

Introduction

Use HTML, CSS, and JavaScript to build a **web application that runs entirely in the browser**. With the exception of [jQuery](#), you are not allowed to use external libraries.

Specifications

Your application can be of **any type**: a phonebook, an image gallery, or a simple game; it is entirely up to you. There are two additional requirements:

- Your application should not be a typical todo application or an application that does not substantially differ from a typical todo application;
- Your application should not be a simple modification of the application we worked on in the third lab session.

If you are unsure, ask in forums.

Make sure you will be able to complete the assignment in due time. You can find a couple of application suggestions below.

Your application has to meet the following requirements.

1 Data acquisition

Use appropriate HTML elements to allow the user to **input the data**. The input should be **appropriately validated** either by using [JavaScript](#) or [HTML attributes](#).

2 Data manipulation

Your application should enable the user to perform various operation on the data:

- inserting,
- editing,
- deleting,
- sorting,
- querying (filtering, searching) etc.

You should implement **at least three such operations**.

As an example, the application that we were working with in the 3rd lab session (list of Web technologies participants), implements two such operations: insertion and deletion.

3 A non-trivial HTML5 feature

Your application should make use of at least **one non-trivial HTML5 feature**. Something along the lines of local storage, web workers, geolocation, drag&drop functionality etc.

4 Responsive design

You should design your application to be responsive.

In particular, your application should implement at least **two layouts**: one for mobile devices and the other for desktops. Make sure you implement the design using **mobile first** strategy.

Also, make sure that the user interface of your application is complex enough so that the two layouts make sense.

5 Non-functional requirements

Besides requirements 1-4, your application should also meet the following non-functional requirements.

5.1 Code organization

Put your HTML, CSS, and JavaScript **code into separate files**. Then use appropriate HTML elements to include them in the HTML document.

5.2 Valid HTML

All of your HTML should be valid and should pass the [W3C validation test](#).

5.3 References (resources)

Create a dedicated page and list all references that you used in making this assignment.

Every code snippet which you did not write yourself, but you found it online and included in the assignment, should be listed as a reference. Additionally, every such reference should contain a sentence explaining how that code snippet helped you. You should also be able to explain and defend every snippet of the code that you submit.

The main application should **contain a link** to the references page.