

# 12-day training plan for Front-end

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Confidential document. For PinOn Internal training only.

## Objective:

1. Start working on real project immediately after training
2. Minimize instructor time

## Requirement:

1. 10h per day
2. Basic knowledge of Computer Science
3. Eager to learn

## Before Training

(For everyone with or without CS Background)

(cn) [Front-End Development Introduction](#)

## Day 1 - HTML + CSS + JS Basics

(cn)

Basic HTML+CSS (09:18:00)

<http://www.imooc.com/learn/9>

Basic Javascript (01:35:00)

<http://www.imooc.com/learn/36>

(en)

(HTML+CSS)

(03:04:45) <https://www.udemy.com/course/master-the-basics-of-html5-css3-beginner-web-development/>

(HTML+CSS)

(04:32:59) <https://www.udemy.com/course/how-i-landed-a-web-development-job-earned-5k-freelancing/>

(HTML+CSS+JS Basic)

(20:45:58) <https://www.udemy.com/course/foundations-of-front-end-development/>

Before jQuery

More resources:

- [HTML5 Style Guide](#)
- [HTML Semantic Element](#)
- [HTML elements reference](#)
- [MDN Introduction to CSS](#)

## Day 2 - Learn CSS Layout

CSS layout method

- [Learn CSS Layout](#)
- [Flex](#)
- [Grid](#)
- Practice:** <https://codesandbox.io/s/flex-grid-practice-dice-yxve0?file=/index.html>  
**Use Flex and Grid to implement**

## HTML & CSS Questions

Self learning: Finish HTML & CSS Questions

**(Need instructor ~2h)** Question Review

## Days 3, 4 - Practice

- Use HTML and CSS to layout Google Homepage (Or other website)
- Include three popups
  - Setting
  - Google apps
  - Account

\*\* (You don't need to add click event. You can place the popups anywhere on the page. )

**(Need instructor ~2h)** Practice review

## Day 5 - JavaScript 1

- Fix Google homepage layout problem problem

Advanced Javascript

8小时55分 <http://www.imoooc.com/learn/10>

## Day 6 - Practice

- Add interactive functions to your Google Home page.
- Add search history popup.
- Automatic generate html content with Javascript.
  - Search history
  - Google Apps Link

(Need instructor 2h) review

## Day 7 - JavaScript 2

1. Language features
  - a. Short-circuit evaluation
  - b. Destructuring assignment
  - c. Spread Operator
  - d. String template
  - e. Arrow Function
  - f. Built-in collection type and function. [Array](#), [Object](#), [Map](#), [Set](#)
2. JSON & Object
  - a. Object mutation
  - b. JSON and Javascript
3. **\*\* Async programming**
  - a. Getting to know asynchronous JavaScript: Callbacks, Promises and Async/Await
  - b. (Optional for reference) [Promise](#)
  - c. (Optional for reference) [Async/Await](#)
  - d. **Practice:** <https://codesandbox.io/s/autorefetch-problem-1k2ny>
4. 3rd party libraries (Optional)
  - a. [Lodash](#): Lots of utility functions
  - b. [date-fns](#): Time manipulation
  - c. [Axios](#): Promise based HTTP client

(Need instructor ~2h)

## Day 8 - (Framework) React - Component & Lifecycle (11.7h)

<https://www.udemy.com/course/react-the-complete-guide-incl-redux/>

Getting Started **39:40**

Refreshing Next Generation JavaScript (Optional) **45:16**

Understanding the Base Features & Syntax **02:21:47**

Working with Lists and Conditionals **01:00:56**

Styling React Components & Elements **00:15:00**

**(Only first 4 sections)**

Debugging React Apps **20:07**

Diving Deeper into Components & React Internals **05:30:36**

(Important)

## Day 9 - (Framework) React - Ajax HTTP Request (10h)

**(Need instructor 2h)** React life-cycle recap question

<https://codesandbox.io/s/react-life-cycle-pu564>

Life-cycle difference between Components and Functional Components(Hook). Equivalent.

(6h)

<https://www.udemy.com/course/react-the-complete-guide-incl-redux/>

A Real App: The Burger Builder (Basic Version) **03:59:42**

React Hooks **03:03:16**

Reaching out to the Web (Http / Ajax) **56:27**

## Day 10 - (Framework) React 3 - Routing

(4h)

<https://www.udemy.com/course/react-the-complete-guide-incl-redux/>

Multi-Page-Feeling in a Single-Page-App: Routing **02:03:00**

Adding Routing to our Burger Project **01:18:50**

Forms and Form Validation **01:11:48**

**Practice** : Google homepage React version

- Wrap your Google Home page with React
- No more function needed

**(Need instructor 4h)** Practice review

 [React Router & Single-Page-App](#) (2h w/ 1h practice)


React Design Pattern

[cn] <https://reactpatterns.com/>

[en] <https://reactpatterns.cn/>

## Day 12 - Building tools

TypeScript (2h)

 [Git Workflow](#) (4h w/ 1h practice)

ESLint

Prettier

Babel

.....Other 3rd party library

## Day 13 - Finish

Start working on project

Submit first PR/MR

### **\*\*Read:**

 [Front-end Code Review Common Problem](#)

 [PinOn Programming Naming convention](#)

## Day - Advanced CSS & SVG

 [Advanced CSS & SVG](#)