**WEEK 1 – CS FUNDAMENTALS**

# Task 2: History of Computers

A lot of people jump right into learning big technologies like MERN stack or Excel or SQl, without **having the fundamentals right**. Before, we start our journey, It’s absolutely important to **clear the computer science fundamentals**and have a high level overview. In this pre-coursework, we are going to do exactly the same with this Super informative video series ahead.

NOTE: Intricate concepts in the video series ahead have been **asked in interviews of top tech companies**. So, make sure you understand everything thoroughly and set the foundations right.

Video - <https://youtu.be/O5nskjZ_GoI>

**Task 3: Personal Computer Revolution**

The **personal computer revolution** was sparked by two legends of this era. Let’s understand what brought us here to use GUI and personal computers that we use in our day to day life. These concepts are not important from Interview’s point of view, but it helps in establishing subject matter expertise and **thought leadership in tech domain.**

Video - <https://youtu.be/M5BZou6C01w?list=PL8dPuuaLjXtNlUrzyH5r6jN9ulIgZBpdo>

Video - <https://youtu.be/pQocN_c2uLI>

# Task 4: How Computers Work

In this module, we’ll be covering the basics of how **computers work, function and do calculations**. This playlist is of immense importance as **direct questions are asked in interviews** based on the concepts covered. This video series sets the **foundation on working of computers** and is taught by Bill Gates himself. This video series was recommended to us by an employee working in Microsoft.

Let’s understand how the computers work in detail.

Video - <https://youtu.be/OAx_6-wdslM?list=PLzdnOPI1iJNcsRwJhvksEo1tJqjIqWbN->

Video - <https://youtu.be/mCq8-xTH7jA?list=PLzdnOPI1iJNcsRwJhvksEo1tJqjIqWbN->

Video - <https://youtu.be/USCBCmwMCDA?list=PLzdnOPI1iJNcsRwJhvksEo1tJqjIqWbN->

Video - <https://youtu.be/ZoqMiFKspAA?list=PLzdnOPI1iJNcsRwJhvksEo1tJqjIqWbN->

Video - <https://youtu.be/DKGZlaPlVLY?list=PLzdnOPI1iJNcsRwJhvksEo1tJqjIqWbN->

Video - <https://youtu.be/xnyFYiK2rSY?list=PLzdnOPI1iJNcsRwJhvksEo1tJqjIqWbN->

# Task 5: How Internet Works

Go into a tech interview, especially one for operations or security, and you’re more than likely going to get an interview question like this:

“What happens when you put a URL in the address bar of a browser and hit enter?”

Yet, **95% people fail to answer this simple question** even after gaining mastery in Software Dev or Data Analytics. There has been an **increasing trend of questions appearing on this topic is majority of tech interviews** ranging from small start-ups to large companies. So, let’s cover on what is the internet & how does the internet work by the creator of Internet himself.

Video - <https://youtu.be/Dxcc6ycZ73M?list=PLzdnOPI1iJNfMRZm5DDxco3UdsFegvuB7>

Video - <https://youtu.be/ZhEf7e4kopM?list=PLzdnOPI1iJNfMRZm5DDxco3UdsFegvuB7>

Video - <https://youtu.be/5o8CwafCxnU?list=PLzdnOPI1iJNfMRZm5DDxco3UdsFegvuB7>

Video - <https://youtu.be/AYdF7b3nMto?list=PLzdnOPI1iJNfMRZm5DDxco3UdsFegvuB7>

Video - <https://youtu.be/kBXQZMmiA4s?list=PLzdnOPI1iJNfMRZm5DDxco3UdsFegvuB7>

Video - <https://youtu.be/ZghMPWGXexs?list=PLzdnOPI1iJNfMRZm5DDxco3UdsFegvuB7>

Video - <https://youtu.be/AuYNXgO_f3Y?list=PLzdnOPI1iJNfMRZm5DDxco3UdsFegvuB7>

Video - <https://youtu.be/LVV_93mBfSU?list=PLzdnOPI1iJNfMRZm5DDxco3UdsFegvuB7>

# Task 6: Programming Concepts

In this module, we are going to cover **Programming Basics**. Even if you have been doing programming for a while, I suggest you to watch the entire video below as a **refresher** to these concepts. This particular video has concepts which are most frequently asked in interviews of tech service based companies like TCS, WIPRO, INFOSYS. Please make sure to thoroughly go through each and every topic with clarity.

I will see you in next module. Let’s get rolling!

Video - <https://youtu.be/zOjov-2OZ0E>

# Task 7: Virtual Presentation

Your**Senior management** team wants to review your weekly progress and you have been called to the **board room** to present your key learnings to the team during this virtual board meeting.

You have to create a professional **corporate level presentation** and submit it for the team to review.

But before we start creating PPTs, **we’ll learn on how to present yourself & create PPTs that gets attention** and would help you stand among the top 5% .

**Your Tasks**:

1. Watch the video on communication skills & public speaking
2. Watch the video attached on creating PPTs
3. Select a topic from CS fundamentals and create a presentation on it ( You are free to use your own creativity on the topic you want to select, the length of the ppt and number of slides in it)
4. Prepare a 5 minutes video which carries a brief description of the topic and present it with all your creativity.

**Deadline for Task Submission**: 2 Days From Now

**Objective** Of PPT: Senior Leadership Team wants to **review your training progress** and would be allotting you further modules accordingly

Video - <https://youtu.be/K0pxo-dS9Hc>

Video - <https://youtu.be/yoD8RMq2OkU>