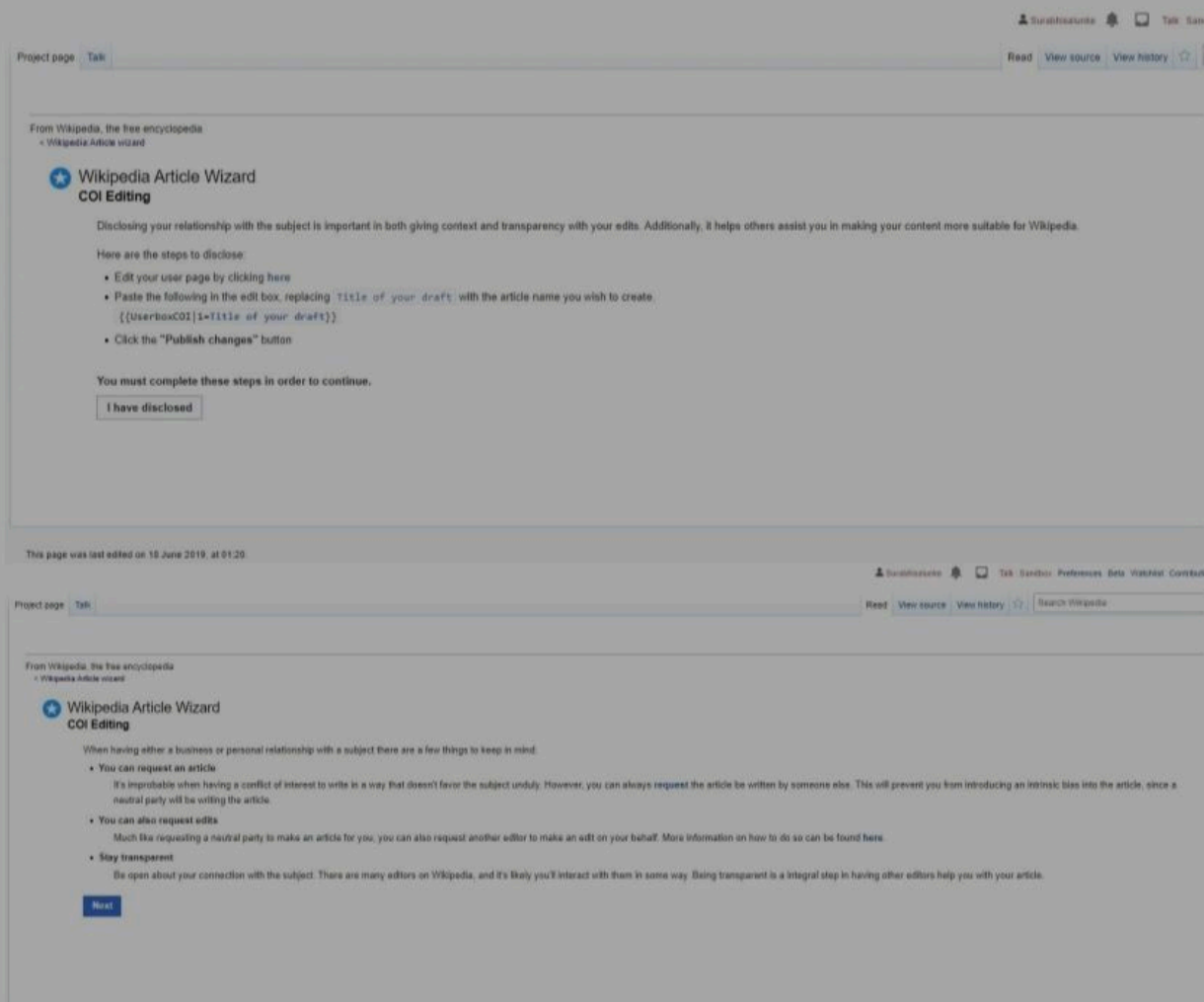


Click on next again and you will be redirected to a page like this:

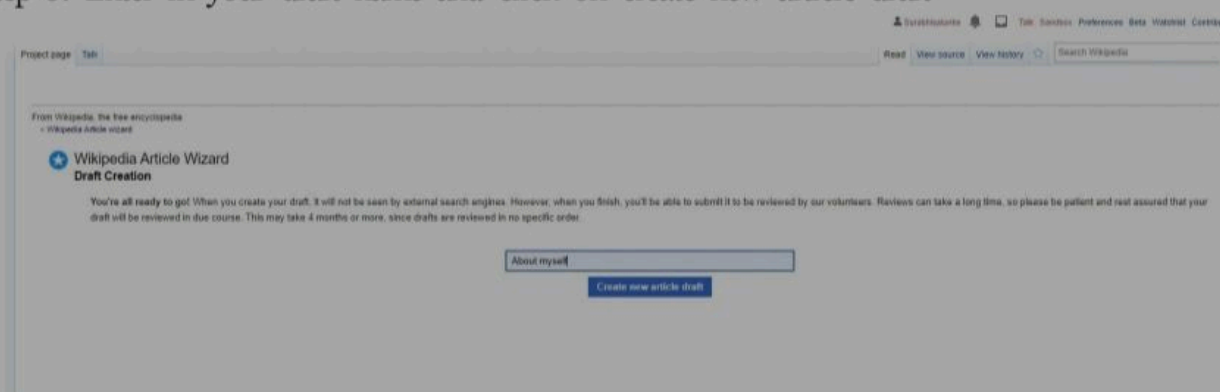


Step 4: Click on i am writing for myself

Click on i have disclosed. And then next



Step 5: Enter in your draft name and click on create new article draft



You will be redirected to the page where you can put your information or about the article you want to write about

Draft | Talk

Creating Draft:About myself

Instructions

Creating a draft article takes four steps. Please read carefully:

- Enter the content of your article in the blank area as illustrated. You may use the *Wikipedia CheatSheet* to properly format your article.
 - Remember to use your own words. Do not copy content from another website.
- List your references in the bulleted area provided or cite them using inline citations. (See example.)
 - Review what is a "reliable source".
- If you require assistance with your submission, visit our live chat. You may use any nickname you would like, provided that it isn't already taken.
- When you are finished writing, click the "Publish page" button. You are all done! We appreciate your submission.

Important

- Please note: Once you click the "publish" button, your draft is saved in a public drafting area. You may continue to work on your draft as long as you like; there is no deadline, but bear in mind that if the draft isn't edited in six months, it may be deleted.
- If the draft is declined, you will still be able to edit it. It is simply marked as declined.
- When you feel your draft is ready to become an article, you can request a review (or a re-review). To do so, edit your draft, by clicking on its "Edit" button, and add {{subst:submit}} at the beginning of your draft.

Find sources: Google (books · news · newspapers · scholar · free images · WP refs) · FENS · JSTOR · NYT · TWL

Content that violates any copyrights will be deleted. Wikipedia content must be verifiable. Any work submitted to Wikipedia can be edited, used, and redistributed—by anyone—subject to certain terms and conditions.

B | ID > Advanced > Special characters > Help > Cite

```
[{{subst:off|submission/draftnew}}]{{!-- Important, do not remove this line before article has been created. --}}
```



```
-- References --
<ref></ref>

```

For linking your page to another site or page you can click on the highlighted button

References

B I **GO** [Icons] > Advanced > Special characters > Help > Cite

```
{subst:AFC submission/draftnew}}{<!-- Important, do not remove this line before article has been created. -->
...
Hello there!
...
My name is Surabhi Abhisjit Salunke I am studying first-year computer science.
```



```
<-- References -->
<!-- Inline citations added to your article will automatically display here. See en.wikipedia.org/wiki/WP:REFB for instructions on how to add citations. -->
{{reflist}}
```

Insert [Dropdown] [Toolbar Icons] Sign your posts on talk pages: ~~~~ Cite your sources: <ref></ref>

Edit summary (Briefly describe your changes)

[Text Area]

☒ Watch this page Permanent [Dropdown]

By publishing changes, you agree to the Terms of Use, and you irrevocably agree to release your contribution under the CC BY-SA 3.0 License and the GFDL. You agree that a hyperlink or URL is sufficient attribution under the Creative Commons license.

Publish page Show preview Show changes Cancel

Step 6: Click on the publish page and then submit the draft to review.

(continued)

Name : AMAN BHOLA RAI

Roll no : 46

Class : FYCS

Practical 2

Creating account, repository on Github and Cloning repository in Github

Step 1: to create an account on github go to <https://github.com> click on Sign Up



Step 2: you will be directed to a page like this fill it

Join GitHub

Create your account

Username *

Email address *

Password *

Make sure it's at least 15 characters OR at least 8 characters including a number and a lowercase letter. [Learn more.](#)

Email preferences

☒ Send me occasional product updates, announcements, and offers.

Verify your account



Create account

Step 3 : After clicking on create account you will be directed to this page:



Please verify your email address

Before you can contribute on GitHub, we need you to verify your email address.



An email containing verification instructions was sent to surabhisalunke05@gmail.com.

[Resend verification email](#)[Change your email settings](#)

Step 4: Check your email for a verification mail from GitHub

The email will look something like this:

[GitHub] Please verify your email address.

Inbox x  



GitHub <noreply@github.com>

10:43 AM (23 hours ago)



Reply

to atriton

Hi @atriron!

Help us secure your GitHub account by verifying your email address (pconrad@ucsd.edu). This lets you access all of GitHub's features.

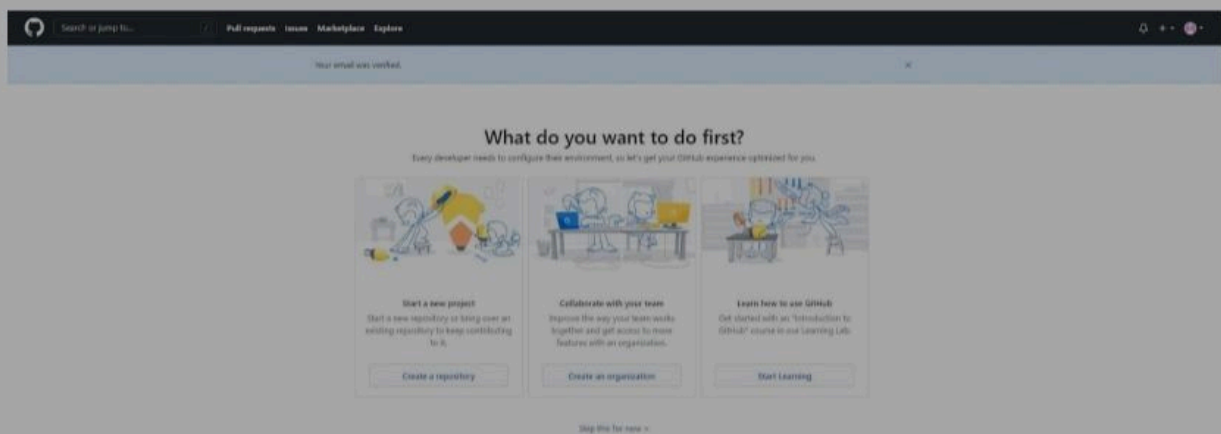
[Verify email address](#)

Button not working? Paste the following link into your browser:

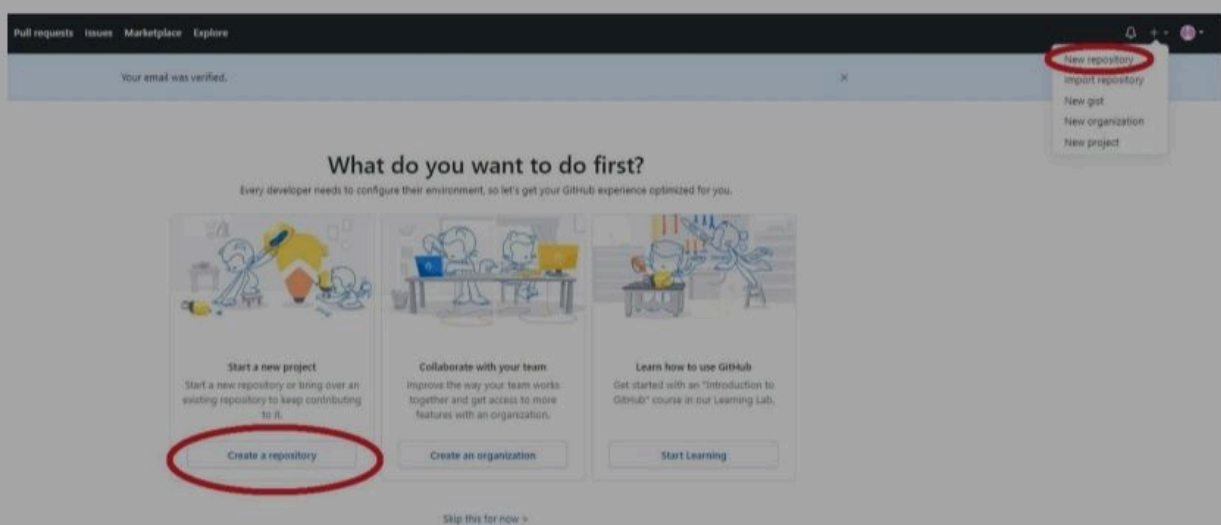
https://github.com/users/atriron/emails/24088043/confirm_verification/cd8f553ec492a878104c76726b12ca3a08e4eb2f

You're receiving this email because you recently created a new GitHub account or added a new email address. If this wasn't you, please ignore this email.

Step 5: Click on verify e mail address it will take you to this page:



Step 6: to create a repository





Step 7: fill in the information shown according:

Create a new repository

A repository contains all the files for your project, including the revision history.

Owner

Repository name

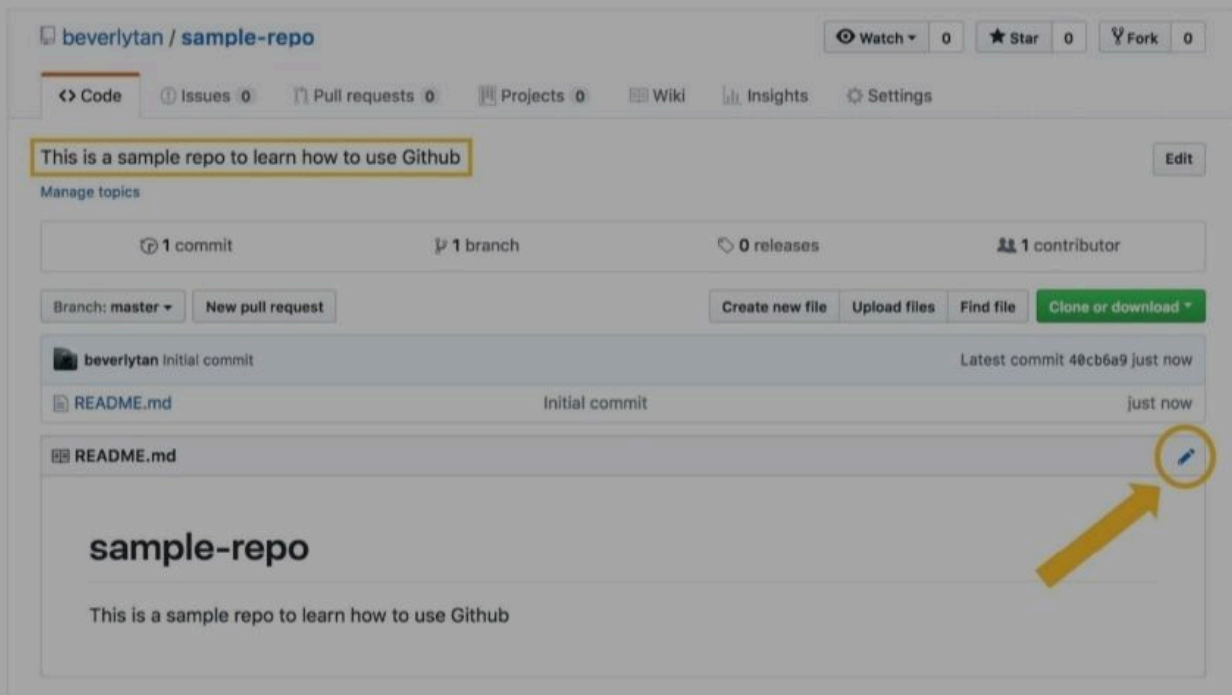
 octocat ▾ / hello-world 

Great repository names are short and memorable. Need inspiration? How about **potential-eureka**.

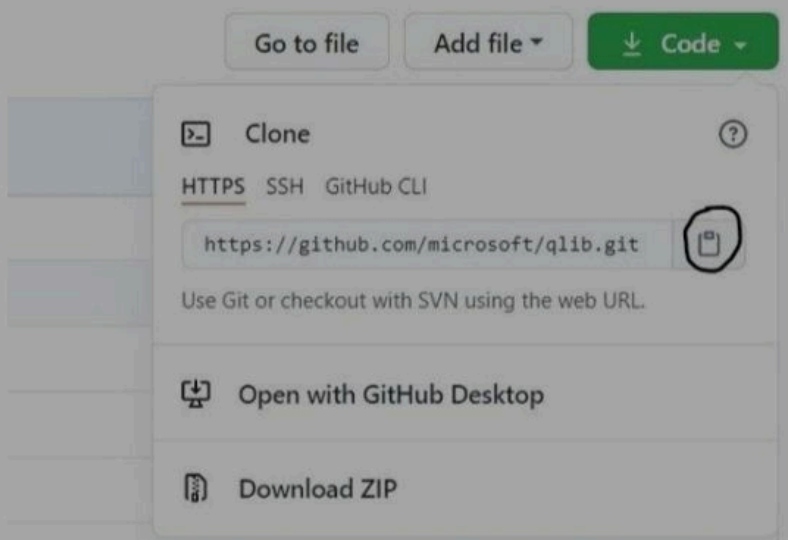
Description (optional)

My first repository on GitHub

Step 8: you will see y our repository on your account



Step 9: to clone the repository click on the green color code button:



Step 10: copy the url by clicking on the small clipboard icon:

Go to file

Add file ▾

↓ Code ▾



Clone



HTTPS SSH GitHub CLI

`https://github.com/microsoft/qlib.git`



Use Git or checkout with SVN using the web URL.



Open with GitHub Desktop



Download ZIP

Name: AMAN BHOLA RAI

Roll no: 46

Class FYCS

PRACTICAL 3:

BASIC UNDERSTANDING ON FREE AND OPEN-SOURCE SOFTWARE

a) Describe Open Source Software with Example.

Open Source Software(OSS) is a software with source code that anyone can inspect, modify, and enhance. It usually includes license for programmers to change the software in any way they choose, they can fix bugs, improve functions or adapt the software to suit their own needs. For example linux is the best example of open source, new programs can be created from its nucleus or kernel.

More examples can be :

- Mozilla Firefox
- Apache Web Server
- VLC media player
- jQuery

b) Describe Free Software with Example.

Free software is a software that can be freely used, modified, and redistributed with only one restriction: any redistributed version of the software must be distributed with the original terms of free use, modification, and distribution. The GIMP is a powerful bitmap mode digital creation program. Because of their high quality and openness, several free software programs have become leaders in their field or comprise the core of an entire industry. In spite of being relatively new, The Gimp has rapidly become serious competition for Photoshop. More examples can be:

- Thunderbird
- Openoffice
- BitTorrent

c) Difference between Free and Open Source Software.

Free Software	Open Source Software
Development methodology	Social movement
Free redistribution of the software.	The freedom to run the program as you wish, for any purpose.
Freedom is a value that is more important than any economical advantage	Freedom is not an absolute concept. Freedom should be allowed, not imposed.
Examples: linux kernel, BSD and linux operating systems, the GNU compiler collection and C library.	Examples: Apache HTTP Server, the e-commerce platform, internet browser, full office suite LibreOffice

NAME : AMAN BHOLA RAI

ROLL NO : 46

CLASS: FYCS

PRACTICAL 4

WRITING EMAIL

STEP 1: LOGIN TO YOUR GOOGLE ACCOUNT

12:31



3%

Google

Sign in

Use your Google Account. [Learn more](#)

Email or phone

amanrai7080@gmail.com

[Forgot email?](#)

[Create account](#)

Next

STEP 2: SEARCH EMAIL AND CLICK ON COMPOSE

12:33

3%

Search in emails

SWEETY GARG (Classroom) 2 17 Apr
New announcement: "Check elearning.nkc.a...
Hi 46_ FYCS_ AMAN_ RAI, SWEETY GARG p...

SWEETY GARG (Classroom) 2 17 Apr
New announcement: "INSTRUCTION FOR IT...
Hi 46_ FYCS_ AMAN_ RAI, SWEETY GARG p...

Gradeup 17 Apr
🏆 **CLAT & Law: Basic Concepts of Percenta...**
Law Entrance Exams Dear Aman , Here, we a...

Myntra 17 Apr
Are You Ready For A Glow Up?
Up To 80% Off on beauty & personal care To...

Microsoft 17 Apr
Updates to our terms of use
Hello, You're receiving this email because we...

Amazon Marketplace 17 Apr
Aman Rai, regarding your recent order at Am...
Hi Aman Rai,will you please take a minute to...

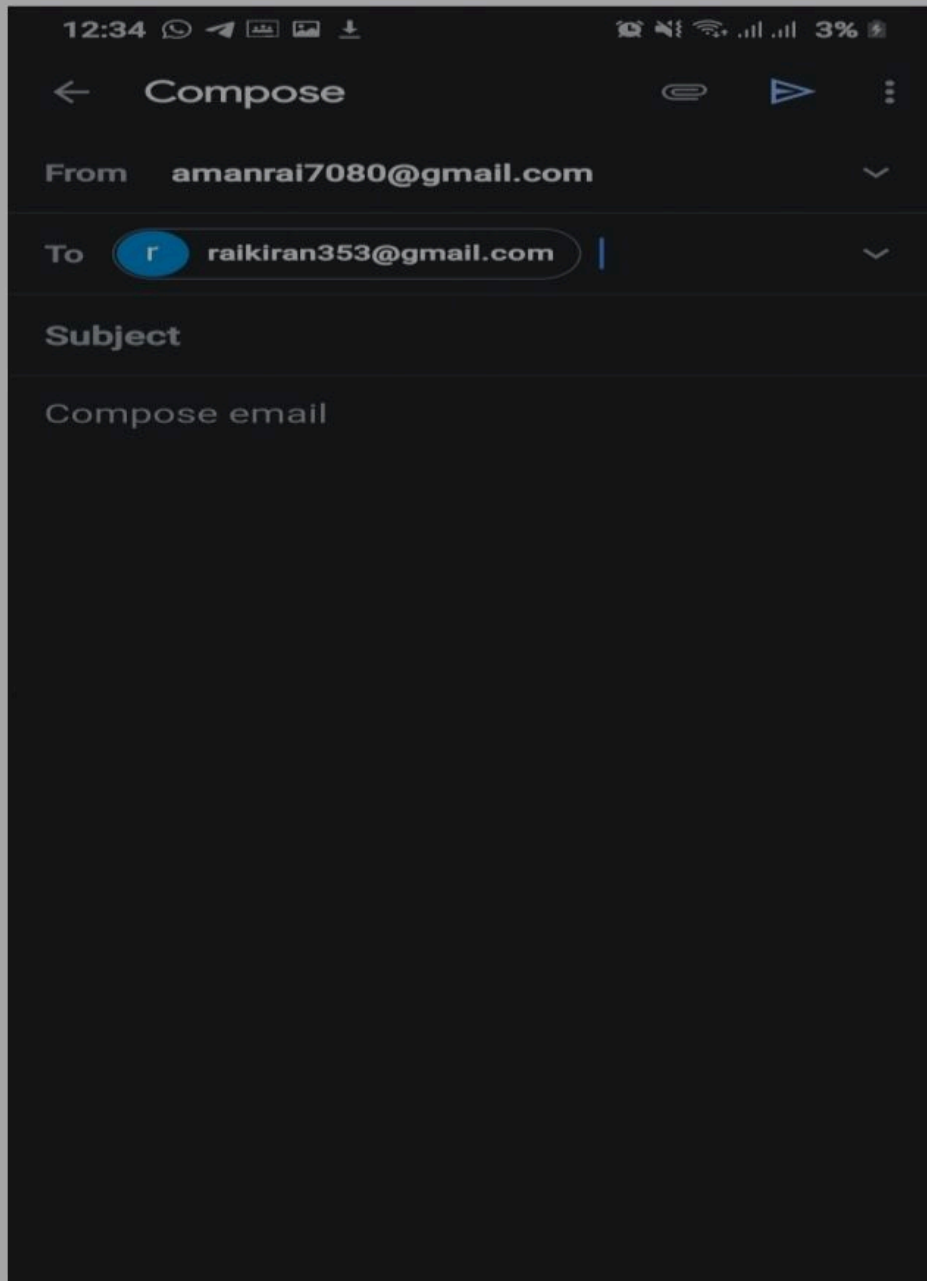
Myntra 16 Apr
🌟 **Styles You'll Love**
We can't get enough of these To unsubscribe...

Gradeup 16 Apr
🏆 **Daily Editorial Analysis for Law Entran**
Law Entrance Exams Dear Aman , Here, we

99+
Mail

Meet

STEP 3 : YOU'LL GET A WINDOW POP UP LIKE THIS



STEP 4: IN THE "TO" SECTION TYPE THE GMAIL ID OF THE NAME OR ORGANIZATION TO WHOM YOU WANT TO SEND THE MAIL AND WRITE THE SUBJECT BELOW THE "SUBJECT" SECTION.

THERE ARE 2 TYPES OF EMAIL FORMAL AND INFORMAL, MAKE SURE YOU USE THE RIGHT FORMAT

12:35

4%



(no subject)

Add label



46_FYCS_AMAN_RAI 16 Mar

to raikiran353



Dear Ma,

I am doing good. Hope you are doing great and you are in best of your health. Hope dad is also doing great. Although we keep talking, it is high time that i thought that i should be writing. I have not been able to give you both sufficient time as i have been busy for the last couple of years settling down in my career. Although you are happy with what i have been doing, i terribly feel sad that i am not with you all. I have been staying so far off from you all, that i cannot be there for both the good and bad times. I do not even remember the last family photo in which we were clicked together. As a child when you and dad had brought me up, i really never knew that i was being born and being taken care by a wonderful set of parents who would imbibe a great set of values. I do feel privileged having come to this family and i am really grateful about it. You all had given your present for my future and i really cannot pay you back with anything except for good memories. I just wish that i become at least a percent of as wonderful a parents that you were. What you have taught me, and let me live is something which i cherish and hope that i will be able to imbibe this for the generations to come. At least i hope to do so. Do keep blessing me so that through your affection, i love people around me.

Just praying for your long life and health.

Your loving son,

Aman

Reply

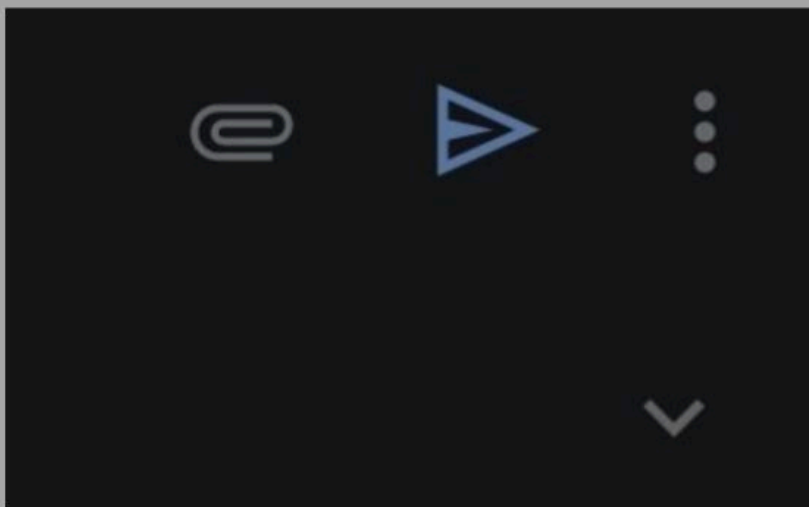
Reply all

Forward

HOW TO WRITE AN EMAIL

1. THE SUBJECT LINE WRITE THE WHAT EMAIL IS ABOUT.
2. START WITH AN APPROPRIATE GREETING: BE FORMAL IF THEY ARE ELDER AND INFORMAL IF THEY ARE YOUR AGE, BUT TO BE PROFESSIONAL ALWAYS USE FORMAL FORMAT.
- 3.KEEP YOUR MESSAGE SHORT AND CONCISE.
- 4.USE STANDARD FONTS.
- 5.WRITING YOUR CLOSINGS: YOURS SINCERELY, YOURS TRULY TO CLOSE YOUR EMAIL .
- 6.DO A FINAL SPELLING AND GRAMMAR CHECK.

STEP 5: USE ATTACH BUTTON IF YOU WANT TO ATTACH ANY FILE.



STEP 6: ONCE YOU ARE SATISFIED WITH YOUR EMAIL CLICK ON SEND BUTTON NEAR THE ATTACH BUTTON TO SEND THE MAIL.

Practical No 5

GREEN COMPUTING

- A. Using practical examples, describe green computing. List and explain the steps that you take to contribute to green computing.
- Green computing is environmentally responsible and eco-friendly use of computers, It is also defined by being the using and disposing of computing devices in a way that reduces their environmental contact. Some steps that we could take to contribute to green computing are:
 - 1) Power down when not in use Seems simple but many of us leave computers powered up for a long time when not in use a A large sum of power is being wasted, so if you're not using the computer press the power button to shut it off until needed. This can be done even if the computer is working on something. Screensavers do not save power. The same goes for computers, you don't have to shut it down completely if you don't want to reboot, just use sleep or hibernation mode. This will help save energy and keep the system in its current state when you need it again.
 - 2) Purchase energy-saving hardware If you don't need super-fast computing power then look out for energy-efficient components when buying a new computer, such as green hard drives and low-energy processors. While performance is slower and they can use remarkably less power. Purchasing an energy-saving power supply unit for a desktop PC can help the environment and save money, they're often quieter too.
 - 3) Use the power-saving features All computers include power-saving options. Using these features you can command the computer to do various energy-saving tasks automatically, including shutting off unused hard disks, powering off a monitor after a given time, or even placing the computer into sleep mode when not in use. This is very useful on laptops to help preserve battery life.
 - 4) 4)Disposal of e-waste While new computers are being made every day, old computers are being discarded-thus creating a lot of e-waste. When we throw away our old computers to buy new ones, we are just adding to the e-waste. You can't burn e-waste because it will release harmful gases. Try to sell your old products after buying new so that most e-waste can be avoided.
 - 5) Use a laptop instead of desktop Laptops are much better for the environment than desktop computers as they have components that require less power. If you don't need a desktop computer to consider buying a laptop instead, or if you have both, use the laptop as much as possible before considering the desktop.
 - 6) Recycle responsibly Computer hardware is filled with different materials which can be hazardous to the environment so make sure you dispose of old components effectively. Don't just throw broken technology in the bin, take the time to trace local recycling organizations. There should be companies that can remove the metals which may fix or furnish items. You should check with your local authorities to find out what facilities they offer for safe disposal of old computing parts.

Practical No 7


Implementing coding practices in python using PEP8

PEP8 is a style guide for python code. PEP stands for Python Enhancement Proposal, and they describe and document the way python language evolves. It is a document that describes new features proposed for python and document aspects of python, like design and style. It promotes a very readable and eye-pleasing coding style.

Some things to keep in mind are:

1. Use 4-space indentation and no tabs.

Example:

 it tools.py

```
1  # Aligned with opening delimiter.
2  grow = function_name(variable_one, variable_two,
3  | variable_three, variable_four)
4  # First line contains no argument. Second line onwards
5  # more indentation included to distinguish this from
6  # the rest.
7  def function_name ( |
8  |     variable_one , variable_two , variable_three ,
9  |     variable_four ):
10 |     print (variable_one)
11
```

2. Use docstrings: there are both single and multi-line docstrings that can be used in python. However, the single line comment fits in one line, triple quotes are used in both cases. These are used to define a particular program or define a particular function.

Example:

```
"""This is single line docstring"""
|
| """This is
| a
| multiline comment"""
```

3. Wrap lines so that they don't exceed 79 characters: The Python standard library is conservative and requires limiting lines to 79 characters. The lines can be wrapped using parenthesis, brackets, and braces. They should be used in preference to backslashes.

Example:

```
with open ( '/path/from/where/you/want/to/read/file' ) as file_one, \
    open ( '/path/where/you/want/the/file/to/be/written' , 'w' ) as file_two:
    file_two.write(file_one.read())
```

4. While naming the function or methods always use self for the first argument. If the function argument name matches with reserved words then it can be written with a trailing comma.

Example:

```
# Python program to find the
# factorial of a number provided by the user.
# change the value for a different result |
num = 7
# uncomment to take input from the user
#num = int(input("Enter a number: "))
factorial = 1
# check if the number is negative, positive or zero
if num < 0 :
    print ( "Sorry, factorial does not exist for negative numbers" )
elif num == 0 :
    print ( "The factorial of 0 is 1" )
else :
    for i in range ( 1 ,num + 1 ):
        factorial = factorial * i
    print ( "The factorial of" ,num, "is" ,factorial)
```

```
PS D:\Users\Documents\FYCS SEM 2\IT Tools> python -u "d:\Users\Documents\FYCS SEM 2\IT Tools\it tools.py"
Enter a number: 10
The factorial of 10 is 3628800
PS D:\Users\Documents\FYCS SEM 2\IT Tools> |
```

WHAT IS OPEN SOURCE SOFTWARE???



- Open-source software is a type of computer software in which source code is released under a license in which the copyright holder grants users the rights to use, study, change, and distribute the software to anyone and for any purpose. Open-source software may be developed in a collaborative public manner.

Developer: Zmanda, Danese Cooper



WHAT IS THE HISTORY OF OSS???



- The Open Source Definition was originally derived from the Debian Free Software Guidelines (DFSG). Bruce Perens had composed the original **draft** of the DFSG, and it was edited, refined, and approved as formal policy by the Debian developer community in 1997.

WHAT IS OPEN SOURCE INITIATIVE???

- The Open Source Initiative (OSI) is a California public benefit corporation, with 501(c)3 tax-exempt status, founded in 1998. It promotes the usage of Open Source Software. The organization was founded in late February 1998 by Bruce Perens and **Eric S.**

FOUNDER OF OSI

- ERIC. S. RAYMOND



- BRUCE PERENS



HOW DOES OSS WORK??

-



- **Open-source software** (OSS) is any computer **software** that's distributed with its **source** code available for modification. That means it usually includes a license for programmers to change the **software** in any way they choose: They can fix bugs, improve functions, or adapt the **software** to suit their own needs.

EXAMPLES OF OSS...

- LINUX
- APACHE
- PERL, PYTHON, PHP, ETC. AND LANGUAGES
- MySQL
- MOZILLA FIREFOX
- ECLIPSE
-

IS OSS BUG FREE???

- The **open source bug** tracking tools are the stress-**free** way to gain knowledge of the **software** and to put up a new workflow within the process. Even they are **free** to use your team track issues at no cost by employing **free bug** tracking tool.