**Interactive Multimedia Programming**

**Assignment set**

1. **Deﬁnitions:**

**Write descriptions / deﬁnitions of these topics. Please, do not copy paste. Use your own words and make sure that you understand everything you write.**

1. **HTML**

HTML stands for Hypertext Markup Language. It’s the language to create the web pages. HTML elements such as <html>, <body>, <h1>, <p> and so on are building blocks of HTML pages. Html codes are written in basic text editor like notepad, sublime text, netbeans.

1. **CSS**

CSS stands for Cascading Style Sheets. It is a language that describes the how the web pages look. The background colour, font size, colour, padding and so on are some example that CSS can change in web pages.

1. **Javascript**

Javascript is the scripting language, used on web which is used to enhance HTML pages which allows the pages to react to events, exhibit special effects, accept variable text, validate data, create cookies, detect a user’s browser, etc. It does not need any compilation. To write Javascript codes, text editor like notepad, sublime text are needed.

1. **HTTP**

HTTP is short for Hypertext Transfer Protocol. It is protocol used by www (world wide web). Simply, it is rules for transferring files (sound, text, graphics and other multimedia) on www.

1. **HTML5**

It is the latest version of HTML with new elements, behavior and attributes. It was officially standardized by W3C in 2014. The new tags introduced in HTML5 are <header>, <footer>, <nav>, <article>. HTML5 supports 2D graphics, document editing, drag and drop, audio, video playback.

1. **Dynamic HTML (DHTML)**

It is the collective term for the combination of HTML tags that can make web pages more animated and interactive. Simple example of DHTML is drag and drop of image inside the web pages. DHTML makes the web pages act like desktop applications.

1. **Coding conventions: OK, this may sound boring but coding conventions are really important when you are doing code professionally. Make yourself familiar what this actually means in practice. Here is a generic deﬁnition: https://en.wikipedia.org/wiki/Coding\_conventions Find conventions from for html / css / is from Internet which you are going to use on this course. Like: http://codeguide.co/ And from now on, use these conventions every time you write html. If your code does not follow the conventions, you can not pass this course. Write down what is your understanding of the coding conventions. Why they are important to follow? What kind of conventions you are going to use.**

Coding conventions is the set of rules to write the codes in programming that recommend the programming style, practice and method for each aspect of program.

Coding conventions makes easier to read and understand the codes. It also standardized the structure of an application.

We are going to use naming conventions.

1. **HTML5**

**a. Create a simple HTML5 document. Please do not copy paste, and remember to follow coding conventions. You can ﬁnd an example from here:  http://www.w3.org/TR/html5/single-page.html#a-quick-introduction-to-html**

**The document linked above actually is an ofﬁcial speciﬁcation of the HTML version 5. Browse through the document and store the link to your bookmarks. It will be valuable later on.**

**b. Modify previous document so that you will have an a. external style sheet ﬁle (.css) with styles b. external Javascript ﬁle (.js)  Both of these ﬁles should be linked and used in .html ﬁle**

**5. Dynamic HTML**

**Create a simple person list web application. With this app you should be able to list persons. Do not use any Javascript frameworks (like jQuery). I want you to learn the basics what happens ”under the hood”. In practice you should dynamically modify dom tree of the browser view. See example of the user interface on the next page.**

**Extra task if you have time (not mandatory). Modify the previous web application to follow MVC (Model View Controller) design pattern.**