

Assignment 2

Create a Dynamic Webpage in JS

The Komputer Store

Build a dynamic webpage using “vanilla” JavaScript. Follow the guidelines given below, but feel free to customize the app if you want. It must meet the minimum requirements prescribed.

1) Set up the development environment

Make sure you have installed at least the following tools:

- A text editor of your choice (Visual Studio Code recommended)
- Live Server VS add-on

You will also use your browser’s Developer Tools for testing and debugging.

2) Optional: Design a wireframe

You can follow the wireframe provided (Appendix B) or you can create your own design as long as it meets the minimum requirements set out below in Step 4.

3) Write HTML & CSS as needed

Try to write the CSS yourself, it will be a great learning experience. However, you may use Bootstrap, Foundation, or another CSS framework of your choice. Revise Module 1 if you need an HTML/CSS refresher.

4) Use plain JavaScript (no frameworks) to build the following minimum requirements into your webpage (See Appendix A for detailed specs):

- 1) The Bank – an area where you will store funds
- 2) Work – an area to increase your earnings and deposit cash into your bank balance
- 3) Laptops – an area to select and display information about the merchandise

5) Submit

- a) If you created your own wireframe, export it to PDF and upload the file to your Git repository and submit a link to your file.
- b) Publish your web page on GitHub pages and submit a link to your website.

Appendix A: Requirements for the Komputer Store

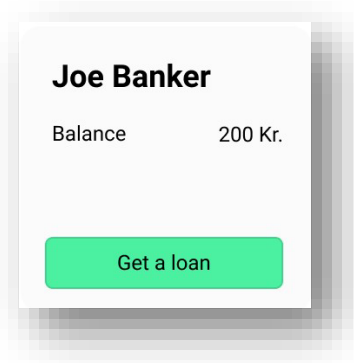


Figure 1 The Bank Section



1. The Bank (Figure 1)

1.1 Balance

The bank shows a “Bank” balance in your currency. This is the amount available for you to buy a laptop.

1.2 Outstanding Loan (Only visible after taking a loan)

Shows the outstanding Loan value

1.3 Get a loan

The Get a loan button will attempt to get a loan from the bank. When the Get a loan button is clicked, it must show a “Prompt” popup box that allows you to enter an amount.

Constraints on Get a loan button:

1. You *cannot* get a loan more than double of your bank balance (*i.e.*, If you have 500 you *cannot* get a loan greater than 1000.)
2. You *cannot* get more than one bank loan before buying a computer

Once you have a loan, you must pay it back BEFORE getting another loan

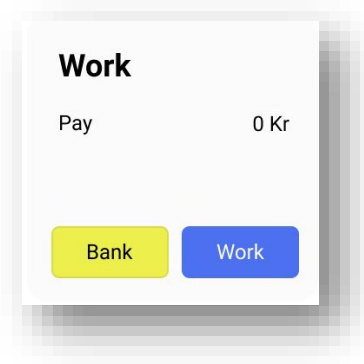


Figure 2 Work Section



2. Work (Figure 2)

2.1 Pay

The pay amount in your currency. Should show how much money you have earned by “working”. This money is NOT part of your bank balance.

2.2 Bank Button

The bank button must transfer the money from your *Pay balance* to your *Bank balance*. Remember to reset your pay once you transfer.

Constraints on Bank button:

1. If you have an outstanding loan, 10% of your salary MUST first be deducted and transferred to the outstanding Loan amount
2. The balance after the 10% deduction may be transferred to your bank account

2.3 Work button

The work button must increase your *Pay balance* by 100 on each click.

2.4 Repay Loan button

Once you have a loan, a new button should appear. Upon clicking this button, the full value of your current **Pay** amount should go towards the outstanding loan and NOT your bank account.

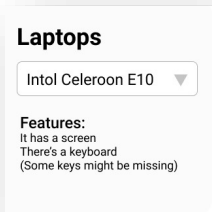


Figure 3 Laptop Selection Area

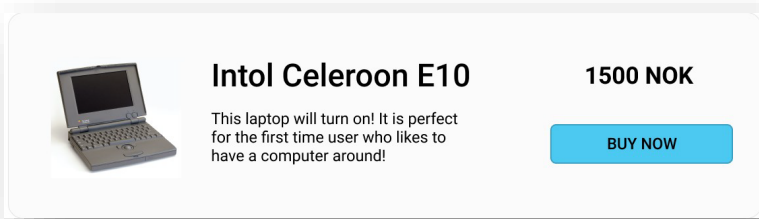


Figure 4 Laptop Information Area



3. Laptops

The laptops section has 2 parts: laptop selection area (Figure 3) and info section (Figure 4)

3.1 Laptop selection (Figure 3)

Use a select box to show the available computers. The feature list of the selected laptop must be displayed here. Changing a laptop should update the user interface with the information for that selected laptop.

Laptop API

The data for the laptops will be provided to you via a RESTful API. The endpoint for the API is:

<https://noroff-komputer-store-api.herokuapp.com/computers>

The endpoint will return an array of computers, each computer will have the following properties:

```
{
  "id": 1,
  "title": "Classic Notebook",
  "description": "A little old, but turns on.",
  "specs": [
    "Has a screen",
    "Keyboard works, mostly",
    "32MB Ram (Not upgradable)",
    "6GB Hard Disk",
    "Comes with Floppy Disk Reader (Free) - Requires cable",
    "Good exercise to carry"
  ],
  "price": 200,
  "stock": 1,
  "active": true,
  "image": "assets/images/1.png"
}
```

Use this API to populate your laptop selection dropdown box.

3.2 Info section (Figure 4)

The Info section is where the image, name, and description as well as the price of the laptop must be displayed.

Buy Now button

The buy now button is the final action of your website. This button will attempt to “Buy” a laptop and validate whether the bank balance is sufficient to purchase the selected laptop. If you do not have enough money in the “Bank”, a message must be shown that you cannot afford the laptop. When you have sufficient “Money” in the account, the amount must be deducted from the bank and you must receive a message that you are now the owner of the new laptop!

Appendix B: Sample Wireframe for the Komputer Store

