# Let’s Code! Teaching plan.

1. **Intro.**

(<https://www.youtube.com/watch?v=XNWJhmvJaF8> )

* W3C standardization.
* HTML (Hypertext Markup Language) short history.
* Code redactors. <https://notepad-plus-plus.org/>
* Web browsers.
* <!DOCTYPE html>
* <head></head><body></body>
* Tags: <https://www.w3schools.com/tags/ref_byfunc.asp>
* Text tags: <h1></h1>,<p></p>,<br>,<hr>, <b></b>, <i></i>, <u></u>.
* **Exercise 1: Hello World.**

**2. Text Markup.**

The topic of a second class “2. Text Markup.”.

We will take a look at the most common HTML Tags. Such as Blocks and Text elements, Lists, Links, Images, and Tables. After this lesson, you will be able to create your own Email template or even a simple Homepage. So Let’s code!

* <div></div>
* <span></span>
* <ul><li></li></ul>
* <a href=”#”></a>
* <img>
* <table>
* **Exercise 2: Email template.**

**3. The world of Forms.**

Hello guys! I decided to combine the topics of the 3d and the 4th lessons. It will be called “Now I know my HTML. So let's play with CSS!”.

We will take a look on Forms by an example of a contact form, and finalize our knowledge of HTML. The next task will be to style our content. I will show you the difference between Margin and Padding, how to center the text on a page and the magic world of colors.

* <form></form>
* <input>
* <select></select>
* <textarea></textarea>
* **Exercise 3: Contact form.**

**4. CSS. Intro.**

* Types adding CSS on the page.
* Styling tags, id, class.
* Background. RGBA.
* Width/Height.
* Margin/Padding.
* Border/Outline.
* Fonts.
* List styling.
* **Exercise 4: Styling your page.**

**5. CSS. Styling like a Pro.**

The theme of the 4th class will be “CSS. Styling like a Pro.”

We will continue with the learning of CSS. Finish with basics and go deeper into the understanding of how the elements on a page display and interact.

* Links styling.
* Opacity.
* Display.
* Float.
* Position.
* **Exercise 5: Upgrading the pages.**

**6. Mobile first!**

* Responsive pages and adaptation.
* @media screen().
* Web optimisation.
* Pseudo elements.
* HTML5.
* **Exercise 6. Test yourself!**

**7. Web animations.**

(<https://www.youtube.com/watch?v=DZA-4plmrlw> )

* Transitions.
* Transforms
* @keyframe animations.
* SVG.
* **Exercise 7. Make your page interactive.**

**8. Java Script. Intro.**

(<https://www.youtube.com/watch?v=4Vv1S2RP3co> )

(<https://www.youtube.com/watch?v=nItSSTwBvSU> )

* Data types
* Variables.
* Objects.
* Loops (for, while)
* Functions
* Events.
* This.
* Console.log();
* **Exercise 8: Push the button.**

**9. Frameworks.**

* JQuery.
* Bootstrap. (<https://www.youtube.com/watch?v=gBnhe7JBovI> )
* Angular. (<https://www.youtube.com/watch?v=PF3qr7mMmgA> )
* Webpack.

**10. Welcome to the world of AR.**

* Languages overview: OpenGL, WebGL, ThreeJS, A-Frame.
* Object types: PNG, OBJ, FBX, JSON.
* A-Frame basics.
* **Exercise 10. Your first WebAR App in 10 lines of code!**

**11. AR. Do you want more?**

* ThreeJS basics.
* How to combine A-frame and ThreeJS.
* **Exercise 11. Build your first game.**