

# Final Project «Web technologies»

The Final Project Examination of the Academic program for Major: 6B06101 Computer science, 6B06112 Data science, 6B06111 Financial Mathematics of the 1-year students of the course « SFT6307 Web technologies ». You should build and implement the Web App based on a topic that you will choose (for example: Social Media App, Drag and Drop List, Messenger or Chat App, eCommerce App, Blog, Books Application, Todo App, Fitness App/Workout Tracker etc.). The purpose of this project is to demonstrate the knowledge of frontend office systems development based on HTML, CSS, Bootstrap & JavaScript. According to syllabus of this course, as well as skills in the most important tools web technologies. This final Web App Project requires the implementation of a full-fledged web application that will have a clear goal and provide value for its users.

**Notice:** The **COURSE POLICY** is - Cheating will not be tolerated. Students caught cheating will receive a "0" **ZERO** for the assignment!

**You must implement this Web App Project individually!**

Technical requirements:

1. Create **8-10 HTML** pages on your Web App. Project.
2. Use **heading elements, anchor tags, images, paragraph elements**.
3. Use **HTML 5** structure for design your web page.
4. Use **Block & Inline** elements **<div>** and **<span>**. Add **<hr>** & **<br>** tags.
5. Create and use **tables**: **<tr>**, **<td>**, **<th>**, **<thead>**, **<tbody>**, **<tfoot>** elements.
6. Create and tables: **colspan & rowspan** elements.
7. Create and implements the **form** elements: **input types, buttons (radiobutton, checkbox, submit/select, etc.)**,
8. Create **menu, drop-down list** for nested or hidden form of menu.
9. Connect and use external link for **CSS** and add **styles** for the web page. Use **color & background-color** properties. Use **RGB, Hexadecimal & Named Color** systems.
10. Use Common **Text Properties** and **font size** basics with pixels. Implement **font-family** property.
11. Use different **selectors** like **element, child, class, nested, universal, id, pseudo-class & pseudo-element** type selectors.
12. Use **CSS Box-Model: Width & Height, Border & Border-Radius, Padding & Margin, the Display Property, CSS Units: ems & rems** to control spaces and indentation.
13. Implement CSS Properties: **Opacity & The Alpha Channel, the Position Property, CSS Transitions & Google fonts**.
14. Use **Responsive CSS & Flexbox**. Implement **Flex-Direction, Justify-Content, Flex-Wrap, Align-Items, Align-Content & Align-Self**. Use and add **Media Queries**.

15. Connect and use **Bootstrap framework** to add style in webpage. Use **Including bootstrap & Containers, Bootstrap buttons. And Bootstrap Typography & Utilities**. Implement **Responsive Bootstrap Grids. Bootstrap Forms & Navbars**.
16. Use and connect **JavaScript files** to construct logic between **HTML & CSS**.
17. Use **simple** and **template literal** syntax in JS.
18. Use **functional programming (JS)** approach in Web Project.
19. Use **variables (let, const), functions, conditional statements (if else, switch case, ternary operator) arrays, methods for arrays, objects, and loops (for, while)**.
20. Use **spread operator** with **Array Literals** and **Spread with Objects**. Use **Rest params**.
21. Create and use **forEach** and the **Map** methods. Use **filter & reduce** methods.
22. Use **DOM** elements in **JS** to manipulate **HTML & CSS**. Use **document, getElementById, querySelector**.
23. Use and create **innerHTML, textContent & innerText** in DOM.
24. Use and implement **Events**. Use **OnClick** Property & implement **addEventListener**. Use & add **Keyboard events & Event Object**.
25. Implement **Form events & PreventDefault**.
26. Use **Prototypes, Classes & Object-oriented programming**. Add **Constructor functions**. Use **extends & super** keywords.
27. Create 2-3 **buttons** for **Modal windows** (named "Modal Window 1", "Modal Window 2", "Modal Window 3").
28. Create **registration form** (Firstname, Lastname, Age, City birth, Region, Country, Home-address, Phone number). Implement and Make **validation** for users.
29. Make a **login form**, which should have two inputs (**username** and **password** or **pin-code**).
30. Implement **Logout** button to exit from system.