

Spider Web Dev Inductions

Task 0

Task 0.1 Gitty about Git

Task 0.2 A personal webpage? Why not?

Task 0.3 Fastest fingers first

Introduction

First of all things, nothing is a burden as long as you love it. We at Spider believe strongly in this principle. And we obviously would expect the same from our future members. So, feel relaxed and be cheerful while solving the tasks we will be giving during the course of our inductions process, as the main aim is not to see who finishes first, but to find who has travelled the farthest. Let's begin our journey...

Task 0.1

Gitty about Git

A good developer is not the one who only develops well but also collaborates well. So, Git is the most important thing before entering the world of dev, and we would like this to be the first thing you learn, as this would prove to be very useful throughout the course of your induction process.

Basically, Git is one of the most popular Version control systems out there.

Here is the main advantage of using a VCS:

Using a VCS generally means that if you screw things up or lose files, you can easily recover.

I guess the last point might be more than enough for a reason to get motivated to learn Git. (You can revert your mistakes, yeah!)

A simplified read on Git

(<https://www.atlassian.com/git/tutorials/what-is-version-control>)

(just the first half)

Using Git:

Linux (Ubuntu, Fedora, Red Hat....)

Yay! You're ready to go!

Windows

We would suggest you guys to dual boot a linux system, the following link might be a good guide

(<https://www.lifewire.com/ultimate-windows-7-ubuntu-linux-dual-boot-guide-2200653>)

If you feel you might lose your data or linux might eat up your system, no worries. Git provides an alternative way of doing stuff from Windows itself -the Git Bash on windows

(The link for Git Bash Download - <https://git-scm.com/downloads>)

Some basic commands:

git init
git add
git commit
git push
git merge
git branch
git checkout
git pull

Now that you're familiar (or try to be soon ;)) with the most basic prerequisite to be a developer, let's get into the realm of web dev. Below are the first set of tasks that you need to complete by 10 days. Fret not if you aren't able to, but it's advisable to complete one task before going for the next as all tasks have been designed in a progressive manner and you'd find it really easy if you follow the path.

One of the most important instructions that you need to follow throughout the induction process:

If you're stuck anywhere, PLEASE feel free to contact your mentor, or for that matter, any web dev senior, coz....that's what we are there for.

YOUR TASKS

Task 0.1

a) Create a GitHub repository. Create a readme.md file and write about yourselves using markdown (google it). You can show your creativity here.

b) Make a commit and push your changes.

c) Now, create a new branch from the current commit and add a new file named sorting.cpp and write your favourite sorting algorithm in that file and push it to your newly created branch.

d) Again branch-out from the current branch and add a commented line at the start of the file which should contain your first-name and your roll number. Now commit the changes and push to your new branch. Eg: //Rohith 106115070

e) Now, come back to the previous branch where the sorting.cpp file was created and add a commented line containing your last-name and your roll number and commit it. Eg: //Balaji 106115070

f) Merge the new branch with the current branch. You will be having some merge conflicts :p. Fix the conflicts and create a new commit.

g) Now merge the current branch with the master branch. Add a tag named "Final" to the last commit and push your code.

Resources:

How to write a readme.md file:

<https://changelog.com/posts/a-beginners-guide-to-creating-a-readme>

<https://guides.github.com/features/mastering-markdown/>

Git tutorials and guides:

<http://rogerdudler.github.io/git-guide/>

<https://confluence.atlassian.com/bitbucketserver/basic-git-commands-776639767.html>

Task 0.2

Personalized web page

Ready to get started? Build your own site from scratch.

Now that you are comfortable with the concepts of git, Create your own personalised web page using the concepts of HTML ,CSS and javascript in **github.io**. Explore these topics and include your wildest imagination to make the web page attractive.

For more details about github pages, refer

<https://pages.github.com/>

Task 0.3

Word Speed Count

Just to get a hang of front-end a little bit more, here is the final part of task 0.

Create your own typing speed counter-

What a typing speed counter does?

You will be given a small piece of text that will be visible on your screen while you're typing. Your goal is to type it out as fast as you can, more importantly, **type it correctly** as fast as you can.

Your app needs to check character by character, and in case if character in text and character you typed out doesn't match, the cursor shouldn't be allowed to move further. Once the user has finished writing, display his typing speed.

Typing speed = no. of characters typed / time taken in seconds

Bonus: You can highlight the character in green if correct and red if wrong.

Sample site: <http://play.typeracer.com/>

Your app just needs to handle a single user

So Let's get started!!

SUBMISSION

You need to submit the GitHub link to your respective mentors. The mode of submission is up to your mentor's decision (WhatsApp, Telegram).

Deadline : 17th May 2018

This is a soft deadline and can be extended under valid reasons. We just want you to explore new stuff and learn as much as possible over the summer.

Happy Coding!!