**FRONTEND DEVELOPMENT [2 hours 45 min]**

**Section I : Introduction and getting to know basics of frontend dev**

[30 min taking into account setting up time wastage or starting late]

[While this is happening coordinators are requested to sort out xampp and other technical issues candidates have so that everyone is ready for the backend dev part post lunch]

1.Introduction coordinators and speakers

2.Interactive session on what the candidates think web dev is about, its uses and get to know where they stand and how much they know about frontend and backend dev

3.Based on this allocate more time for the part which most of the candidates are interested in.

4.Introduce why h1, h2, etc tags are actually used for and how Search engines use crawlers in brief.

5.Give an intro to some of the tags generally used where there is scope for confusion on when to use which tag

<article> tags should be used where a piece of content could be taken out of a page completely and still make sense by itself with no surrounding content.

<section> tags, on the other hand, should be used for content that is grouped together according to a theme, but makes sense only in the context of the content surrounding it.

Tell about where to use div and where to use section

<nav> tags are designed to indicate major navigation blocks on a webpage, such as a menu bar or pagination. They shouldn't be applied to regular links, only to significant sections that are wholly dedicated to navigation.

<aside> tags could effectively be described as the "everything else" element for content that is neither article, section nor navigation. W3C prescribes this tag for use when something is tangentially related to the content around it, but is separate from the main content of the page, such as sidebars, blogrolls and so on.

**Section II : Start off writing basic HTML5 and CSS code**

[ 45 min ]

1. HELLO WORLD

Elaborate on the meta tags

2. Use of simple tags such as p, div, img

Using CSS along with this to stress on certain specific attributes.

How to use id's and classes

3. Dive into bootstrap grid system

Elaborate on use of scripts, CDNs

Clarify any doubts regarding any of the above

**Section III : Capstone Project - Make their own websites [Profile Website]**

[1 hour 25 min]

1. Elaborate more on bootstrap, provide valuable links for resources font awesome etc

2. Show demo of the template made Website made, and show other better websites available on the internet so that they can draw inspiration from to make their own website.

3. Go around to everyone's bench and help them out personally with any doubt with the help of the coordinators.

**Section IV : Current Trends in Front end**

[5 min]

1.New Frameworks being used and why they are being used

2.Briefly discuss about react Js library and angular framework

**BACKEND DEVELOPMENT [2 hours 30 min]**

**Section I : Getting to know basics of backend dev**

[15 min]

1.Introduction to backend dev, why we need it the various languages one can use

2.Advantages and disadvantages on choosing each of these for programming in based on the application

3.Why we will be going with PHP for today

**Section II : MYSQL and Apache Server**

[30 min]

1. Basics of MYSQL

2. Candidates make tables and execute simple queries

3.What and why is the apache server required

**Section III : Basics of PHP**

[1 hour]

1. Basic syntax that is needed to be known

2. How to receive on POST/GET etc requests the various form values

3.Connect the Form on the Frontend to Backend by using form action

4. Show how to code quires in PHP to store data in the database.

5. Elaborate the process by showing the candidates the code and asking them to code along.

**Section IV : Basics of PHP**

[30 min]

1.Demo on hosting your website [with/ without backend depending on time]

**Section V : Intermediate Uses of PHP in general and wrap up by talking briefly about ruby on rails and python for backend**

[15 min]

1. Setting up mailer, authentication (Session variables)

2. Talk about the in trend backend languages