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CREATING THE ELECTRONIC COURSE OF LECTURES IN A WEB FORMAT

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The purpose of the project is to create an electronic study guide (course of lectures) on algorithm construction and analysis discipline using HTML (Hyper Text Markup Language), CSS (Cascading Style Sheets) and JavaScript.

For the convenience the process is divided into several stages.

1. Designing, where we have created a schematic model. The model represents the structure of the website which helps to think over the details and elements and to define the sequence of their development.

2. Creation of the main page template. It is also the table of contents of the whole guide. We have decided to make the navigation bar that includes three buttons and the search bar. All the interactive details are created via using JavaScript programming language. It basically creates scripts for certain elements called containers from HTML code. CSS is only used for decorating the web page, editing the sizes and shapes of the containers and also for making the website colorful. Both JavaScript and CSS are applied to HTML. Thus, the structure of the website entirely consists of containers and for editing a specific container without affecting all the other containers with the same tag name, we give the ID's to them. The container with an ID can be either edited as an independent part or be given all the properties of all the containers of the same tag name.

3. Creation of the list of contents and the lecture page template. To make the searching system and the text of the page interconnected, it is essential to use the «``» (*untitled list*) tag, therefore the searching script started to display the elements tagged «``» (*list*). There is also a function to mark the topics covered using checkboxes, their state is saved in cache and remains in this state even after refreshing the page. In general, the main page and the lecture pages only differ in couple of things such as the search bar (only on the main page), the header (only on the main page) and the sidebars (only on lecture pages). Hence, the templates were partially alike.

4. Working on the lectures. On the following stage we have started to work on the text and inserting it into the web page. The text is simply divided into paragraphs using the «`<p>`» (*paragraph*) tag, and the images are embedded into the page with «``» tags. Every lecture page has the clickable list of subtopics that automatically puts the user to the certain subtopic when clicking on it. Besides, there are two sidebars on each page, they are used as the additional list of contents of the whole guide, the custom notes and the additional information bars for references in the text so that when the user clicks on a certain term or a name, the sidebar slides out with the requested information.