



**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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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 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.Sweety Garg)**

Date of Examination: (College Stamp)

Sr. No.	DATE	TITLE	SIGN
1.	2/2/21	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.	9/2/21	Creating account, repository on GitHub and Cloning repository in GitHub Page	
3.	16/2/21	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.	23/2/21	WRITING EMAIL	
5.	25/2/21	Using practical examples, describe green computing. List and explain the steps that you take to contribute to green computing	
6.	2/3/21	WRITING BLOGS	
7.	9/3/21	Implementing coding practices in Python using PEP8.	
8.	16/2/21	PRESENTATION: Open Source Software	

Practical 1- Introduction & Contribution to Wikipedia.

a. Description about Wikipedia & its features.

Wikipedia is a free, multilingual open-collaborative online encyclopedia created and maintained by a community of volunteer editors using a wiki-based editing system.

Special features on Wikipedia:

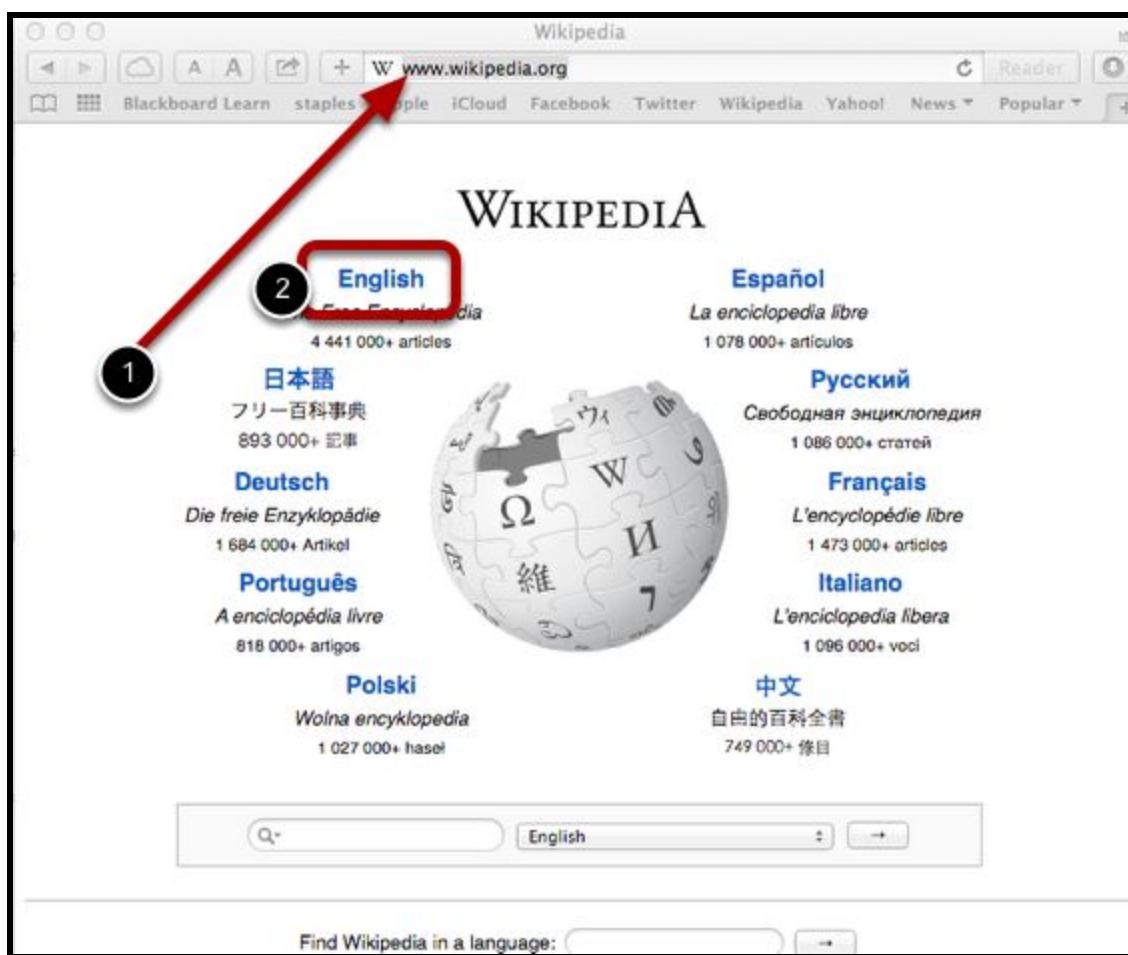
1. Turn pages into PDF books:- One of Wikipedia's most useful features is the ability to turn Wikipedia pages into a PDF, ODF or ePUB file. You can also order a print book. Various Wikipedia pages can be bundled together into one file, instead of many scattered files, making it easy to keep track of all of the information you need.
2. Celebrity voice recordings:- Recently, Wikipedia has been experimenting with celebrity voice recordings, so people can hear what the person sounds like.
3. The random tool:- You can enter a URL which will take you to a random Wikipedia page.
4. Wikipedia games:- If you get bored reading Wikipedia, then you can play some Wikipedia games.
5. Wikipedia nearby:- This feature only works on a laptop or mobile phone, and you need to enable the location settings on your browser, so Wikipedia knows where you are. Wikipedia brings up all of the local features which have their own Wikipedia pages. You can then view the relevant pages to get more information.
6. Public domain images on Wikipedia:- If you are looking for public domain images, you will find that Wikipedia is the best place to go. Wikipedia describes the whole concept of public domain images on

the site, along with providing a huge list of other public domain image sources.

7. Featured sections:- Every day, Wikipedia showcases featured articles, pictures, and sounds. The articles and pictures sections hold just over 4,000 items, whereas the sound section is only just over 200. The sounds page is currently inactive but is being kept for "historical reference".

b. Creating account on Wikipedia.

1. Go to www.wikipedia.org & choose "English".



2. Click “Create account” on the upper right of your browser.



3. Enter your account information & the captcha, & click “Create Account”.

A screenshot of the 'Create account' form on Wikipedia. The form is titled 'Create account' and has a sub-section 'Enter your information below.' It contains several input fields: 'Username' (with a note '(help me choose)'), 'Password', 'Confirm password', and 'Email address (optional)'. Below these fields is a 'Security check' section containing a CAPTCHA image with the text 'orateothee' and a text input field 'Enter the text you see above'. At the bottom of the form is a blue 'Create your account' button. Six numbered red arrows point to each of these fields and buttons, starting from 1 for the 'Username' field and ending at 6 for the 'Create your account' button.

c. Creating your page on Wikipedia.

1. After logging into your Wikipedia account, enter text in the search field that you seek to create as a page title.

Marylou Pereira

Read View source View history Marylou Pereira

Search Search Wikipedia [alt-shift-f] Marylou Pereira

- The arts
- Biography
- Geography
- History
- Mathematics
- Science
- Society
- Technology
- All portals

In the news

- Aung San Suu Kyi (*pictured*), the State Counsellor of Myanmar, is detained by the military in a coup d'état.
- A coordinated short squeeze targeting American hedge funds causes GameStop's stock price to spike.

If the title you entered does not already exist, is not technically restricted & is not creation protected, the resulting page will 1) tell you that it does not exist; 2) advise that you can create the page, & 3) will provide a red link to the page title.

2. Click the red-linked text you searched for.

Marylou Pereira

Advanced search: Sort by relevance X

Search in: Article X

Did you mean: **mary of pereira**

The page "Marylou Pereira" does not exist. You can ask for it to be created, but consider checking the search results for Jennifer Granholm Dorothy A. Johnson Julie Krone Mary Camelita Manning Barbara Roberts Mason Marylou Olivarez Mason Andra M. Rush Mary Ellen Sheets Lucille Farrier Stickel 94 KB (8,046 words) - 08:35, 4 February 2021

Federal Emergency Management Agency against states." Massachusetts Secretary of Health and Human Services Marylou Sudders cited a shipment of 3 million masks that the state had negotiated

3. The next page gives you three different options. Click on “Start creating”.

Before you create an article, you should read this guide.

- New to Wikipedia? See the [contributing to Wikipedia](#) page for everything you need to know to get started.
- Need interactive help? You can ask questions at the [Teahouse](#), [help desk](#) or through [live chat](#).

There are different ways to edit Wikipedia:

- Sandbox**
Ready to try editing? You can experiment in your own sandbox to get a feel for editing Wikipedia. This is a great place to start without affecting live articles.
[Start editing](#)
- Improve**
Wikipedia needs your help. Pick small editing tasks from a list, such as fixing spelling and grammar. Learn by making improvements to existing articles.
[Start helping](#)
- Article wizard**
If you already have experience with editing, you can use our article wizard to create new articles. In just a few steps, you'll be on your way to contributing to Wikipedia.
[Start creating](#)

4. You will be directed to the Wikipedia Article Wizard. Click on “Next”.

Project page [Talk](#) [Read](#) [View source](#) [View history](#)

From Wikipedia, the free encyclopedia

Wikipedia Article Wizard
Welcome

Thank you for your interest in contributing to Wikipedia!

Before creating a draft article, you can practice by first editing in [your personal sandbox](#). It's a great way to try out editing without affecting the way, see our [guide to your first article](#).

[Next](#) [Practice in your personal sandbox](#)

5. You will be directed to a page stating the rules regarding copyright, notability & referencing. Click on “Next”.

 Wikipedia Article Wizard

Referencing and notability

Your article **will be rejected** if the topic is not **notable**, is not **referenced properly**, or **violates copyright**.

Copyright

Do not **copy-paste** or **closely paraphrase** material from sources. Rather summarize what the source says in your own words.

Notability

The topic of an article must already be covered in **reliable sources** that are **independent** of the subject. These include academic journals, books, websites with a reputation for fact checking. Social media, press releases or corporate/professional profiles do not qualify.

Referencing

- Independent sources (see above) are *generally* acceptable and should be used before other sources.
- Non-independent sources (like company websites or press releases) can be used to verify **basic facts** only.
- Blogs, social media, and tabloid journalism are *generally not* acceptable.

To create a reference, use `<ref></ref>` as follows

Bizco was founded in 1942.<ref>[</ref>](https://www.nytimes.com/bizco)

More detail on how to cite different types of materials can be found at our [introduction to referencing guide](#)

Next 

6. You will be directed to a page with three different options- “I’m paid to edit”, “I’m writing about myself, or a close person/subject”, “I’m not connected to the subject”. Select the correct option regarding your article.

 Wikipedia Article Wizard

Common mistakes

There are a lot of common mistakes that are made with drafts. Here are a few you must watch out for:

- Writing about yourself or someone/something you’re close to**
Whether it is yourself, a family member, a friend, an employer, a mentor/business partner, writing about topics close to you (and the people close to you) in the article you will create may not be neutral.
- Copy-pasting material**
You must write the article in your own words, or it may be deleted.
- Not citing your sources**
Articles without independent reliable sources usually get deleted within days.
- Overly promotional language**
Terms like “leading expert” and “ground-breaking technology” sound great when promoting a product, but they do not belong on Wikipedia. Let’s look at some examples.

I'm paid to edit

I'm writing about myself, or a close person/subject

I'm not connected to the subject

7. You will be directed to a page to create your article. When you're done, click on "Publish page...".

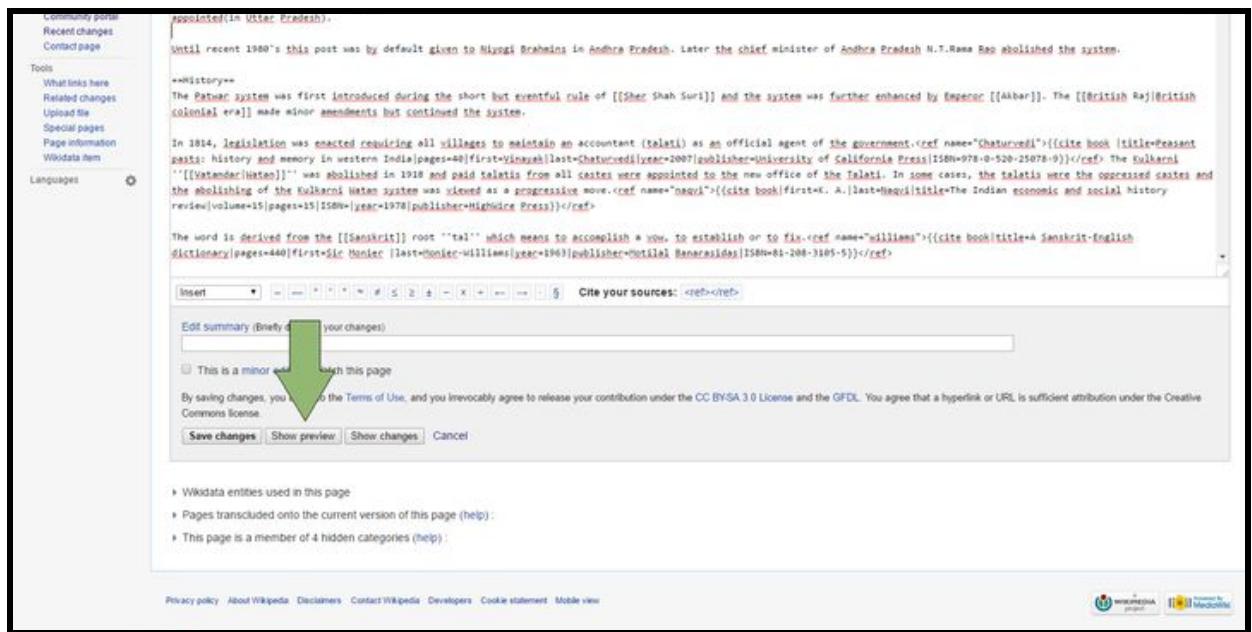
A screenshot of a Wikipedia draft page titled "Draft:Marylou Pereira". The page contains some placeholder text and a reference section. At the top, there is a toolbar with various editing tools. On the far right of the toolbar, there is a blue button labeled "Publish page...". A thick red arrow points directly at this button, indicating it should be clicked to publish the changes.

d. Editing a page on Wikipedia.

1. Find the article that has a mistake (wrong information, spelling, etc.)
2. Click on the "Edit" icon.

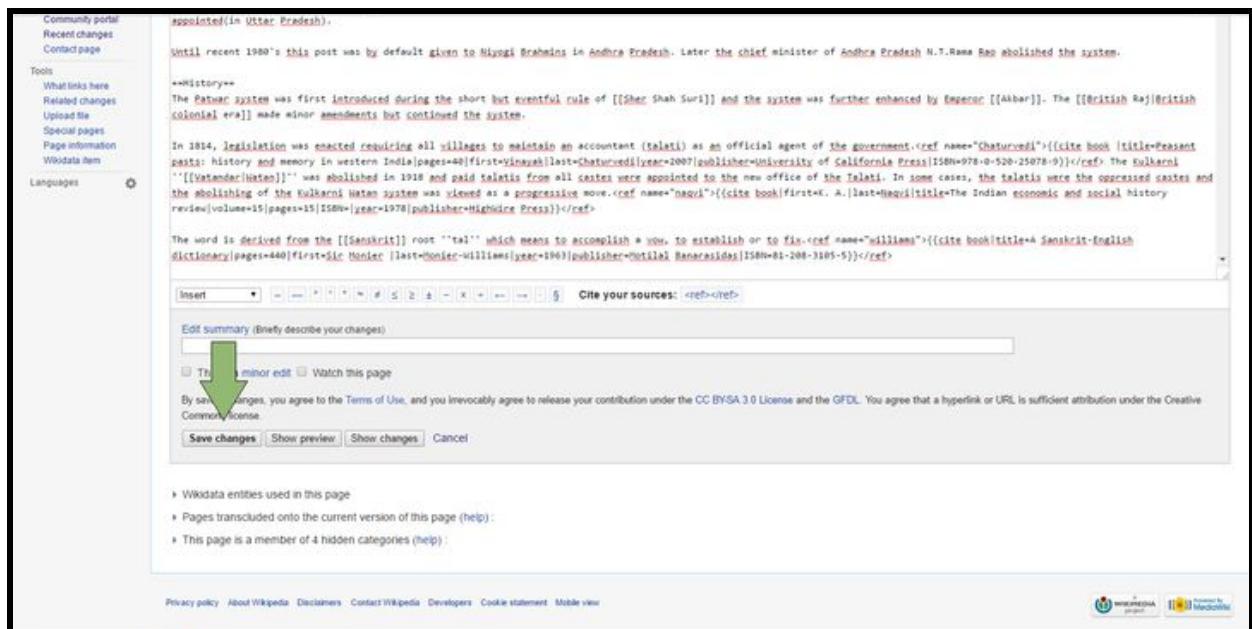
A screenshot of a Wikipedia article page for "Village accountant". The page title is "Village accountant". The main content area includes a summary, a table of contents, and a history section. At the top of the page, there is a navigation bar with links like "Read", "Edit", "View history", and "More". To the left of the "Edit" link, there is a blue "Edit" icon (a pencil symbol) which is highlighted with a large green arrow pointing towards it. This indicates that clicking this icon will allow the user to edit the article.

3. Correct the mistake you have found. When you're done, click on "Show preview". It will give you the chance to take a look at the article with your edits without saving the edit.



The screenshot shows a Wikipedia edit page for the article "Talati". The page content discusses the history of the Talati system in India, mentioning its introduction during the Mughal era and its abolition by the British. A green arrow points to the "Show preview" button at the bottom of the edit interface.

4. You can leave an edit summary to describe the changes that you have made. Click "Save changes" to save your edits.

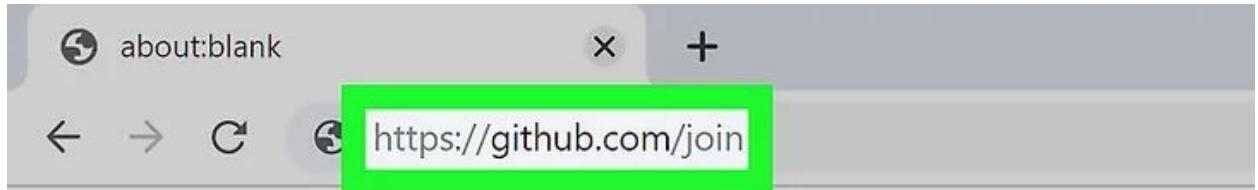


The screenshot shows a Wikipedia edit page for the article "Talati". The page content is identical to the previous screenshot. A green arrow points to the "Save changes" button at the bottom of the edit interface.

Practical 2- Creating Account, Repository on Github & Cloning Github Repository.

a. Creating account.

1. Go to <https://github.com/join> in a web browser.



2. Enter your personal details. In addition to creating a username & entering an email address, you'll also have to create a password. Verify your account by solving the puzzle.

The screenshot shows the "Create your account" form on GitHub. The form fields are as follows:

- Username ***: marylou-pereira512 (green checkmark)
- Email address ***: xyz@gmai.com (blue outline, green checkmark)
- Password ***: (red asterisks)
- 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**: A large empty text area with the placeholder text "Please solve this puzzle so we know you are a real person".

3. Click the green “Create an account” button. Its below the form.

The screenshot shows a user interface for creating a GitHub account. At the top, there is a password field placeholder '*****' followed by a note: 'Make sure it's at least 15 characters OR at least 8 characters including a number and a lowercase letter.' Below this is a 'Learn more.' link. A section titled 'Email preferences' contains a checked checkbox labeled 'Send me occasional product updates, announcements, and offers.' Underneath is a 'Verify your account' section containing a CAPTCHA image with the text 'Please solve this puzzle so we know you are a real person' and a 'Verify' button. To the right of the CAPTCHA is a speaker icon. At the bottom of the page is a large blue button with a green border and rounded corners, labeled 'Create account'. Below this button is a note about agreeing to the Terms of Service and Privacy Statement, and about receiving account-related emails.

.....

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

Please solve this puzzle so we
know you are a real person

Verify

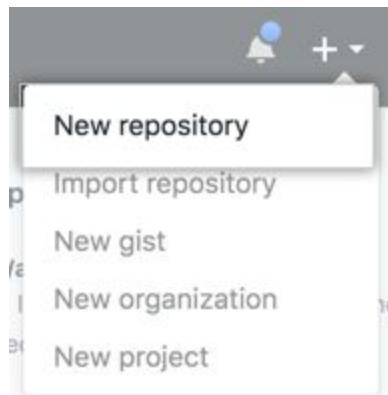
Speaker icon

Create account

By creating an account, you agree to the [Terms of Service](#). For more information about GitHub's privacy practices, see the [GitHub Privacy Statement](#). We'll occasionally send you account-related emails.

b. Creating repository.

1. In the upper-right corner of any github page, use the + drop-down menu, & select “New repository”.



2. Type a short, memorable name for your repository.

A screenshot of the GitHub "Create new repository" form. It shows the "Owner" field set to "marylou-pereira" and the "Repository name" field set to "CollegeAssignments(NKC)". Below the fields, a message says "Great repository names are short" and "Your new repository will be created as CollegeAssignments-NKC-". A green checkmark icon is next to the repository name field.

3. Optionally, add a description of your repository.

A screenshot of the "Description (optional)" field in the repository creation form. The field contains the text "My college (NKC) assignments.".

4. Choose a repository visibility.

A screenshot of the "Visibility" selection section. It shows two options: "Public" (selected with a blue radio button) and "Private" (unselected with a white radio button). The "Public" option has the description "Anyone on the internet can see this repository. You choose who can commit." and the "Private" option has the description "You choose who can see and commit to this repository.".

5. Select any option to initialize your repository with.

Initialize this repository with:

Skip this step if you're importing an existing repository.

Add a README file

This is where you can write a long description for your project. [Learn more.](#)

Add .gitignore

Choose which files not to track from a list of templates. [Learn more.](#)

Choose a license

A license tells others what they can and can't do with your code. [Learn more.](#)

This will set `main` as the default branch. Change the default name in your [settings](#).

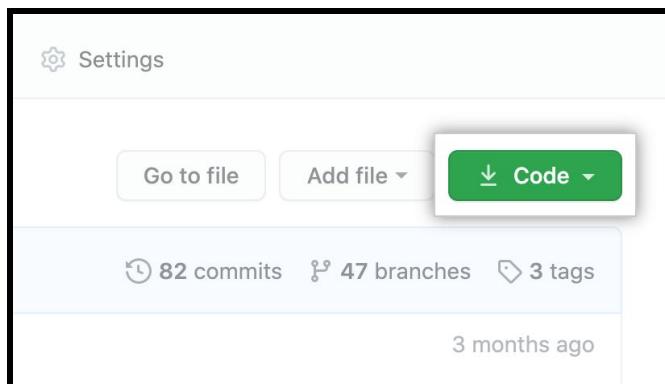
6. Click “Create repository”.

This will set `main` as the default branch. Change the default name in your [settings](#).

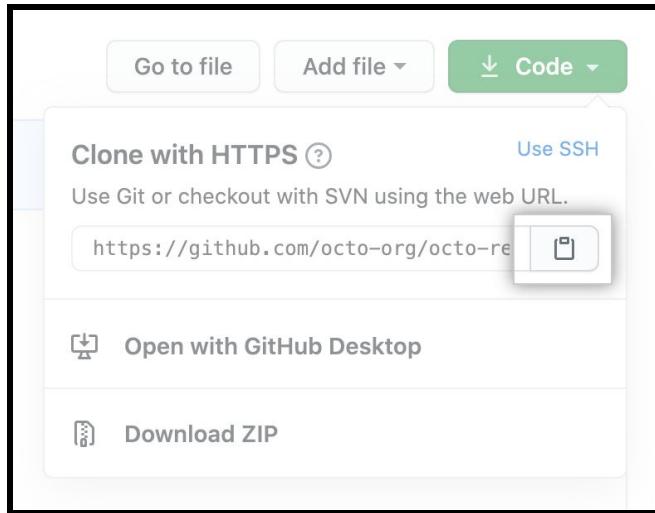
Create repository

c. Cloning repository.

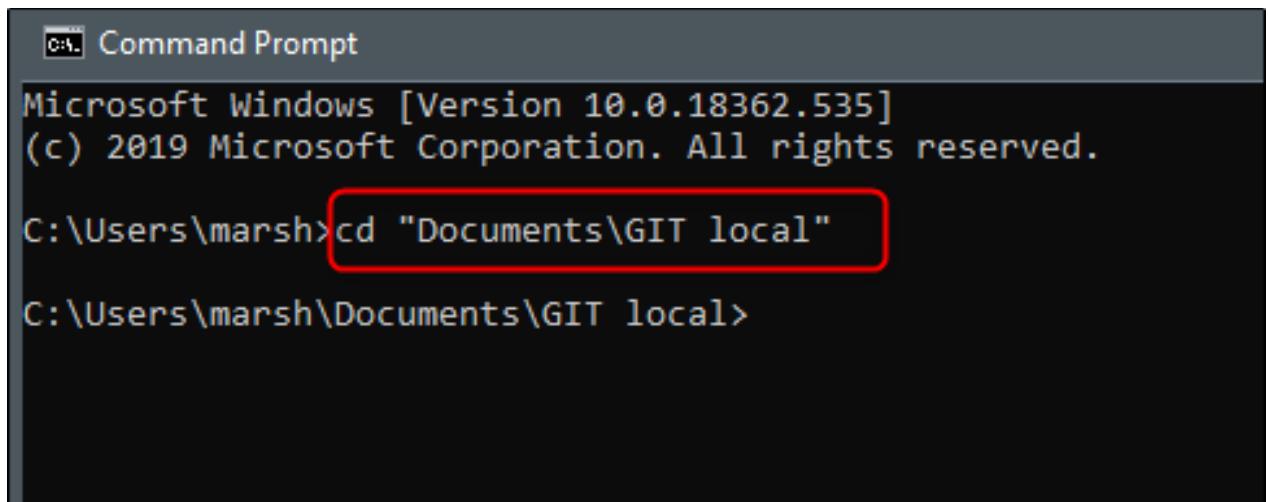
1. On github, navigate to the main page of the repository.
2. Above the list of files, click “`Code`”.



3. To clone the repository using HTTPS, under “Clone with HTTPS”, click .



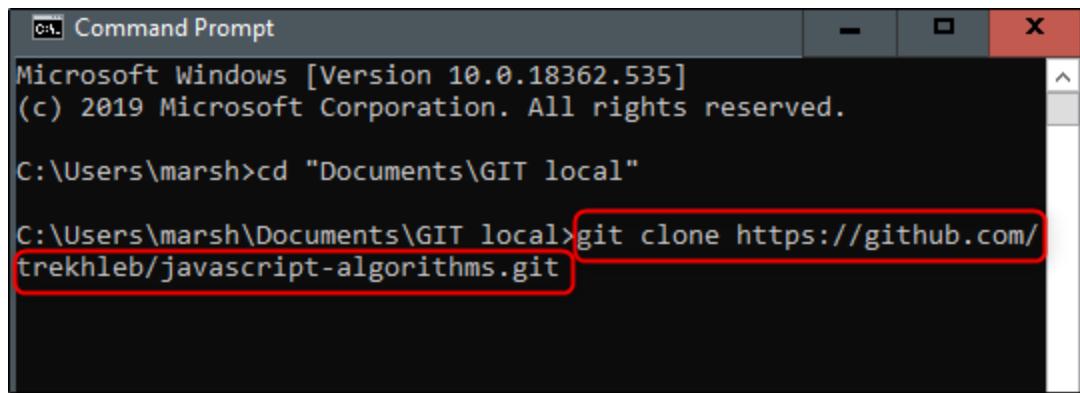
4. Open command prompt.
5. Change the current working directory to the location where you want the cloned directory.



```
Command Prompt
Microsoft Windows [Version 10.0.18362.535]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\marsh>cd "Documents\GIT local"
C:\Users\marsh\Documents\GIT local>
```

6. Type git clone, & then paste the URL you copied earlier.

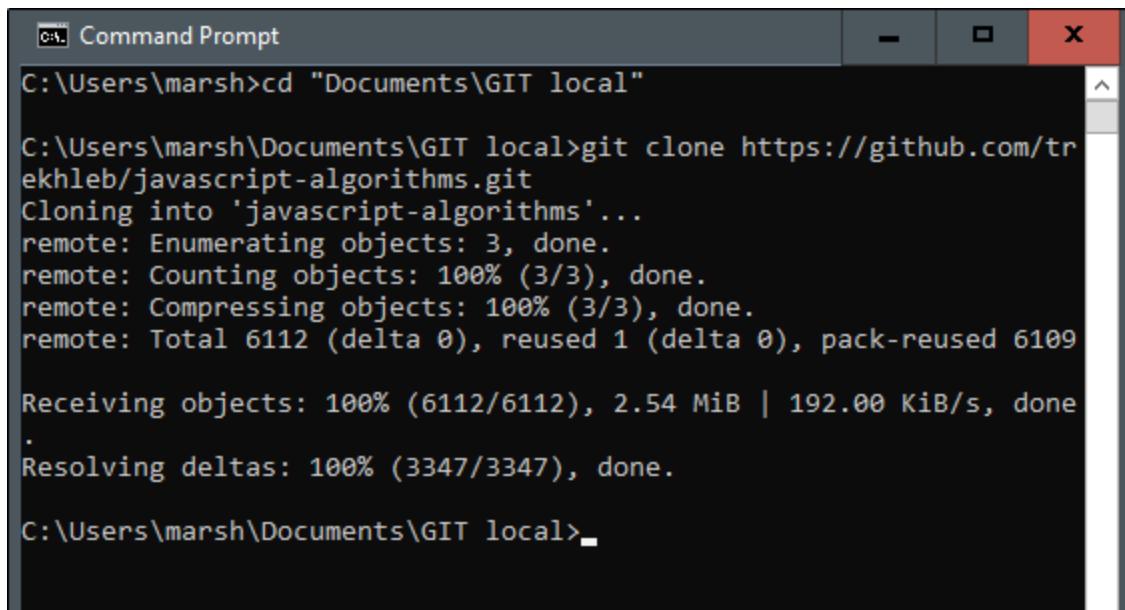


```
Microsoft Windows [Version 10.0.18362.535]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\marsh>cd "Documents\GIT local"

C:\Users\marsh\Documents\GIT local>git clone https://github.com/trekhleb/javascript-algorithms.git
```

7. Press Enter to create your local clone.



```
Microsoft Windows [Version 10.0.18362.535]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\marsh>cd "Documents\GIT local"

C:\Users\marsh\Documents\GIT local>git clone https://github.com/tr
ekhleb/javascript-algorithms.git
Cloning into 'javascript-algorithms'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 6112 (delta 0), reused 1 (delta 0), pack-reused 6109

Receiving objects: 100% (6112/6112), 2.54 MiB | 192.00 KiB/s, done
.
Resolving deltas: 100% (3347/3347), done.

C:\Users\marsh\Documents\GIT local>
```

Practical 3- Basic Understanding on Free & Open-Source Software

a. Open Source Software

Open source software (OSS) is software that is distributed with its source code, making it available for use, modification, and distribution with its original rights. Source code is the part of software that most computer users don't ever see; it's the code computer programmers manipulate to control how a program or application behaves. Programmers who have access to source code can change a program by adding to it, changing it, or fixing parts of it that aren't working properly. OSS typically includes a license that allows programmers to modify the software to best fit their needs and control how the software can be distributed.

Eg.: GNU/Linux, Mozilla Firefox, VLC media player, SugarCRM, GIMP, VNC, Apache web server, LibreOffice, jQuery.

b. Free Software

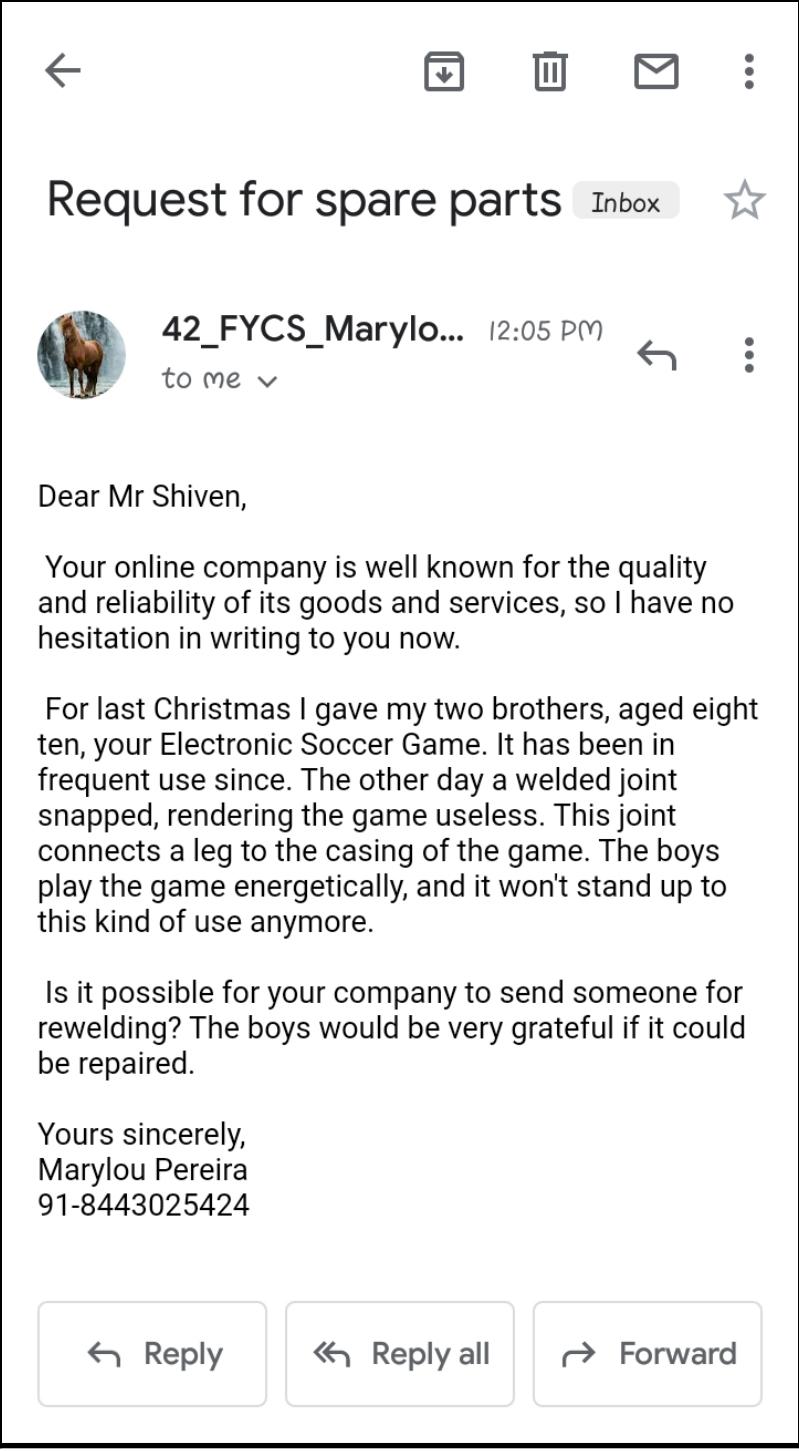
Free software is computer software distributed under terms that allow users to run the software for any purpose as well as to study, change, and distribute it and any adapted versions. Free software is a matter of liberty, not price: all users are legally free to do what they want with their copies of a free software regardless of how much is paid to obtain the program. Computer programs are deemed "free" if they give end-users ultimate control over the software and, subsequently, over their devices. The right to study and modify a computer program entails that source code—the preferred format for making changes—be made available to users of that program.

Eg.: Linux kernel, BSD and Linux operating systems, GNU Compiler Collection and C library, MySQL relational database, Apache web server, Sendmail mail transport agent.

c. Difference between Free & Open Source Software

Free Software	Open Source Software
Freedom to run program for any purpose.	It has distribution of license.
Freedom to study about program.	Availability of source code.
Freedom to distribute copies of software.	Free distribution.
Freedom to modify/improve program & release improvements to public.	Integrity of author's source code.
Free software focuses on providing a moral/ethical argument for open source.	Open source tends to focus on providing an economic/business argument for free software.
Eg.: Linux kernel.	Eg.: Mozilla Firefox.

Practical 4- Writing Email

A screenshot of an email application interface. At the top, there are standard icons for back, download, delete, reply, and more. The subject line is "Request for spare parts" with an "Inbox" button and a star icon. The sender is "42_FYCS_Marylo..." and the time is 12:05 PM. The recipient is "to me".

The message body starts with "Dear Mr Shiven," followed by a paragraph about a broken electronic soccer game. Then, it asks if someone can come to re-weld it. Finally, it concludes with a signature.

At the bottom, there are three buttons for "Reply", "Reply all", and "Forward".

Request for spare parts Inbox star

42_FYCS_Marylo... 12:05 PM Reply ⋮

to me ⋮

Dear Mr Shiven,

Your online company is well known for the quality and reliability of its goods and services, so I have no hesitation in writing to you now.

For last Christmas I gave my two brothers, aged eight ten, your Electronic Soccer Game. It has been in frequent use since. The other day a welded joint snapped, rendering the game useless. This joint connects a leg to the casing of the game. The boys play the game energetically, and it won't stand up to this kind of use anymore.

Is it possible for your company to send someone for rewelding? The boys would be very grateful if it could be repaired.

Yours sincerely,
Marylou Pereira
91-8443025424

Reply Reply all Forward

Practical 5- 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 impact. With today's powerful systems, not to mention the myriads of peripheral devices, the home office is an area of the house where energy is wasted and lost. In the following ways you can contribute to green computing at home:

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 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. 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 to its current state when you need it again.

2) 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.

3) 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 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.

4) Use a laptop instead of desktop

Small size.

Fairly low-Power CPU.

Compact screen.

Low cost.

Uses flash memory for storage.



Laptops are much better for the environment than desktop computers as they have components which require less power. If you don't need a desktop computer consider buying a laptop instead, or if you have both use the laptop as much as possible before considering the desktop.

5) Recycle responsibly



Computer hardware is filled with different material which can be hazardous to the environment. So make sure you dispose off old components effectively. Don't just throw broken technology in the bin. Take the time to trace local recycling organizations. There should be companies which 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 6- Writing Blogs

← → 🔍 mysketicalblog.blogspot.com

Marylou's Diet Desserts

Delicious vegetarian diet dessert recipes!

Search this blog





Fruit Parfait

on March 19, 2021



Apple Jaggery Cake

on March 18, 2021



Marylou

Hey I'm Marylou! Welcome to my blog! I'm currently doing my Bsc in Computer Science. I like making desserts in my free time😊

Visit profile

Labels ▾

← Marylou's Diet Desserts

How to make Mocha Mousse

Mocha Mousse is a quick, no-bake dessert that's sure to impress! I first learned to make Mocha Moose from my friend's mom. This is also the first dessert I learned to make. Then I made it for my family with my own style. They enjoyed it as much as I enjoyed making it for them. This encouraged me to learn making desserts.

I'm happy to share my own recipe with you all. I have not used eggs. This is a 100% vegetarian recipe. A great combination of coffee and chocolate! Hope you all will like it!



Practical 7- Implementing Coding Practices in Python using PEP8

PEP 8 is a document that provides guidelines and best practices on how to write Python code. It was written in 2001 by Guido van Rossum, Barry Warsaw, and Nick Coghlan. The primary focus of PEP 8 is to improve the readability and consistency of Python code. PEP stands for Python Enhancement Proposal, and there are several of them. A PEP is a document that describes new features proposed for Python and documents aspects of Python, like design and style, for the community.

The following program is written following the PEP8 rules:

```
1 #Program to calculate area & perimeter of a rectangle.
2 class Rectangle:
3     def calculate_area(self):
4         print("Enter length: ")
5         self.length = float(input())
6         print("Enter breadth: ")
7         self.breadth = float(input())
8         area = self.length*self.breadth
9
10        print("Area of rectangle= %f" %(area))
11
12    def calculate_perimeter(self):
13        perimeter = 2 * (self.length+self.breadth)
14
15        print("Perimeter of rectangle= %f" %(perimeter))
16
17
18 c = Rectangle()
19 x = c.calculate_area()
20 y = c.calculate_perimeter()
```

OSS

Open Source Software



GROUP NO. 5

TANISH MARICK - 28

MARYLOU PEREIRA - 42

SATISH SAHANI - 71

DARREN PEREIRA - 41

VEDANT PHANASGAONKAR - 43

ABHISHEK SARKATE - 51

SANIYA SHAIKH - 56

INTRODUCTION

- What is an Open Source Software ?
- Source code can be repurposed into other new software
- The LAMP

ORGANIZATIONS

● Mozilla
Foundation

● Apache
Software
Foundation

● Eclipse
Foundation

● OW2

● Linux
Foundation

● Debian
Project

Groups promoting the use of OSS



Open Source for
America

Open Source Software
Institute

Mil-OSS

ADVANTAGES AND DISADVANTAGES

ADVANTAGES

- Highly reliable
- Promotes innovation
- Evolving continuously
- Fosters learning

DISADVANTAGES

- Non-user friendly
- Less personalized support
- Liabilities and warranties
- Security threats

Differences Between Open Source and Closed Source Software

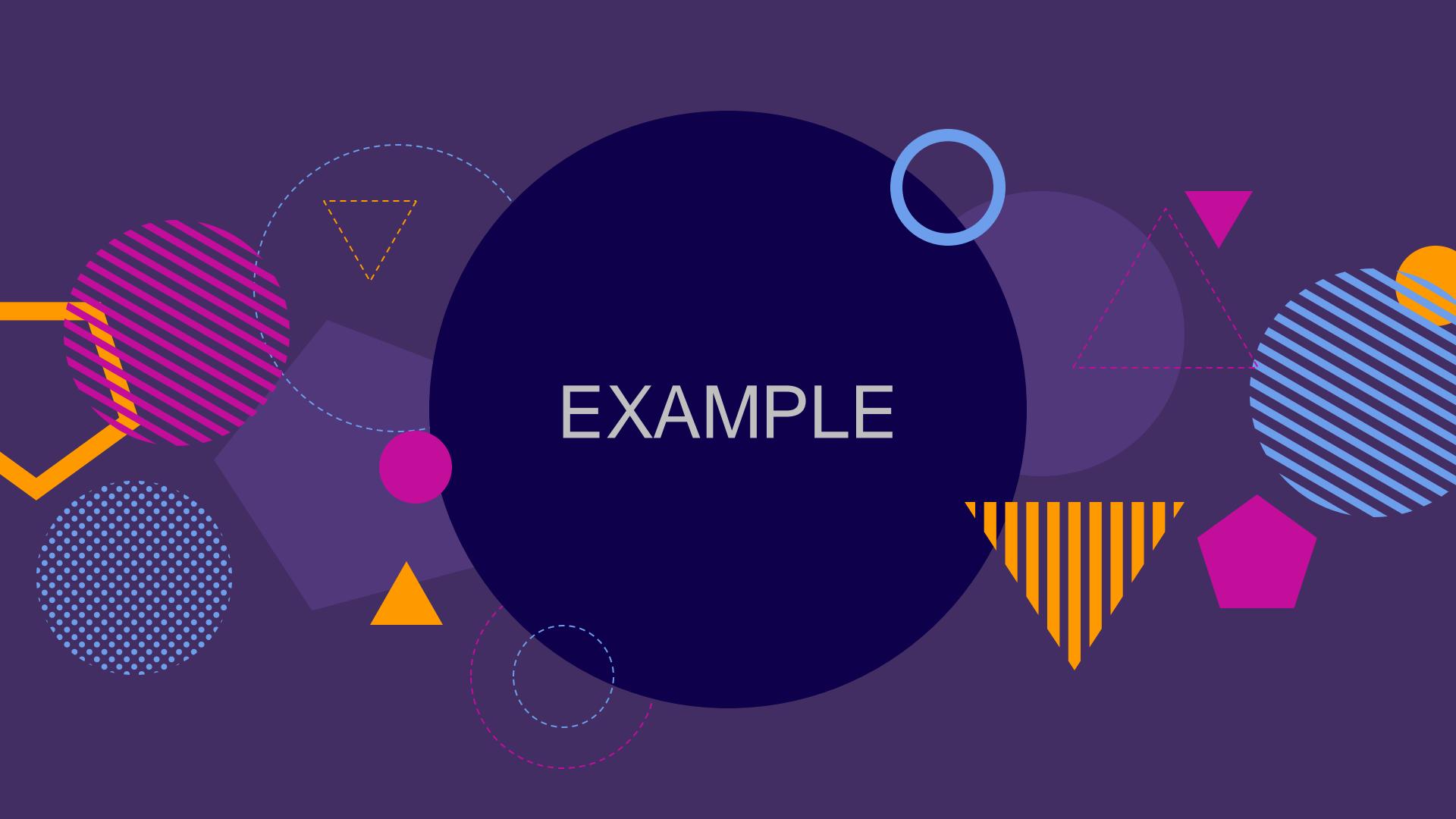
- □ Price policy
- □ Security
- □ Quality of support
- □ Source code availability
- □ Usability

OSS Security

- OSS possessing security threat
- More due diligence on OSS security needed
- Find and Fix

Synopsis Offerings for OSS Security

- Open Source Software and third-party code audit
- Open Source risk assessment
- Web services and API risk audit



EXAMPLE

PHP : Hypertext Preprocessor

- Websites and Web applications
(server side scripting)
- Command line scripting
- Desktop (GUI) application



Thanks!