

INC281
2020



INC281-Lec-Lab-03

JavaScript Programming

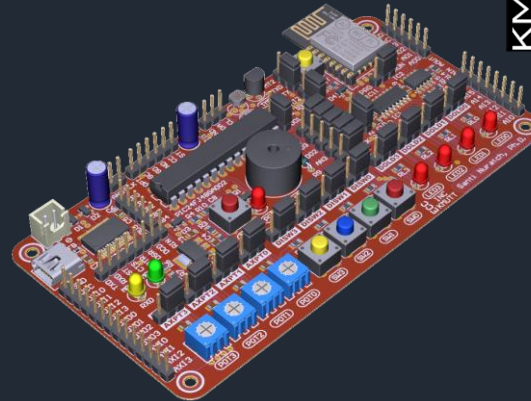
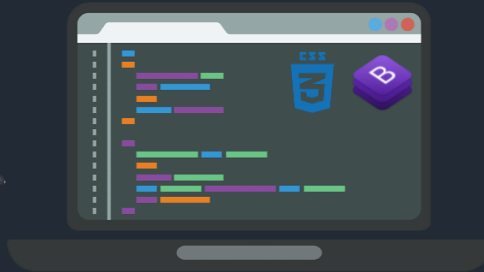
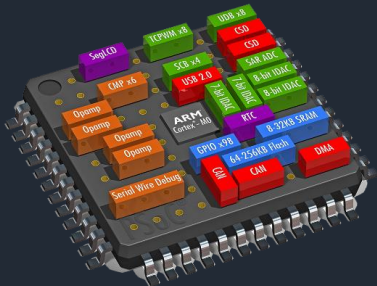


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We Make Computers do More



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JavaScript was initially created to “make web pages alive”

JavaScript can be written right in a web page’s HTML and run automatically

Today, JavaScript can execute not only in the browser, but also on the server, or actually on any device that has a special program called the JavaScript engine.

In-browser JavaScript can do everything related to webpage manipulation, interaction with the user, and the webserver. For instance, in-browser JavaScript is able to:

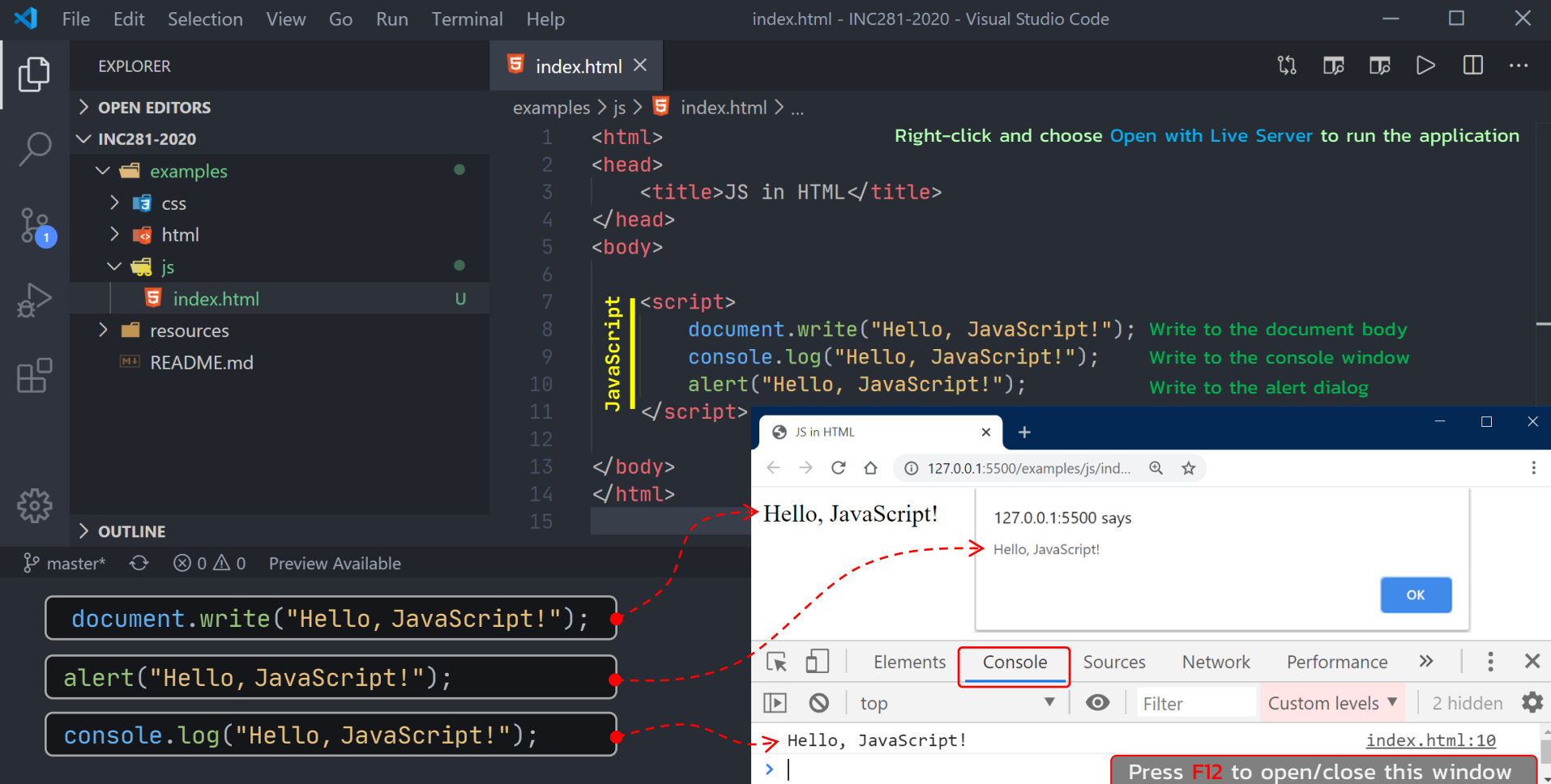
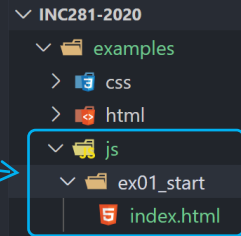
- Add new HTML to the page, change the existing content, modify styles.
- React to user actions, run on mouse clicks, pointer movements, key presses.
- Send requests over the network to remote servers, download and upload files (so-called AJAX and COMET technologies).
- Get and set cookies, ask questions to the visitor, show messages.
- Remember the data on the client-side (“local storage”).

JavaScript programs can be inserted into any part of an HTML document with the help of the `<script>` tag. (Check the next page for example).

<https://javascript.info/js>

Getting Started with JavaScript

- 1) Create a web page, `index.html` and save it in the `js/ex01_start` directory
- 2) Edit the `index.html` as shown below
- 3) Save and run `index.html`, then check the result in the web browser



The screenshot shows the Visual Studio Code editor with the `index.html` file open. The Explorer sidebar on the left shows the project structure: `INC281-2020` > `examples` > `html` > `js` > `ex01_start` > `index.html`. The Editor sidebar on the right shows the code for `index.html`:

```
1 <html>
2 <head>
3   <title>JS in HTML</title>
4 </head>
5 <body>
6
7   <script>
8     document.write("Hello, JavaScript!");
9     console.log("Hello, JavaScript!");
10    alert("Hello, JavaScript!");
11  </script>
12
13 </body>
14 </html>
15
```

Annotations in the code include: "Right-click and choose Open with Live Server to run the application" pointing to the `index.html` file in the Explorer, and "JavaScript" written vertically next to the `<script>` block. Below the code, three lines of JavaScript code are highlighted with red dashed arrows pointing to the browser's console:

- `document.write("Hello, JavaScript!");` points to the "Hello, JavaScript!" text in the browser's body.
- `alert("Hello, JavaScript!");` points to the alert dialog box that says "Hello, JavaScript!".
- `console.log("Hello, JavaScript!");` points to the "Hello, JavaScript!" message in the browser's console.

The browser window shows the page title "JS in HTML" and the URL "127.0.0.1:5500/examples/js/ind...". The console shows the message "Hello, JavaScript!" and the log output "Hello, JavaScript!". The console tab is highlighted with a red box. At the bottom right, a red box contains the text "Press F12 to open/close this window".

[Edit on GitHub](#)

Ads

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Everyone can learn, just not on the same day, or the same way

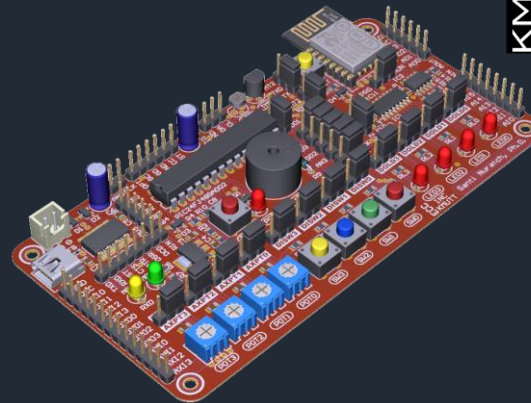
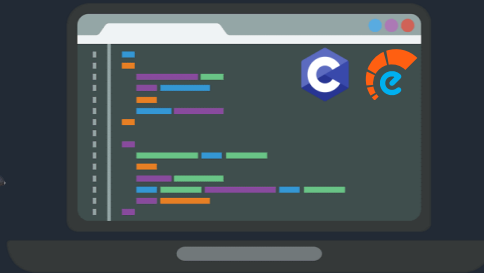
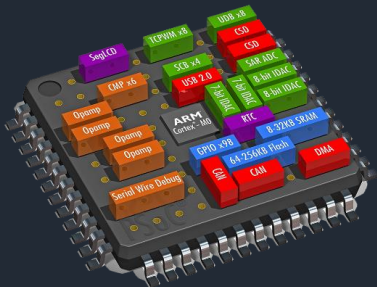
Let's learn the fundamentals of script building.

1. Hello, world!
2. Code structure
3. The modern mode, "use strict"
4. Variables
5. Data types
6. Type Conversions
7. Operators
8. Comparisons
9. Interaction: alert, prompt, confirm
10. Conditional operators: if, '?'
11. Logical operators

THANK YOU!



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