

Project

Overview

It is now a common practice that everyone from zero day or no experience person to 20 years experienced persons who are in industry uses a version controlling system such as Git. When controlling version control systems Github takes a major place among others. So anyway today's topic is not teaching about Github! Today we are going to talk about how to contribute to CoDeKu Paid Micro Tasks and work on an open source project on Github.

For a demonstration example I have created a brand new Github Account and it now looks like this.



So as you can see there is nothing except empty windows and tabs. So we're gonna make it busier!

So we will be use <u>https://github.com/CoDeKu-Labs/</u> as the resource.

Get into the business

Step 01

First we need to find out a platform or an organization to contribute. In this case we're using CoDeKu-Labs Github Organization. Now you need to follow <u>https://github.com/CoDeKu-Labs/</u> link first.

Now you will be able to see a page similar to the above image. Now you can click the *follow* button and save that organization in your list. It make you easier to access that organization later without finding for links everywhere



Step 02

Then you can go to the relevant repository. You can find repositories by clicking the 2nd Item (*Repositories*) on the tab bar.



Then you will be able to see all the repos available. In this case we need to use https://github.com/CoDeKu-Labs/codeku-devops-cloud-micro-tasks

Step 03

After selecting the repo, you will be able to see a page like below. There you can see all the project and its folder structure. Below that you can find the official documentation and readme of the project. So it is a best practice to read it from very begin to the end to get a clear overview of the project and how it is going forward.

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	tharinduk001 Merge pull request #3 from tharing	duk001/main 🚥	4f2eadd - 17 hours ago 🛛 8 Commits	CoDeKu Paid Micro Tasks Repository	
	CICD			C Readme	
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	CoDeKu DevOps and	Contributors 2			
	Welcome to CoDeKu's DevOps and Cloud Mi real-world projects and clients on Upwork, of	icro Tasks repository! This collection of t ffering you practical and hands-on expe	tasks is specially curated from rience in the latest DevOps and	tharinduk001 Tharindu Kalhara	

Step 04

Now you need to select a project to work on! OR see the available projects at this moment. So, to do that, you need to click on *Projects*. Then you will be able to see a page like this and select the <u>DevOps & Cloud Micro Tasks</u> project there.



Step 05

Then you will be able to see a list of available tasks there as follows. Browse them, surf them and find the most suitable one or suitable many tasks for you. Then you need to keep a note on that task code that has been mentioned.

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CoDeKu-Labs / Project		Q, Type [] to search			• 0 n 🗠 🄶		
DevOps & Cloud Micro Tasks Overview Soard View							
= Filter by keyword or by field							
Task Code •••	Title ···	Assigners •••	Status ···	Labels ···	Payout (\$)		
1 CPT-DC-001	Dockerfile for a Simple Python App #2	🅞 nimeshmora					

In this case there is one task available. In that row you can find more useful data relevant to that task such as *Task Code, Task, Assignees (you do not need to think about this), Status, Labels and The payment amount.* If you want to clearly see the available projects, you can click on the Board view.



Then you'll be able to see whether the tasks are done or not. You need to check the Status Column and check whether it is to-do.

If it is -> <u>to-do</u> -> YOU CAN WORK ON THAT PROJECT If it is -> <u>done</u> -> THIS TASK IS ALREADY COMPLETED

So choose a task that has a **to-do** flag which indicates that no one has completed that before. Once you raise a PR it will be evaluated and merged (the best solution) on every weekends (Saturdays & Sundays).

So, when you have completed these steps, you have the desired tasks codes with you. So let's see what are the next steps to follow.

Step 06

So, actually the real game is starting from here! You need to come back to the <u>repository</u>. Then what you have to do first is fork the repository.

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As you can see in the image above, you can fork the repo. Before that make sure to give a star to that repository, so that it can make the repository a more popular one. So then click on the fork button. Fork means that you will create a copy of that repository into your own github account. So there you can make changes to the project to whatever desire you want to do so.

Fork CoDeKu-Labs/codeku-dev × +	- c	9 X
← → C 💱 github.com/CoDeKu-Labs/codeku-devops-cloud-micro-tasks/fork	G #	
Create a new fork A fork is a copy of a repository. Forking a repository allows you to freely experiment with changes without officiate the activity from original forder forder.		Ĥ
Required fields are marked with an asterisk (*).		
Owner * Repository name *		
By default, forks are named the same as their upstream repository. You can customize the name to distinguish it further.		
Description (optional) CoDeKu Paid Micro Tasks Repository		
Copy the main branch only Contribute back to CoDeKu-Labu/codeku-devops-cloud-micro-tasks by adding your own branch. Learn.more.		
① You are creating a fork in your personal account.		
Create fork		

Then a page like above will be displayed and you need to do nothing except pressing *Create fork* button below. You have now completed a significant amount of process up-to this point. So let's dive into the rest of the parts also.

Step 07

Now you have a forked copy of the original repository in your personal github profile. Now you have to do is working on it.

From now onwards the procedure is normal github procedure which you have been familiar before too.

1. First you need to clone that repo into your local machine.

Go to your desired work directory and open cmd or whatever terminal you have and execute the following command.

git clone https://github.com/{GITHUB USERNAME}/codeku-devops-cloud-micro-tasks

Then you will have a local copy of the project in that work directory as follows.



2.Start your work - Start Coding!

Open the project from your favorite code editor! we'll use VSCode today. Then you have to make a work directory specified to you. So, please do this step correctly and without any mistakes by carefully reading this documentation.

1. You need to first select the task category (Docker and Containerization / Kubernetes/ Cloud).

2.Then, create a folder with Task name like CPT-DC-001

3. Then create a folder using the below naming convention inside that task folder. So you have to simply make a folder by renaming it as follows.

[TASK CODE]_[YOUR GITHUB USERNAME]

ex:- CPT-DC-001_TharinduCoDeKu

> 🖿 CICD Cloud Services Docker and Containerization > CPT-DC-001_kalharaCodes CPT-DC-001_TharinduCoDeKu 🧕 jenkinsfile The solution.txt Instructions.txt М > Documentation and Blog Writing > 🐼 Infrastructure as Code > 🔝 Kubernetes > 📑 Monitoring and Logging 👯 LICENSE README.md

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4. So now you can do your development or task related thing there and add all files there accordingly.

The folder structure for your convenience.

TASK CATEGORY FOLDER > TASK CODE FOLDER> [TASK CODE_YOUR GITHUB USERNAME FOLDER]

ex :- Kubernetes > CPT-KB-001 > CPT-KB-001_TharinduCoDeKu

3. Push Code to Github

Now you have worked on this project or task and you can check it locally by running unit tests or whatever suitable. Finally after all the stuff, you have to push this code to github.

You can push this code by using the Graphical user Interface or CMD as following.

git add . git commit -m "{TASKCODE_Commit Message}" git push

MUST:- When you push to the github always you need to start your <u>commit</u> <u>message</u> with TASKCODE_MESSAGE.

Ex:- CPT-DC-001_Added Docker Files

All the PR's which doesn't follow up this convention will be ignored.

You can see now the local project is pushed in to to your remote repo.



Step 08

Now you have pushed your project to your remote repo. So now it is on your personal github. Now you might be thinking about how to link this with the original project repository. That is very easy. Now you want to do is, just press on *Contribute* and then *Open Pull Request*.

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CICD		devops-cloud-micro- tasks:main				
Cloud Services				O watching ♥ 0 forks		
Docker and Containerization		Open a pull request to contribute your changes upstream.				
Documentation and Blog Writing				Releases		
Infrastructure as Code		Open pull request		No releases published Create a new release		
Kubernetes	Updated Instructions			Packages		

Hooray! Congratulations! You have now completed all the steps and you have now contributed for an open source project!

Conclusion

What Happens Next?

So now you may have a curiosity about what's happening under the hood after you raise a PR. So after you made a PR, a PR will be shown on the owners of the original repo. They can visualize the changes that you have made to the codebase or the project and evaluate them. After evaluating, the best matching solution will be merged to that original repo and it will be kept forever as a part of that repository.

Some Final Words

You can get a huge hands on experience by doing CoDeKu Paid Micro Tasks while earning dollars at the same time. So please read this documentation very carefully from beginning to the end.

So start contributing to open source projects and become a hero on planet earth!



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