Introduction to web developement technology

From the early years of www new technology will arisen. As fundamental building bocks of all web can be recongnized HTML and CSS.

HTML or Hypertext Markup Language is content describing markup language for description of appropriate building blocks of all webpages. Today longterm supported version is 5.0. This version is meant to be open standard — new improvements are continualy added to its syntax.

For styling or visual theming is used CSS standard (standard for Cascade Style sheets). Actual verion is 3.0. HTML+CSS introduced separation of content and look of a pages. Content is more rigid bud external styles enable quick change of look of your page from one location on your webserver.

We can say that only HTML and CSS are main building blocks of all webpages but today webs are mor dynamic and adaptive. You can make administration from web backends, or you can make subscription and then gain access to elevated content of pages.

These improvements enable scripting technologies. These technologies can be divided on two main parts:

a) scripting technologies on server side — for a long time and beacause wide support in hosting houses wide spreaded technology is PHP. For PHP is common that generate pure HTML as interpreted output. Today standardized version is 7.4 but version 8.0 is in development. More reading about PHP can be found on https://www.php.net/docs.php or in more descriptive way on wiki https://en.wikipedia.org/wiki/PHP .

PHP is not only server side technology — for bigger projects

but with lover support at hosting company are node.js (server side scripting with javascript), java jsp or servlets or microsoft asp.

b) scripting technology on client side – widely used is javascript (not confuse with java because this scripting languahe has nothing with java/ jsp as its name will sugest). Difference between server side and client side scripting is that client script must be downloaded to the browser and interpreted by them. Taht lead to possible problems with code confidentiality and posible blocking features on browser/ client side. Output of server scripting technology can by pure HTML/ CSS pages.

If you are involved in bigger projects or make common web for larger public existing frameworks will accelerate development. When you use framework you can obtain generated parts and use prepared parts of web. Most frameworks insist on design patterns named MVC (model – view – controller). MVC concept separate building parts of code in to:

- model – driving logic of aplication, how are data handled and stored with database
- view – visual part of aplication
- controller – part handling requests from the clients and event generated by states of application

Well known frameworks are:

- symfony for PHP scripting language – more reading at https://symfony.com/
- bootstrap – for frontend developement – for furter reading https://getbootstrap.com/
- angular – used by google, big framewor for creation robust application, based on javascriptsyntax https://angular.io/docs
- react – frontend development framwork used by facebook, based on javascript syntax (user friendlier as angular)

https://reactjs.org/
- jQuery – small framework for web scripting and DOM manipulation (separtaion of parts of page and manipuating them). Can be used for srooling menu creation, animation of galeries … .For furter reading you can visit https://jquery.com/ .