

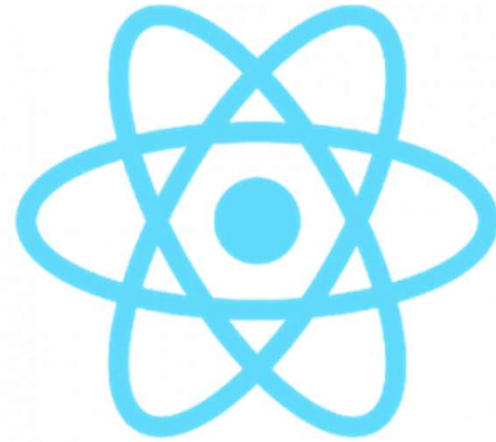


Vue Fundamentals

Short recap day #1

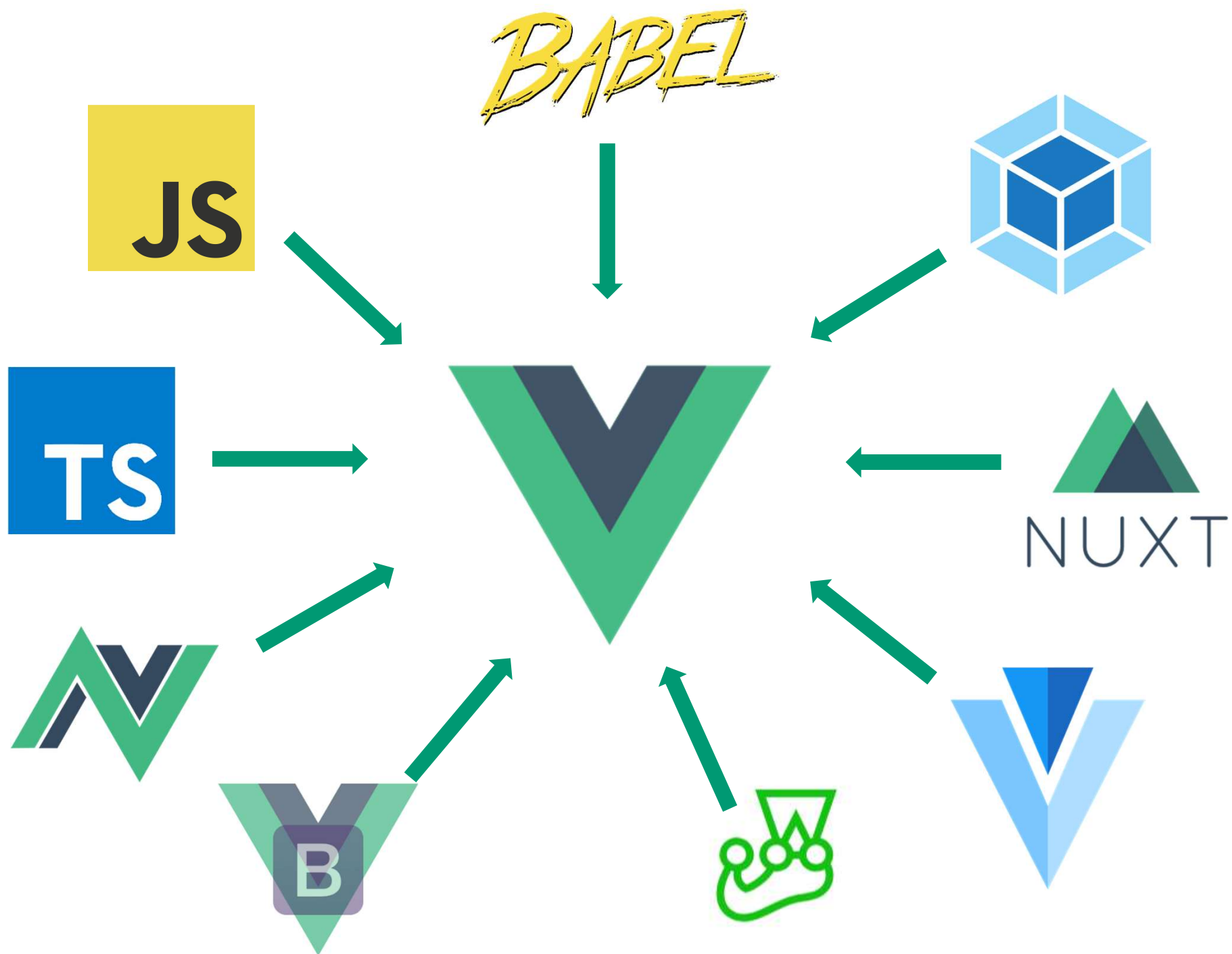
Peter Kassenaar –
info@kassenaar.com

Yesterday - Front-end Frameworks

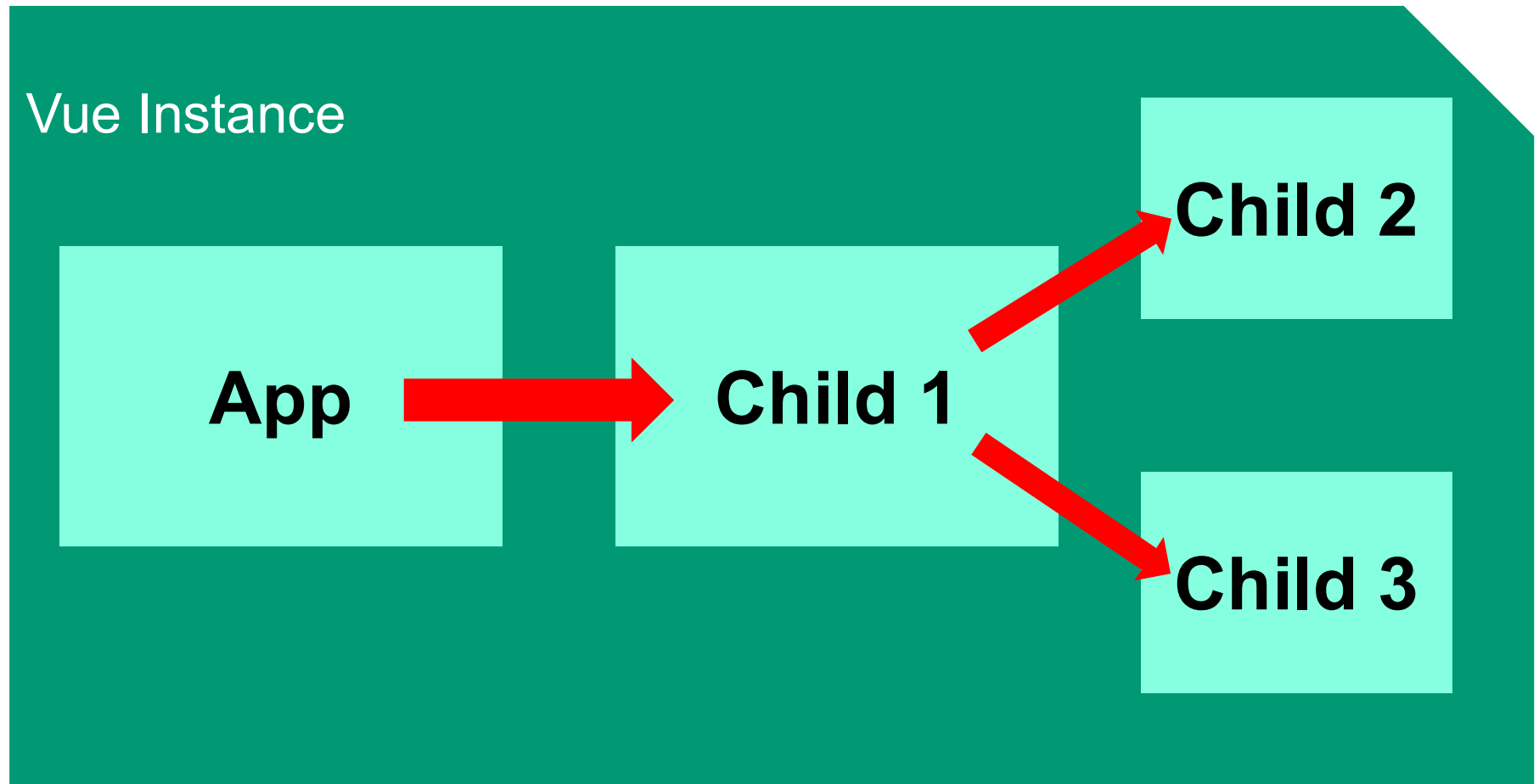


Zooming in on Vue

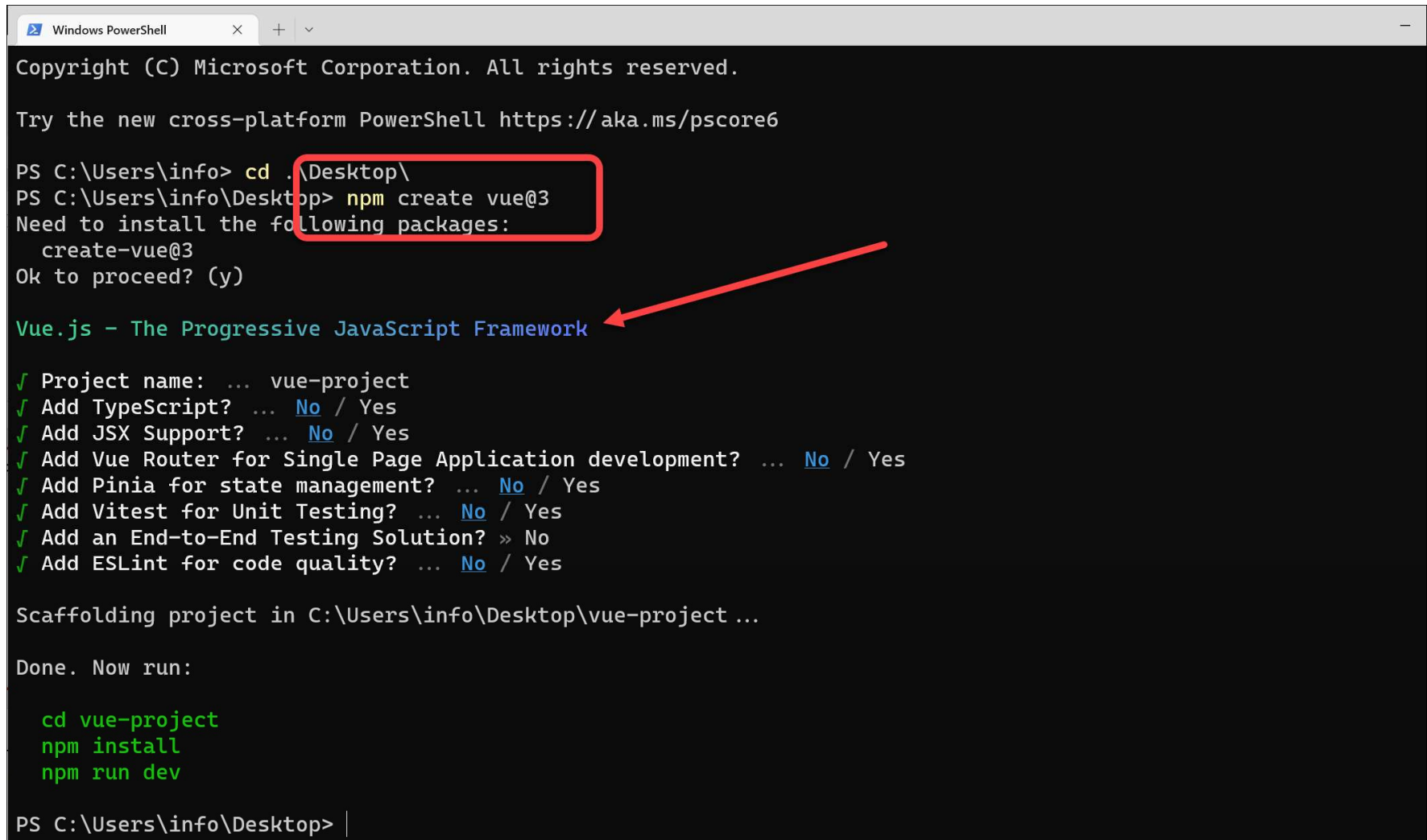
- **Introduction** – overview of the front-end landscape
- Vue **tooling** – installation
 - Node, NPM, create-vue, Vue DevTools
- NodeJS **commands**
 - `npm install, npm run dev`
- Hello World; **structure and architecture** of Vue apps.
- **Options API vs. Composition API**
 - `{ ..., ...}`
 - `<script setup>`



Visual of the Vue instance



Vue 3: npm create vue@latest



```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\info> cd .\Desktop\
PS C:\Users\info\Desktop> npm create vue@3
Need to install the following packages:
  create-vue@3
Ok to proceed? (y)

Vue.js - The Progressive JavaScript Framework

✓ Project name: ... vue-project
✓ Add TypeScript? ... No / Yes
✓ Add JSX Support? ... No / Yes
✓ Add Vue Router for Single Page Application development? ... No / Yes
✓ Add Pinia for state management? ... No / Yes
✓ Add Vitest for Unit Testing? ... No / Yes
✓ Add an End-to-End Testing Solution? » No
✓ Add ESLint for code quality? ... No / Yes

Scaffolding project in C:\Users\info\Desktop\vue-project ...

Done. Now run:

  cd vue-project
  npm install
  npm run dev

PS C:\Users\info\Desktop> |
```

Under the hood this uses `Vite` as bundler, instead of `Webpack`

Vue 3 - project



Documentation

Vue's [official documentation](#) provides you with all information you need to get started.



Tooling

This project is served and bundled with [Vite](#). The recommended IDE setup is [VSCode](#) + [Volar](#). If you need to test your components and web pages, check out [Cypress](#) and [Cypress Component Testing](#). More instructions are available in [README.md](#).



Ecosystem

Get official tools and libraries for your project: [Pinia](#), [Vue Router](#), [Vue Test Utils](#), and [Vue Dev Tools](#). If you need more resources, we suggest paying [Awesome Vue](#) a visit.



Community

Got stuck? Ask your question on [Vue Land](#), our official Discord server, or [StackOverflow](#). You should also subscribe to [our mailing list](#) and follow the official [@vuejs](#) twitter account for latest news in the Vue world.



Support Vue

As an independent project, Vue relies on community backing for its sustainability. You can help us by [becoming a sponsor](#).

App.vue

```
<template>
  <div class="wrapper">
    <HelloWorld msg123="Hello World!" name="Joris" />
  </div>
</template>
```

Template

```
<script setup>
  import HelloWorld from './components/HelloWorld.vue'
  ...
</script>
```

Script

```
<style scoped>
  .wrapper {
    line-height: 1.5;
  }, ...
</style>
```

Style

Vue Concepts:

- Components:
 - data binding `{{ ... }}`
 - attribute binding `v-bind:` or `:`
 - event binding `v-on:` or `@`
- Computed properties
- Binding to images

- Using `v-model`
 - Textboxes, checkboxes, (selection lists, radio buttons, texarea)
- Lifecycle methods
 - `onMounted()`
 - `onUpdated()`
 - `onUnmounted()`

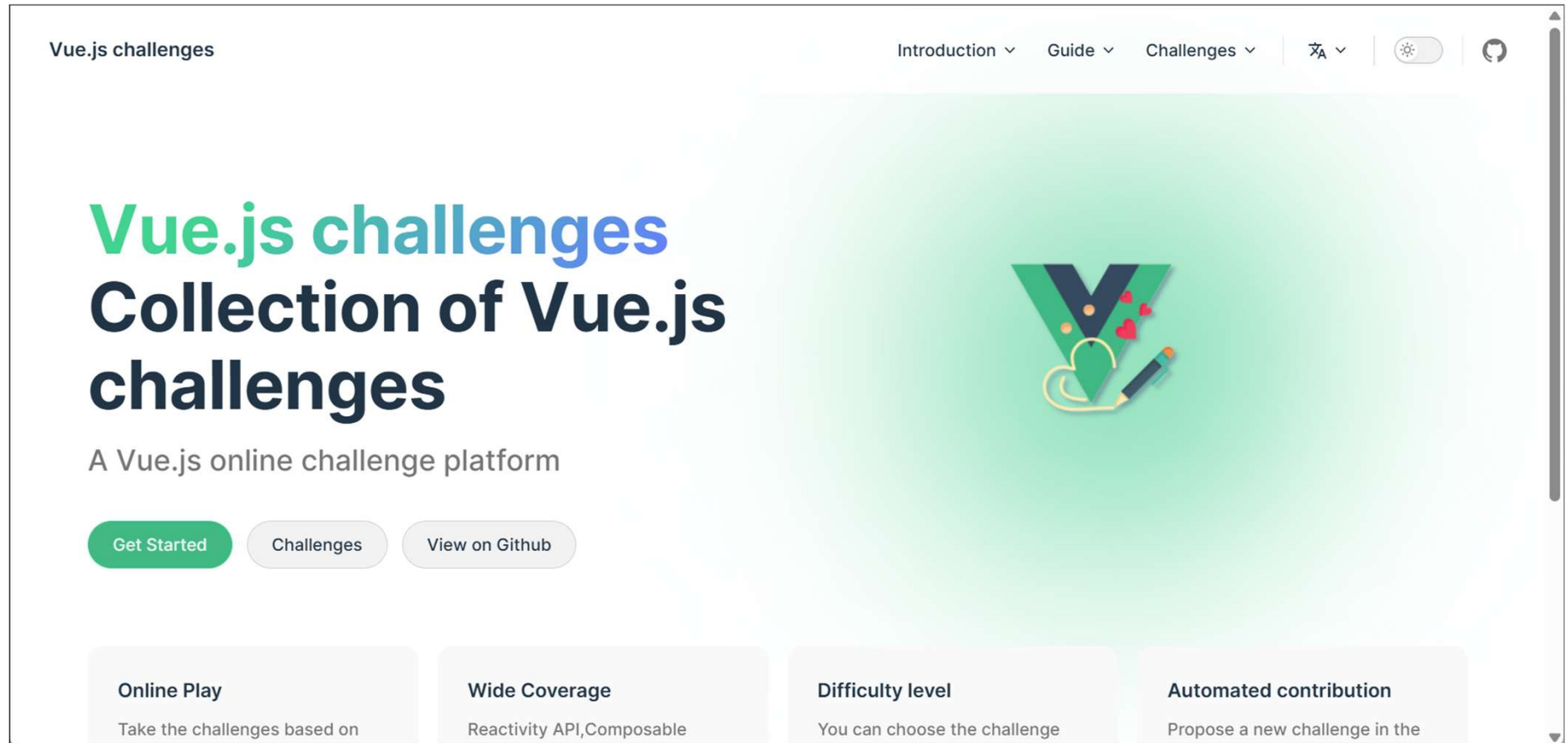
Important: Learn Concepts instead of Code

Questions?

Today – Day 2, (½ day)

- **Communication** between components
 - Props and events; using `emit(...)`
- **Vue Router**
 - Routing to different pages / components)
- Using **HTTP** API's
 - Using Live API's
 - Building a small application

Vue Further practice



<https://vuejs-challenges.netlify.app/>

Vue.js Exercises

The screenshot shows a web application titled "Vue.js Exercises". On the left is a sidebar with a list of exercises: 1. Getting Started, 2. v-model, v-if, v-for, 3. Computed and Methods, 4. Components, import / export, 5. Transitions (optional), 6. localStorage and JSON, 7. vue-router, and 8. axios or fetch. The first exercise, "Getting Started", is selected and highlighted. Below the list is a link "Report a mistake" with a bug icon. The main content area displays the details for "1. Getting Started". It includes a paragraph: "This is a collection of exercises to apply Vue.js concepts in practice. We assume that you already have a project setup and know the basic concepts of Vue.js." followed by another paragraph: "The main concepts are mentioned in the title of the exercise. Most of the exercise built on top of the previous ones." Below these is a green callout box with the text: "Looking for more? In any case the official [Vue.js Documentation](\"#\") is a great source for more information. Be sure to select the right mode of API Preference which fits your project (Options or Composition)." At the bottom of the main area is a blue button labeled "Next". The top right of the application has a search bar and keyboard shortcuts "CTRL" and "K".

Vue.js Exercises

Search CTRL K

- 1 Getting Started
- 2 v-model, v-if, v-for
- 3 Computed and Methods
- 4 Components, import / export
- 5 Transitions (optional)
- 6 localStorage and JSON
- 7 vue-router
- 8 axios or fetch

Report a mistake

1. Getting Started

This is a collection of exercises to apply Vue.js concepts in practice. We assume that you already have a project setup and know the basic concepts of Vue.js.

The main concepts are mentioned in the title of the exercise. Most of the exercise built on top of the previous ones.

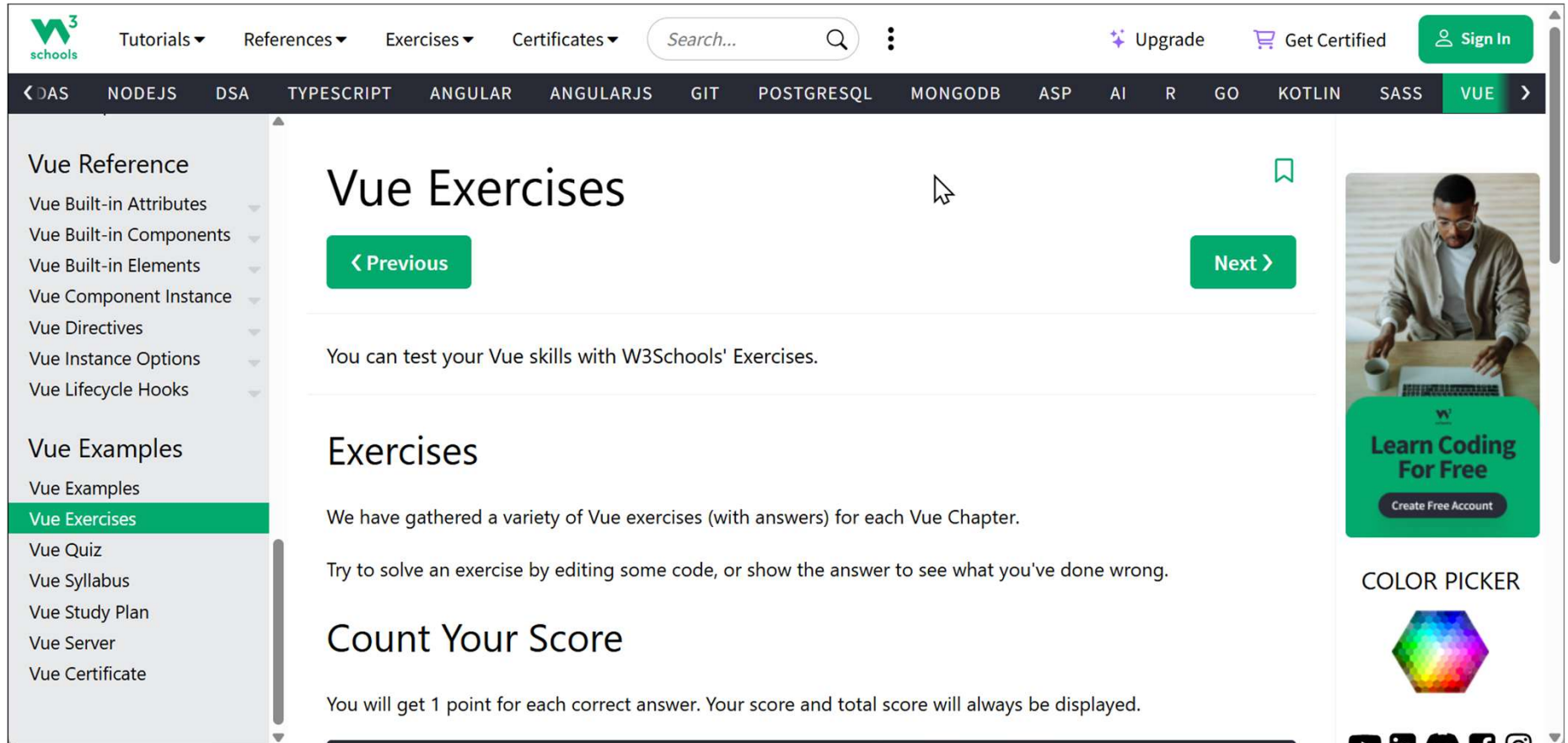
Looking for more? In any case the official [Vue.js Documentation](#) is a great source for more information. Be sure to select the right mode of API Preference which fits your project (Options or Composition).

Have Fun!

Next

<https://learn.fritscher.ch/codelabs/vue-exercises/index.html>

W3 Schools – Vue.js



The screenshot shows the W3Schools website interface for the Vue.js Exercises section. The top navigation bar includes links for Tutorials, References, Exercises, and Certificates, along with a search bar and buttons for Upgrade, Get Certified, and Sign In. A secondary navigation bar lists various technologies, with 'VUE' highlighted. On the left, a sidebar menu shows the 'Vue Exercises' link selected. The main content area is titled 'Vue Exercises' and features 'Previous' and 'Next' buttons. It contains introductory text about testing Vue skills, a section for 'Exercises' explaining the purpose of the exercises, and a 'Count Your Score' section detailing the scoring system. A right sidebar contains a 'Learn Coding For Free' banner and a 'COLOR PICKER' tool.

W3schools

Tutorials ▾ References ▾ Exercises ▾ Certificates ▾ Search... Upgrade Get Certified Sign In

◀ DAS NODEJS DSA TYPESCRIPT ANGULAR ANGULARJS GIT POSTGRESQL MONGODB ASP AI R GO KOTLIN SASS **VUE** ▶

Vue Reference

- Vue Built-in Attributes ▾
- Vue Built-in Components ▾
- Vue Built-in Elements ▾
- Vue Component Instance ▾
- Vue Directives ▾
- Vue Instance Options ▾
- Vue Lifecycle Hooks ▾

Vue Examples

- Vue Examples
- Vue Exercises**
- Vue Quiz
- Vue Syllabus
- Vue Study Plan
- Vue Server
- Vue Certificate

Vue Exercises

◀ Previous Next ▶

You can test your Vue skills with W3Schools' Exercises.

Exercises

We have gathered a variety of Vue exercises (with answers) for each Vue Chapter.

Try to solve an exercise by editing some code, or show the answer to see what you've done wrong.

Count Your Score

You will get 1 point for each correct answer. Your score and total score will always be displayed.

Learn Coding For Free

Create Free Account

COLOR PICKER

https://www.w3schools.com/vue/vue_exercises.php

If you liked it, endorse

The screenshot shows a LinkedIn profile page. The top navigation bar includes the LinkedIn logo, a search bar, and icons for Home, My Network (with a red notification badge), Jobs, Messaging, Notifications, Me, and Work. The main content area on the left shows a section for education with the text 'duursporten (lopen, zwemmen, fietsen, roeien, schaatsen). Laatste jaar in combinatie met studie Bewegingswetenschappen, Rijksuniversiteit Groningen (RUG).'. Below this is a blue button labeled 'Add new profile section'. The 'Featured Skills & Endorsements' section is circled in red and contains three skills: 'Teaching' (3 endorsements from Youri Pattynama and 2 connections), 'TypeScript' (3 endorsements from Youri Pattynama and 2 connections), and 'Angular' (2 endorsements from Momen El Kamri and 1 connection). A link 'See 26 more skills' is at the bottom of this section. The 'Recommendations' section is partially visible at the bottom. On the right side, there is a blue button 'Add new profile section' and a 'Messaging' button at the bottom right.

duursporten (lopen, zwemmen, fietsen, roeien, schaatsen).
Laatste jaar in combinatie met studie Bewegingswetenschappen, Rijksuniversiteit Groningen (RUG).
[See more education](#) ✓

Featured Skills & Endorsements [Add a new skill](#) ✎

Teaching · 3 Youri Pattynama and 2 connections have given endorsements for this skill

TypeScript · 3 Youri Pattynama and 2 connections have given endorsements for this skill

Angular · 2 Momen El Kamri and 1 connection have given endorsements for this skill

[See 26 more skills](#) ✓

Recommendations [Ask to be recommended](#) ✎

[Messaging](#) ✎ ⚙

<https://www.linkedin.com/in/peterkassenaar/>



Thank you

www.eduvision.nl