



TypeScript: Learning Materials

Chapter 0: Basics

History of TypeScript:

1. [TypeScript In 5 Minutes: A VERY Brief Intro](#)
2. [The Story of TypeScript](#)

How to install TypeScript:

1. [How to set up TypeScript.](#)
2. [How To Run TypeScript In VSCode | Create TS Project | Compile TypeScript](#)
3. Typescript playground in vscode: [Quokka.js: Introduction](#)

Difference between TypeScript and Javascript:

1. [Typescript and Javascript both have their pros and cons - learn more in the article!](#)
2. [TypeScript VS JavaScript: Key Differences You Must Know](#)

TypeScript and JS:

1. [Documentation - TypeScript for JavaScript Programmers](#)

Get started:

1. [The TypeScript Handbook](#) (Go through the entire list)
2. [High Order Functions in TypeScript | by Rodrigo Figueroa | Geek Culture | Medium](#)

Asynchronous TypeScript:

1. [A guide to async/await in TypeScript - LogRocket Blog](#)

Chapter 1: Introduction to NodeJs with Ts

History of NodeJS:

1. [#1 - Node.js নিয়ে একটি ছোট্ট গল্প - Node.js Tutorial Bangla | Express.js Tutorial Bangla](#)
2. [#2 - Node.js কি & কিভাবে কাজ করে? - Node.js Tutorial Bangla | Bangla Node js Tutorial](#)

What is V8 Engine:

1. [The V8 JavaScript Engine](#)
2. [Difference between nodeJS and the browser](#)

Event loop

1. [Javascript execution pipeline](#)

2. [The Node.js Event Loop](#)
3. [📺 What the heck is the event loop anyway? | Philip Roberts | JSConf EU](#)
4. [Don't Block the Event Loop](#)
5. [Node.js — Overview of Blocking vs Non-Blocking](#)
6. [Event loop visualizer](#)

How to install NodeJS:

1. [How to install Node.js](#)
2. [📺 #3 - Node.js Installation - VS Code Editor Setup - Node.js Tutorial Bangla](#)
3. [How to Setup a TypeScript + Node.js Project | Khalil Stemmler](#)
4. [TypeScript: Documentation - What is a tsconfig.json](#)
5. [📺 How to Setup Node.js with TypeScript in 2023](#)
6. [Run Node.js scripts from the command line](#)

Styling and formatting

1. [How to use ESLint with TypeScript | Khalil Stemmler](#)

Npm packages and versioning

1. [Node.js — An introduction to the npm package manager](#)
2. [Where does npm install the packages? - DEV Community](#)
3. [What is the difference between package.json and package-lock.json?](#)
4. [Understanding npm Versioning - DEV Community](#)
5. [Difference between dependency and devdependency | by Pravin M](#)
6. [Node.js — npm 1.0: Global vs Local installation](#)

Node modules and exports

1. [ECMAScript modules | Node.js v22.1.0 Documentation](#)
2. [Node Module Exports Explained – With JavaScript Export Function Examples](#)
3. [Relative vs Absolute Imports in Node JS | by Oboite Osahon | Medium](#)

Environments

1. [Node.js, the difference between development and production](#)
2. [How to read environment variables from Node.js](#)

Chapter 2: Essential modules in NodeJS

Fs module in NodeJS:

1. [Working with file descriptors in Node.js](#)
2. [Node.js file stats](#)
3. [Reading files with Node.js](#)
4. [Writing files with Node.js](#)
5. [Working with folders in Node.js](#)

Path Module in NodeJs:

1. [Node.js File Paths](#)

OS module in Nodejs:

1. [OS Module in NodeJS](#)

Events in NodeJS:

1. [Events in Node.js. Basic article on event handling in... | by diego.coder | Medium](#)
2. [The Node.js Event emitter](#)

Buffers and Streams in NodeJS

1. [Buffers in Node.js: What They Are and Why They Matter | by Marcos Vinicius Gouvea | Medium](#)
2. [Node.js Streams: Everything you need to know](#)

Chapter 3: ExpressJs

Setting up express

1. [Node Frameworks - GeeksforGeeks](#)
2. [How to set up TypeScript with Node.js and Express - LogRocket Blog](#)
3. [Express.js Tutorial Bangla Series for Beginners - YouTube](#) (Optional: Video #15 - #23)

Chapter 4: Database

Introduction

1.  [SQL vs. NoSQL: What's the difference?](#)

Setting up PostgreSQL

1. [PostgreSQL: Windows installers](#)
2.  [Getting Started w/ PostgreSQL! | Download, Install & Add Data](#)

Introduction to ORMs

1. [What is an ORM – The Meaning of Object Relational Mapping Database Tools](#)
2. [Getting Started | Sequelize](#)
3. [TypeScript | Sequelize](#)
4. [Installation | Knex.js](#)

Misc.

1. [Node.js Event Loop - YouTube](#)
2. [9 essential VS Code extensions for TypeScript - LogRocket Blog](#)
3. [Dependency Injection in Typescript with Inversify | by Paolo Posso](#)