# I can help you becoming a full stack developer:

### Presentation:

Become a full stack developer with my help! I have more than 10 years experience as a teacher and 3 as a software developer!

This course aims to teach you not just the most used tools the market is using right now (2022), but also: fundamentals of computer science (which are very important for a complete developer) and market best practices and organization methodologies.

All of that with 34 projects where you are going to learn by DOING!

And, during the course, if I fell like you are prepared I can help you getting a job (not guaranteed, but I will do my best).

# Study program:

- 1. Software development fundamentals 30 lessons
  - 1. GitHub 3 lessons
  - 2. Html & CSS: intro \* 4 lessons
  - 3. Introduction to JS and programming logic \* 4 lessons
  - 4. JS: DOM, events and WebStorage \* 5 lessons
  - 5. HTML & CSS: Forms, flexbox, responsive \* 6 lessons
  - 6. JS ES6 & unit tests \* 3 lessons
  - 7. HoF \* 5 lessons
- 2. FrontEnd: 21 lessons
  - 1. JS & async tests \* 3 lessons
  - 2. Intro to React \* 2 lessons
  - 3. Components, state, events and forms \* 2 lessons
  - 4. Life cycles \* 2 lessons
  - 5. Agile methodologies \* 1 lesson
  - 6. Automated tests: RTS \* 3 lessons
  - 7. Redux \* 5 lessons
  - 8. Project
  - 9. Context API & Hooks \* 3 lessons
  - 10. Project
- 3. BackEnd: 41 lessons
  - 1. Docker Intro \* 3 lessons
  - 2. SQL Intro \* 4 lessons
  - 3. SQL Advanced \* 3 lessons
  - 4. Creating APIs \* 5 lessons
  - 5. Architecture \* 3 lessons
  - 6. ORMs & authentication \* 4 lessons
  - 7. Deployment \* 2 lessons
  - 8. Typescript \*\* 3 lessons
  - 9. OOP e Solid \* 5 lessons
  - 10. Project
  - 11. MongoDb Intro \* 5 lessons
  - 12. MongoDb + API + OOP \* 2 lessons
  - 13. Project
  - 14. VPS + CI/CD + DNS 2 lessons
- 4. Computer science: 20 lessons
  - 1. Intro to python \*\* 3 lessons
  - 2. Design Patterns \* 3 lessons
  - 3. Web Scraping \*\* 3 lessons

- 4. Algorithms \* 3 lessons
- 5. Data sctructure I: Arrays, Lists, Queues, Stacks \* 4 lessons
- 6. Data sctructure II: HashMaps, Set \* 2 lessons

'\* A project is included at the end of this subject '\*\* This subject can be skipped if you want to do BackEnd and CS classes using C# - if you choose to skip these lessons the total price of the course will be reduced accordingly

# Study program - detailed:

- 1. Software development fundamentals 30 lessons
  - 1. GitHub 3 lessons
    - 1. Understanding Git and how it works
    - 2. Basic commands
    - 3. Internet How it works?
  - 2. Html & CSS: intro \* 4 lessons
    - 1. Page basic structure
    - 2. CSS basics
    - 3. CSS: selectors and positioning
    - 4. Semantic HTML
    - 5. Project Lessons Learned
  - 3. Introduction to JS and programming logic \* 4 lessons
    - 1. First steps into JS
    - 2. Array e for loop
    - 3. Programming logic and algorithmics
    - 4. Objects and functions
    - 5. Project playground functions
  - 4. JS: DOM, events and WebStorage \* 5 lessons
    - 1. JS DOM and selectors
    - 2. Working with elements
    - 3. Events
    - 4. Web Storage
    - 5. Browser tips and tricks
    - 6. Project Pixel Art + Bonus projects (optional)
  - 5. HTML & CSS: Forms, flexbox, responsive \* 6 lessons
    - 1. Forms
    - 2. Libraries and frameworks CSS
    - 3. Flexbox part I
    - 4. Flexbox part II
    - 5. Responsible CSS Mobile first
    - 6. Project Hogwarts school of magic
  - 6. JS ES6 & unit tests \* 3 lessons
    - 1. let, const, arrow functions and template literals
    - 2. Exceptions and objects
    - 3. Jest
    - 4. Project unit tests
  - 7. HoF \* 5 lessons
    - 1. HoF introduction
    - 2. forEach, find, some, every, sort
    - 3. map and filter
    - 4. reduce
    - 5. spread operator, rest operator, destructuring
    - 6. Project Zoo functions

- 2. FrontEnd: 21 lessons
  - 1. JS & async tests \* 3 lessons
    - 1. Asyncronous programming and callbacks
    - 2. Fetch API + async / await
    - 3. Jest async testing
    - 4. Project Shopping cart
  - 2. Intro to React \* 2 lessons
    - 1. React basics
    - 2. React Components
    - 3. Project Solar system
  - 3. Components, state, events and forms \* 2 lessons
    - 1. State & events
    - 2. Forms on React
    - 3. Project Triunphy
  - 4. Life cycles \* 2 lessons
    - 1. Components life cycle
    - 2. React Router
    - 3. Project YourTunes
  - 5. Agile methodologies \* 1 lesson
    - 1. Scrum & Kanban
    - 2. Project Online Store
  - 6. Automated tests: RTL \* 3 lessons
    - 1. RTL Basics
    - 2. Mocks & Inputs
    - 3. Testing React Router
    - 4. Project React Testing
  - 7. Redux \* 5 lessons
    - 1. Global State
    - 2. Redux with React
    - 3. Pratice Redux
    - 4. Async Actions
    - 5. Tests with Redux & React
    - 6. Project Digital Wallet
  - 8. Project Trivia game
  - 9. Context API & Hooks \* 3 lessons
    - 1. Context API
    - 2. useState & useContext
    - 3. useEffect & Custom hooks
    - 4. Project Starwars Datatable
  - 10. Project Recipe App
- 3. BackEnd: 41 lessons
  - 1. Docker Intro \* 3 lessons
    - 1. Basic about containers and docker
    - 2. Manipulating docker images
    - 3. Orquestration with docker compose
    - 4. Project To Do List with docker
  - 2. SQL Intro \* 4 lessons
    - 1. Intro Relational Databases and DB modelling
    - 2. Querying a database
    - 3. Filtering data
    - 4. Manipulating tables
    - 5. Project All for one
  - 3. SQL Advanced \* 3 lessons
    - 1. Most used functions on SQL
    - 2. JOIN's 'easy pizzy'
    - 3. Advanced modelling of Databases
    - 4. Project One for all
  - 4. Creating APIs \* 5 lessons
    - 1. Intro Framework to create a server
    - 2. API Rest with a framework
    - 3. Integration tests
    - 4. Middlwwares

- 5. BackEnd Framework + Sql
- 6. Project Talker Manager
- 5. Architecture \* 3 lessons
  - 1. Model layer
  - 2. Services Layer
  - 3. Controller layer
  - 4. Project Store Manager
- 6. ORMs & authentication \* 4 lessons
  - 1. ORMs basics
  - 2. Associations
  - 3. JWT
  - 4. API integrated tests
  - 5. Project Blog API
- 7. Deployment \* 2 lessons
  - 1. Deploy basics
  - 2. Deploy Docker & Heroku
  - 3. Project Stranger Things
- 8. Typescript \*\* 3 lessons
  - 1. TS basics
  - 2. Static typing & generics
  - 3. TS with backend framework
  - 4. Project Smith
- 9. OOP e Solid \* 5 lessons
  - 1. Intro to OOP
  - 2. Inheritance and interfaces
  - 3. Polimorphism
  - 4. SOLID: S, O and D
  - 5. SOLID: L and I
  - 6. Project Dragons
- 10. Project Futebol club
- 11. MongoDb Intro \* 5 lessons
  - 1. NoSql and Mongo intro
  - 2. Filter operations
  - 3. Query operations
  - 4. Simple updates
  - 5. Complex updates arrays
  - 6. Project Commerce
- 12. MongoDb + API + OOP \* 2 lessons
  - 1. MSC architecture model
  - 2. MSC architecture Service & controller
  - 3. Project Car Shop
- 13. Project Delivery App
- 14. VPS + CI/CD + DNS 2 lessons
  - 1. Connecting to a virtual private server
  - 2. CI/CD and pipelines
- 4. Computer science: 20 lessons
  - 1. Intro to python \*\* 3 lessons
    - 1. Python basics
    - 2. Input / output
    - 3. Tests
    - 4. Project Job Insights
  - 2. Design Patterns \* 3 lessons
    - 1. OOP with a programming language
    - 2. Patterns: Iterator, Adapter, Strategy
    - 3. Patterns: Decorator, Observer, Factory
    - 4. Project Storage
  - 3. Web Scraping \*\* 3 lessons
    - 1. Web structure, and security
    - 2. Data scraping
    - 3. Other scraping tools
    - 4. Project Tech news
  - 4. Algorithms \* 3 lessons
    - 1. Algorithms complexity
    - 2. Recursivity and other strategies
    - 3. Ordenations and search algorithms
    - 4. Project Algorithms

- 5. Data sctructure I: Arrays, Lists, Queues, Stacks \* 4 lessons
  - 1. Computer architecture
  - 2. Arrays
  - 3. Nodes and concatenate lists
  - 4. Queues and Stacks
  - 5. Project We are not Google!
- 6. Data sctructure II: HashMaps, Set \* 2 lessons
  - 1. Hashmap & Dict
  - 2. Set
  - 3. Project restaurant orders

# Course routine:

I offer 3 possibilities: 1. 1 class / week 2. 2 classes / week 3. 3 classes / week (weekend included)

A normal class day consists of: 1. I send you the material to be studied in ADVANCE to our class: 1h30 - 2h30 of studies 2. I give you a class: 1h or 1h30 (to be agreed) 3. You do the exercises or project: 2h - 3h exercises / 1 week project 4. Both projects and exercises have automated correction, if you need personalized help you can pay for single monitoring sessions

### Prices:

- 1. Price / lesson: \$90 / 1h or 120 / 1h30min
- 2. Price for the material 5.000 free
- 3. Single monitoring session (to solve doubts about exercises): \$50 / 1h

#### **Optionals:**

- 1. CV and Pitch consulting: \$150 / 1 session (1h30min)
- 2. Job interview simulation: \$300 / 1 process (3 interviews: 1 of 30min, and 2 of 1h)

# Full course price:

- 1. 1h lesson: 90 \* 112 lessons = \$10.080
- 2. 1h30 lesson: 120 \* 112 lessons = \$13.440

# **Details:**

'\* All this course codes MUST be writen in english, this is to help you, because it's the standard of the market!

#### Lesson + project quantities:

- 1. 112 lessons
- 2. 30 simple projects + 4 complex projects

### **Default durations:**

- 1. Simple project: 1 week
- 2. Complex project: 2 week

#### Course duration:

- 1. 1 class / week: 2 years and 4 months lessons + 9 months projects = 3 years and 1 month
- 2. 2 classes / week: 1 year and 2 months + 9 months projects = 2 years and 2 month
- 3. 3 classes / week: 9 months + 9 months projects = 1 year and 6 months

#### Payment conditions:

- 1. Monthly: All the classes of a month are paid at the end of that month no discount
- 2. Monthly ahead: All the classes of a month are paid at the begging of that month 5% discount (\$9.576 / 12.768)
- 3. 50 50: 50% paid at the beggining of the course, 50% paid at the end 7.5% discount (\$9.324 / 12.432)
- 4. Paid ahead: The whole value is paid ahead 10% discount (\$9.072 / 12.096)

# I can help you get a job:

- 1. If you are performing well during our class and I fell like you are ready to enter the market before the end of the course I can help you getting a job since I have contacts with many companies (not guaranteed, but I will do my best).
- 2. If needed I can help you creating a CV and a pitch to help you with job interview (see prices section).
- 3. If you get a job before the end of the course we can either reduce the number of lessons / week and increased the time to deliver each project OR we can transform the rest of the course on mentoring sessions so that I help you with your day to day activities at work (if you have choose 50 50 payment you MUST pay the rest of the course even if you get a job).

<sup>&#</sup>x27;\* Plus eventual extra time to finish projects '\*\* The durations can be even more reduced if you are capable, and I have the time, to do more than 3 lessons per week OR if you are capable of having 2 subjects on the same class (this last option WON'T change the total price of the course)