



# **2021 Frontend Roadmap**

By Web Dev Simplified <a href="https://courses.webdevsimplified.com">https://courses.webdevsimplified.com</a>

Each section, and all the items listed in each section, of this roadmap are listed in the order that you should learn them.

Each section also includes projects that you can complete in any order that require only the skills learned in that section and the sections prior.

### HTML

Basics - Playlist

Forms - Video

Emmet - Video

### **CSS - Course**

Selectors - Video, Cheat Sheet

Cascade

Specificity - Video, Article

Box Model - Video

Position - Video

Display - Video

Flexbox - Video

Grid - Video

Float - Article

Calc - Video, Article

Pseudo Elements - Video

**Pseudo Classes** 

Custom Properties - Video, Article

Media Queries - Video

## **Projects**

### Easy

Transparent Login Form - <u>Video</u>
Responsive Video Background - <u>Video</u>

#### Medium

CSS Only Tooltips - Video

CSS Emoji Art - Video

CSS Face Art - Video

Advanced Hover Effects - Video

Animated Page Load - Video

Custom Checkbox Tutorial - Video

3D Flip Button - Video

**Animated Loading Spinner - Video** 

#### Hard

YouTube Clone - Video

Price Comparison Table - Video

Landing Page 1 - Video

Landing Page 2 - Video

Animation - Basic Video, Advanced Video, Transform Article, Fill Mode Article

### JavaScript - Course

Async vs Defer Script Loading - Video, Article

Var vs Let vs Const - Video, Article

Strict Equality - Video, Article

**Hoisting - Article** 

Scoping

**DOM Traversal - Video** 

Closures - Video

Reference Vs Value - Video

**DOM Manipulation - Video** 

Arrow Functions - Video, Article

Callbacks - Article, Related Video

**Event Listeners - Video** 

Promises - Video

Async Await - Video

Fetch - Video

Browser Storage - Video, Article

**Event Loop** 

Modules - Video, Advanced Article

Template Literals - Article

Array Methods - Video

Null Vs Undefined - Article

Recursion - Video

**Short Circuiting - Article** 

Ternary Operator - Video, Article

Classes - Video

Bundlers - Parcel Video

### **Projects**

### Easy

Form Validation - Video

Light/Dark Theme Toggle - Video

Google Maps Clone - Video

Analog Clock - Video

Impossible To Click Button - Video

Simple Tabs - Video

Rock Paper Scissors Game - Video

Text To Speech - Video

Eye Tracking Program - Video

**Expandable Content - Article** 

Modal - Video

#### Medium

Password Strength Tester - Video

Password Generator - Video

Quiz App - Video

Card Game - Video

Snake Game - Video

Al Face Detection - Video

Al Face Recognition - Video

Thanos Snap Effect - Video

Sortable Drag And Drop - Video

Speed Typing Game - Video

Tic Tac Toe - Video

Browser Based Guitar Amp - Video

Text Adventure Game - Video

#### Hard

Custom Select Dropdown - Video

Calculator - Video

Card Matching Game - Video

Advanced Todo List - Video

Mars Weather App - Video

Battleship Clone - Video

Destructoring/Spread Operator - Video, Article

# Frontend Framework - (Optional) (Choose Any)

React (Recommended) - Course

**Vue** (Second Recomendation)

**Angular** (Declining Popularity)

**Svelte** (Growing Popularity)

### React - Course

Component Model - Video

**JSX** 

**Events** 

**Class vs Function Components** 

Props - Video

State - Video, Article

useEffect - Video, Article

useLayoutEffect - Article

Context - Video, Article

Refs - Video, Article

useMemo - Video, Article

useCallback - Video, Article

useReducer - Video, Article

Custom Hooks - Video, Article

PropTypes - Article

Portal - Video, Article

## **Projects**

### **Easy**

Todo List - <u>Video</u>

Currency Converter - <u>Video</u>

Photoshop Clone - <u>Video</u>

#### Medium

Pokemon App - <u>Video</u>
CodePen Clone - <u>Video</u>
Infinite Scrolling - <u>Video</u>

#### Hard

Flashcard Quiz App - <u>Video</u>
Authentication (Firebase) - <u>Video</u>
Google Drive Clone (Firebase) - <u>Video</u>

Best Practices - Video, Local State Article, Derived State Article, Debounce Article

# **Other Important Topics**

Version Control (Learn As Soon As Possible) - Video

JSON (Learn Alongside JavaScript) - Video

Regular Expressions (Optional) - Video

**How To Deploy** 

Basic Security - Cross Site Scripting Video, Cross Site Scripting Article

Testing - Video, Test Driven Development Video

# Things That Will Grow In 2021

**TypeScript** 

**Next.js** (Fullstack Framework For React)

Nuxt.js (Fullstack Framework For Vue)

**Progressive Web Apps** 

Single Page Apps

Serverless (Firebase, AWS Lambda, Azure, etc.) - Video