

# Learning NextJS. CSS Styling

### Dmitry Makarenkov, Ph.D. (Tech.)

https://dmpsy.club

NextJS >= ReactJS + NodeJS

### Target Audience

The NextJS adepts, wishing to follow modern trends in full-stack Web apps development

Magic formula:

NextJS > = ReactJS (front-end) + NodeJS (back-end)



1	Visual Studio Code Installation	VSCode Installation from Scratch
2	Global Styles	To apply styles globally to all ui components, Import <i>global.css</i> into the root <i>layout.tsx</i>
3	Tailwind	Add Tailwind when creating an app and use its class names
4	CSS Modules	To apply styles to a particular ui component, create a dedicated *.css file and import it to that ui component
5	Using clsx Library	Use the <i>clsx</i> library to toggle class names conditionally, say, depending on a variable value
6	Other Styling Solutions	Well-known Tailwind & CSS alternatives

NextJS official training: <u>https://nextjs.org/learn/dashboard-app/css-styling</u>

#### Initial Installation of VSCode on Windows



### Initial Installation of VSCode on Linux

1	Open <u>https://code.visualstudio.com/download</u>	
2	Press	<mark>⊥ .deb</mark> Debian, Ubuntu
3	Run	code_1.91.1-1720564633_amd64.deb 96.2 MB — microsoft.com — 21:40
	With	Software Install
4	Verify installation: code -v code # to start VSCode	

## Initial Installation of VSCode on Linux (2)

	Alternative method
1	Install snap
2	Install Visual Studio Code: sudo snap install —classic code
3	Verify installation from Terminal: code -v code # and run VSCode

### Initial Installation of VSCode on MacOS

1	Open <u>https://code.visualstudio.com/download</u>					
2	Press					
3	Unzip *.zip file Move *.dmg file	to Applications	<ul> <li>Ф</li> <li>Недавние</li> <li>Программы</li> <li>Рабочий стол</li> <li>Документы</li> <li>Загруаки</li> </ul>	Загрузки       Има       Visual Studio Code       idealC-2023.2.1.dmg       gradle-8.3-bin.zip       gradle-8.3-bin.zip       kottlin-native-macos-x88_64-1.8.0.tar.gz       jre-8.03-macosx-x64.dmg       Xcode_12.5.1.xip	:≡ ≎ 552 × 0 √ 2           Размер         Тип           572,7 М5         Приложение           929,2 М5         Образ диска           130,6 М5         Архив ZIP           124,1 М5         Архив ZIP           319,1 М5         Скаты…ив gzip           90,6 М5         Образ диска           11,79 Г5         XIP Se…Archive	
4	Verify installatio code -v code # to start V	n: /SCode				

### Applying Styles Globally (from *global.css*)

app/layout.tsx import '@/app/ui/global.css'





The project structure resembles a (matryoshka) nesting doll; all underlying layers are wrapped in the root **layout.tsx**. Accordingly, if we want to style the project uniformly, the **global.css** style file must be imported into the root **layout.tsx**.

#### Applying Styles Globally (from **global.css**) (2)

1	Start the dev server	cd nexxt-app pnpm dev
2	Import styles	app/layout.tsx: Import '@app/ui/global.css'
3	Save and see changes at localhost:3000	Ctrl-S # to save changes

Welcome to Acme. This is the example for the <u>Next.js Learn Course</u>, brought to you by Vercel. Log in Welcome to Acme. This is the example for the Next.js Learn Course, brought to you by Vercel.

#### Using Tailwind (className) Class Names

```
@tailwind base;
@tailwind components;
@tailwind utilities;
```

```
input[type='number'] {
    -moz-appearance: textfield;
    appearance: textfield;
```

```
input[type='number']::-webkit-inner-spin-button {
   -webkit-appearance: none;
   margin: 0;
```

```
input[type='number']::-webkit-outer-spin-button {
   -webkit-appearance: none;
   margin: 0;
```

Adding Tailwind to g**lobal.css**:

@tailwind base;@tailwind components;@tailwind utilities;

#### Using Tailwind (className) Class Names (2)

```
import AcmeLogo from '@/app/ui/acme-logo';
    import { ArrowRightIcon } from '@heroicons/react/24/outline';
 2
 3
    import Link from 'next/link';
 4
    export default function Page() {
 5
 6
      return (
 7
        // These are Tailwind classes:
        <main className="flex min-h-screen flex-col p-6">
 8
          <div className="flex h-20 shrink-0 items-end rounded-lg bg-blue-500 p-4 md:h-52">
 9
10
        11 ...
11
12
```

Example of using class name in action

#### Using Tailwind (className) Class Names (3)

#### Let's test the following class names:

<h1 className="text-blue-500">I'm blue!</h1> <div className="relative w-0 h-0 border-I-[15px] border-r-[15px] border-b-[26px] border-I-transparent border-r-transparent border-b-black" /> <h1 className="text-red-500">I'm red!</h1>





Learning Tailwind here: <u>https://tailwindcss.com/</u>

### Applying Styles Locally (from home.module.css)

1	Create app/ui/home.module.css	<pre>.shape {     height: 0;     width: 0;     border-bottom: 30px solid green;     border-left: 20px solid transparent;     border-right: 20px solid transparent; }</pre>
2	Import styles to app/page.tsx	import styles from '@/app/ui/home.module.css';
3	Apply styles.shape to <div></div>	app/page.tsx: <div classname="{styles.shape}/"></div>
3	Save and see changes (green triangle) at localhost:3000	Ctrl-S # to save changes

I'm blue!

#### Using the *clsx* Library to Toggle Class Names

75 /app/ui/invoices/status.tsx

```
import clsx from 'clsx';
    export default function InvoiceStatus({ status }: { status: string }) {
      return (
 5
        <span
          className={clsx(
 6
            'inline-flex items-center rounded-full px-2 py-1 text-sm',
 8
               'bg-gray-100 text-gray-500': status === 'pending',
10
              'bg-green-500 text-white': status === 'paid'.
11
            }.
          )}
        >
        11 ...
14
15
   )}
```

Learn the *clsx* library here: <u>https://www.npmjs.com/package/clsx</u> and there: <u>https://github.com/lukeed/clsx</u>

#### <u>Example:</u>

If 'pending', the invoice status displays in grey on a grey background; If 'paid', the invoice status is displayed in white on a green background

## Well-Known Tailwind Alternatives

1

Sass, which allows one to import both .css and .scss files

2 The CSS-in-JS libraries: styled-jsx, styled-components, and emotion

3 Material Design (MUI): <u>https://mui.com/material-ui/getting-started/example-projects/</u> (see the NextJS AppRouter example template) Material Design 3 <u>https://m3.material.io/develop/web</u>

NB. Alternatives will be considered in the 2nd part of the course

## Session Summary

1	Learned how to install Visual Studio Code on Windows, Linux, and MacOS
2	Understood how to apply styles globally to all pages of the application
3	Learned recommended ways to style a NextJS app: using Tailwind (globally) and traditional CSS (locally)
4	We learned how to toggle the appearance of interface elements conditionally (depending on variable values) by changing class names using the <i>c</i> /sx library
5	Reviewed Tailwind & CSS alternatives

## See you at the next session: 3. Optimizing Fonts & Images

The presentation is available for download here::

https://dmpsy.club/references/NextJS/lesson 002 css styling eng.pdf

Donate the author: <u>https://www.donationalerts.com/r/dmitrymak</u>



.

🚾 dmitrymakarenkov — -zsh — 88×38

Last login: Sun Jul 14 10:33:53 on ttys000 /Users/dmitrymakarenkov/.zshrc:export:5: not valid in this context: -s [dmitrymakarenkov@iMac-Dmitry ~ % nvm -v zsh: command not found: nvm dmitrymakarenkov@iMac-Dmitry ~ % curl -o- https://raw.githubusercontent.com/nvm-sh/nvm/v 0.39.7/install.sh | bash % Total % Received % Xferd Average Speed Time Time Time Current Dload Upload Total Spent Left Speed 100 16555 100 16555 0 55183 0 --:-- --:-- --:-- 58087 0 => nvm is already installed in /Users/dmitrymakarenkov/.nvm, trying to update using git => => Compressing and cleaning up git repository => nvm source string already in /Users/dmitrymakarenkov/.zshrc => bash\_completion source string already in /Users/dmitrymakarenkov/.zshrc => Close and reopen your terminal to start using nvm or run the following to use it now: export NVM\_DIR="\$HOME/.nvm" [ -s "\$NVM\_DIR/nvm.sh" ] && \. "\$NVM\_DIR/nvm.sh" # This loads nvm [ -s "\$NVM\_DIR/bash\_completion" ] && \. "\$NVM\_DIR/bash\_completion" # This loads nvm bas h\_completion dmitrymakarenkov@iMac-Dmitry ~ % export NVM\_DIR="\$HOME/.nvm" dmitrymakarenkov@iMac-Dmitry ~ % [ -s "\$NVM\_DIR/nvm.sh" ] && \. "\$NVM\_DIR/nvm.sh" dmitrymakarenkov@iMac-Dmitry ~ % [ -s "\$NVM\_DIR/bash\_completion" ] && \. "\$NVM\_DIR/bash\_ completion" dmitrymakarenkov@iMac-Dmitry ~ % nvm -v 0.39.7 dmitrymakarenkov@iMac-Dmitry ~ % nvm install 20 Downloading and installing node v20.15.1... Downloading https://nodejs.org/dist/v20.15.1/node-v20.15.1-darwin-x64.tar.xz... Computing checksum with shasum -a 256 Checksums matched! Now using node v20.15.1 (npm v10.7.0) dmitrymakarenkov@iMac-Dmitry ~ % node -v v20.15.1 dmitrymakarenkov@iMac-Dmitry ~ % npm -v 10.7.0 dmitrymakarenkov@iMac-Dmitry ~ %

#### **ATTENTION!**

When installing node.js on old MACs, do not try to install **fnm**, use **nvm** instead!

See the output from MacOS BigSur

