Getting Started with Web Programming

(make a copy of this document and add your name to the title of the document)

Prerequisites - *Laws for a Learner*

BE HONEST TO YOURSELF
This is the most important value in life. Honesty is a choice.

BE HONEST TO YOURSELF
When a person decides to be honest he will develop two other qualities of the mind, **perseverance** and **courage**, without which no one will ever taste success.

BE HONEST TO YOURSELF
Always remember there is only one person you can fool in the world and that is yourself. Honesty is the defense of the mind not to fall into delusion.

YOU MUST NOT COPY PASTE
One thing you should never do is copy paste code. *All code for these tasks must be typed in*. You can copy but you cannot paste. It teaches nothing. It is ok to look at code and write it yourself. The essence of the law is you should not do CTRL+C and CTRL+V or any shortcuts to copy and paste without typing in code. All the code you write should be typed in.

Keep track of every LINE of code you write and the TIME you take to write it
Keeping track of time is the most important skill as a learner. So note down exactly how much time taken to finish each task. You have to also calculate the exact hours you were able to focus each day. This is for your own evaluation of yourself. You need to track your own progress.

Try hard to keep notes of everything you learn.

Notes must be terse and brief but should have sufficient clues to help you recollect what you learned. It is very important to take notes which will make it easier for you to remember and practise later instead of going through the video/tutorial again.

LEARN TO TOUCH TYPE (*Typing without looking at the keyboard* **)**

You have to learn to type without looking at the keyboard. Practice 30 mins everyday and within a month you should be typing freely. Keep practicing to reach at least 60-70 words per minute. Anything above 70 wpm is good and anything above 100 is awesome. Try one of the online typing tutors (eg: https://www.typingclub.com)

I assume you have any of the linux distributions installed on your laptop or PC. Most people prefer Ubuntu 20 LTS these days for ease of getting started. Other free distributions with sufficient documentation and help include Fedora, CentOS and Arch.

Before we start to get seriously into programming we need to have a very decent grasp of our programming environment, in our case it's Linux.

Task 1 - Install Linux (1 Hour) [30 min]

If you have not installed linux try the default installation

Task 2 - Install VS code

https://code.visualstudio.com/docs/setup/linux
https://www.youtube.com/watch?v=Y1fei1mzP7Q (15 mins) [10 min]

Task 3: Basics

3.1 Linux Commands: These 50 commands are a minimum requirement for a developer and your expertise on linux (the programming environment) is what will set you apart from others.
https://www.youtube.com/watch?v=ZtqBQ68cfJc [9 hours] [7h 15min]

3.2 Touch typing [2 mins]
Take a 1 minute typing speed test at https://www.typingtest.com/ and note down your typing speed. Spend every day 20 mins practicing typing.

Task 4: Review study note [45 mins] [30min]

Review all the linux commands you studied so far from your notes and keep the note updated and make any needed corrections.

The next tool we need to have a good understanding is the version management software called Git. All source code that you write as part of this training needs to be on github and it should follow the git flow. We'll learn more about git later but to get started we need to complete the below tutorial

Task 5: Git Tutorial [4 Hours 20 mins] [3h 16min]

5.1 Git Concept [30 mins] [15min]
https://www.youtube.com/watch?v=K_21JtuLxmw&list=PLQzJEzrRmXOW7pKbwpicijzUdxZmDgqNL&index=1&t=150s

5.2 Git Commands Part 1 [40 mins] [20min]
https://www.youtube.com/watch?v=ffvRCYDJE6c&list=PLQzJEzrRmXOW7pKbwpicijzUdxZmDgqNL&index=2

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5.3 Git Commands Part 2 [50 mins] [30min]
https://www.youtube.com/watch?v=u6KOeKBimKw&list=PLQzJEzrRmXOW7pKbwpicijzUdxZmDgqNL&index=3

5.4 Git command Part 3 [35 mins] [18min]
https://www.youtube.com/watch?v=0EQh3yYLaGI&list=PLQzJEzrRmXOW7pKbwpicijzUdxZmDgqNL&index=4

5.5 Git Collaboration [40 mins] [25min]
https://www.youtube.com/watch?v=mVHxTZqRj1g&list=PLQzJEzrRmXOW7pKbwpicijzUdxZmDgqNL&index=5

5.6 Git and Github [40 mins] [20min]
https://www.youtube.com/watch?v=KCXF2tf-rJ8&list=PLQzJEzrRmXOW7pKbwpicijzUdxZmDgqNL&index=6

5.7 Hosting on Github [25 mins] [10min]
https://www.youtube.com/watch?v=EGMZ-L0yVhc&list=PLQzJEzrRmXOW7pKbwpicijzUdxZmDgqNL&index=7

5.8 Git Pull Rebase [35 mins] [28min]
https://www.youtube.com/watch?v=p2z3LVcK3mc&list=PLQzJEzrRmXOW7pKbwpicijzUdxZmDgqNL&index=9

Task 6: Study Notes Review and Git flow Discussion [1 hour]

6.1 Review and edit the git study note.
6.2 Commit the Linux Commands Study Note and Git Study Note to Github

Task 7: Linux commands Review (2 hours) [1h 20min]
https://www.youtube.com/watch?v=ZtqBQ68cfJc
Must review the following topics
head , tail, cat, wc, piping, sort, uniq, expansions, diff, find, jobs,gzip, tar, xargs, ln, chown, chmod

Task 8: HTML/CSS Crash course

This course will give you a quick overview of HTML/CSS. Make sure that we follow the git flow for all the following tutorials.

8.1 Introduction [40 mins] [20 min [-LOC-]
https://www.youtube.com/watch?v=hu-q2zYwEYs&list=PL4cUxeGkcC9ivBf_eKCPIAYXWzLIPAm6G&index=1

8.2 HTML Basics [1 hour] [25min]
https://www.youtube.com/watch?v=mbeT8mpmtHA&list=PL4cUxeGkcC9ivBf_eKCPIAYXWzLIPAm6G&index=2

8.3 HTML Forms [1 hour 20 mins] [50min]
https://www.youtube.com/watch?v=YwbIeMIxZAU&list=PL4cUxeGkcC9ivBf_eKCPIAYXWzLIPAm6G&index=3

8.4 CSS Basics [2 hours] [35min .]
https://www.youtube.com/watch?v=D3iEE29ZXRM&list=PL4cUxeGkcC9ivBf_eKCPIAYXWzLIPAm6G&index=4

8.5 Classes and Selectors [1 hour] [30min]
https://www.youtube.com/watch?v=FHZn6706e3Q&list=PL4cUxeGkcC9ivBf_eKCPIAYXWzLIPAm6G&index=5

Task 9: Review (30 min) [20 min]

Task 10: Review all learned linux commands [45 mins]

Q. What commands are still unclear and what commands do you feel comfortable with?
A. [your answer]

Task 11:

11. 1 HTML 5 Semantics [40 mins] [20min]
https://www.youtube.com/watch?v=kGW8Al_cga4&list=PL4cUxeGkcC9ivBf_eKCPIAYXWzLIPAm6G&index=6

11.2 Chrome Dev Tools [30 mins] [15min]
https://www.youtube.com/watch?v=25R1Jl5P7Mw&list=PL4cUxeGkcC9ivBf_eKCPIAYXWzLIPAm6G&index=7

11.3 CSS Layout and Positioning [1 hour 30 min] [1h 20min]
https://www.youtube.com/watch?v=XQaHAAXIVg8&list=PL4cUxeGkcC9ivBf_eKCPIAYXWzLIPAm6G&index=8

11.4 Pseudo Classes & Elements [45 mins] [40min]
https://www.youtube.com/watch?v=FMu2cKWD90g&list=PL4cUxeGkcC9ivBf_eKCPIAYXWzLIPAm6G&index=9

11.5 A more detailed tutorial on how to use visual studio code effectively
https://www.youtube.com/watch?v=VqCgcpAypFQ [30 mins] [- time -]

Task 12:
Let's wind up the crash course

12.1 Intro to media queries [40 mins] [55min]
https://www.youtube.com/watch?v=Xig7NsIE6DI&list=PL4cUxeGkcC9ivBf_eKCPIAYXWzLIPAm6G&index=10

12.2 CSS Positioning - 12 videos [3 hours] [4h]
https://www.youtube.com/watch?v=7ZXsPj43heo&list=PL4cUxeGkcC9hudKGi5o5UiWuTAGbxiLTh

12.3 Responsive Web Design - 12 videos [3 hours] [4h]
https://www.youtube.com/watch?v=3tLb3i7GB38&list=PL4cUxeGkcC9g9Vh9MAA-XKnfJsWZnPZFw

12.4 CSS Flexbox - 12 videos [2 hours 40 mins] [6h 5min]
https://www.youtube.com/watch?v=Y8zMYaD1bz0&list=PL4cUxeGkcC9i3FXJSUfmsNOx8E7u6UuhG

12.5 CSS Animations - 12 videos [2 hours 30 mins] [5h]
https://www.youtube.com/watch?v=jgw82b5Y2MU&list=PL4cUxeGkcC9iGYgmEd2dm3zAKzyCGDtM5

12.6 CSS Grid - 10 videos [2 hours 40 mins] [4h 30min]
https://www.youtube.com/watch?v=x7tLPhnA06w&list=PL4cUxeGkcC9itC4TxYMzFCfveyutyPOCY

12.7 CSS Variables - 4 videos [50 mins] [40min]
https://www.youtube.com/watch?v=8Yum7EQgadM&list=PL4cUxeGkcC9ii5PB2UMyYH7QFZWfGnVgZ

12.8 Mobile first design - 14 videos [4 hours 30 mins] [5h 30min]
https://www.youtube.com/watch?v=PM3XW_1RAIs&list=PL4cUxeGkcC9hH1tAjyUPZPjbj-7s200a4

Task 13:
We are now ready and let's build some pages. Let's keep track of the time we take to build these pages as it's very critical to measure yourself and how fast we can make these pages. In the beginning there will be a struggle but do keep striving and you will be able to build these pages faster. After each page is completed deploy them to netlify.

This task is to replicate the links given in the subtasks exactly. The design has to be responsive and there has to be a mobile view as well for all the pages. The aim of the task is for you to build these pages as identical as possible with the original site so that someone visiting your site should not be able to tell the difference.

13.1 https://www.airbnb.co.in/   [40 hours] [44h (5days)]
13.2 https://azure.microsoft.com/en-us/   [48 hours] [- time -]
13.3 https://www.doordash.com/en-US   [30 hours] [- time -]

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13.4 https://open.spotify.com/
13.5 https://www.ubereats.com/
13.6 https://www.yelp.com/

Task 14: Send your time and status reports to allen@vonnue.com for all the above tasks.

If you have successfully completed thus far keeping the principles then you are on the way to become a great programmer. Remember the principles,

Part II

This is work in Progress.

Below are some of the best resources to learn Javascript

Task 14: Complete the Course on

javascript intro
https://www.youtube.com/watch?v=jS4aFq5-91M

Advanced Javascript Udemy
https://www.youtube.com/watch?v=jS4aFq5-91M

Advanced JS code malayalam
https://www.youtube.com/watch?v=XzmwwMgO5Jk&list=PLQzJEzrRmXOVPXv6gj5VvNvGh49qenrdt

javascript info

Namaste javascript
https://www.youtube.com/watch?v=pN6jk0uUrD8&list=PLIasXeu85E9cQ32gLCvAvr9vNaUccPVNP

react courses

codeevolution react
https://www.youtube.com/watch?v=QFaFIcGhPoM&list=PLC3y8-rFHvwgg3vaYJgHGnModB54rxOk3

react router
https://www.youtube.com/watch?v=UWYOC8g5N_0&list=PLC3y8-rFHvwjkxt8TOteFdT_YmzwpBlrG

json server
https://www.youtube.com/watch?v=_1kNqAybxW0&list=PLC3y8-rFHvwhc9YZIdqNL5sWeTCGxF4ya

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