Programming in Python

Seminar Tasks 1

Deadline: 23:59 Oct 10, 2021

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Task 1. Ubuntu Linux Installation
Install Ubuntu.
1) Standalone version
2) Dual boot (Ubuntu + Windows)
3) For VirtualBox installation, refer to https://linuxhint.com/install_ubuntu_18-04_virtualbox/ or other similar sources.
4) For Wubi installation, refer to https://github.com/hakuna-m/wubiuefi/releases

You can get Ubuntu from https://www.ubuntu.com/download/desktop

Task 2. GitHub account creation
Visit GitHub.com and create a new account if you don't have, otherwise you can use your existing Github account.

Task 3. Project and repository creation
Create a new project (repository) called **seminar1** by following the **Step 1** in the tutorial https://guides.github.com/activities/hello-world/

Task 4. Git setup
You need to install and setup Git on Ubuntu.
In the terminal of Ubuntu type:

```
$sudo apt install git-all
```

Provide your identity:

```
$ git config --global user.name "John Doe"
$ git config --global user.email johndoe@example.com
```

Select your default editor edit, nano, emacs or vim:

```
git config --global core.editor gedit
```

Task 5. Python 3 installation
In case, your Ubuntu system does not have Python 3 on board, please install it using this tutorial:
https://www.digitalocean.com/community/tutorials/how-to-install-python-3-and-set-up-a-programming-environment-on-ubuntu-18-04-quickstart

Task 6. Virtualenv setup
To setup Virtualenv, refer to slide 16 of the lecture 1 or use some other tutorial, say this: https://www.digitalocean.com/community/tutorials/how-to-install-python-3-and-set-up-a-programming-environment-on-ubuntu-18-04-quickstart

Don't forget to activate your virtual environment!

Task 7. Project cloning and initial commit to Github
Learn the basics of Git commands from any basic tutorial (no branching and merging yet !!!) on the web like:
http://rogerdudler.github.io/git-guide/

Now that you have your Python environment setup, clone (copy) your repository from Github like:
```
$ git clone https://github.com/USERNAME/REPO.git
```

For existing repository on computer:
```
$ git init
$ git branch -M main
$ git remote add origin https://github.com/USERNAME/REPO.git
```

Currently it is empty (possibly with only one README file). Please add some information to your README.md file (create it if it doesn't exist) such your full name, Github account name, repository name, etc.
Again don't forget to activate your virtual environment before editing!
Once you fill in your file, save, commit and push it to the Github using commands:

```
$ git add .                         # add all your files to git stage area
$ git commit -m "initial commit"  # commit your file changes to local git
$ git push origin main          # upload your local files to the Github
```

Task 8. "Hello, World!" Program
Write your first program, which:
1) Does some arithmetic computations
2) Outputs the result
Name your main program as **main.py**.

Task 9. Commit to Github
Commit your work into Github and send to the instructors your **Github account name** and link to your project (repository) name - `https://github.com/USERNAME/REPO.git`.

Checklist

No	Criteria	Points	Done
1	Ubuntu Linux installation	4	
2	GitHub account creation	2	
3	Project and repository creation	2	
4	Git setup	2	
5	Python 3 installation	2	
6	Virtualenv setup	2	
7	Project cloning and initial commit to Github	2	
8	“Hello, World!” Program	2	
10	Commit to Github	2	
	Total	**20**	