

**САНКТ-ПЕТЕРБУРГСКИЙ НАЦИОНАЛЬНЫЙ  
ИССЛЕДОВАТЕЛЬСКИЙ УНИВЕРСИТЕТ ИТМО**

**Дисциплина:** Фронт-энд разработка

**Отчет**

**Домашняя работа №5**

**Выполнил:**

**Рыбинская Злата**

**Группа**

**К3344**

**Проверил:**  
**Добряков Д. И.**

**Санкт-Петербург**

**2025 г.**

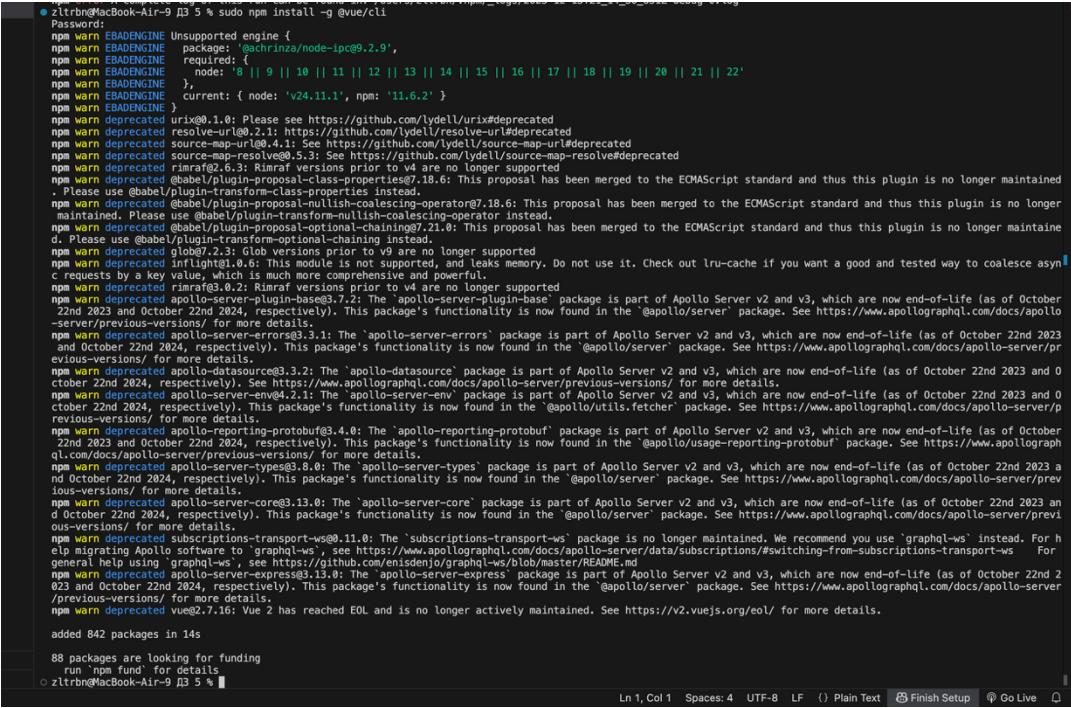
## Задача

Изучить основные команды пакетного менеджера NPM и научиться стартовать проект на Vue. Научиться работать с npm и vue на основе мануала: <https://docs.google.com/document/d/187UkgGNrcWqkb2aCGpkHTLgeozoElMqdVgVGMBOC9gk/edit?usp=sharing>.

## Ход работы

### 1 Подготовка окружения

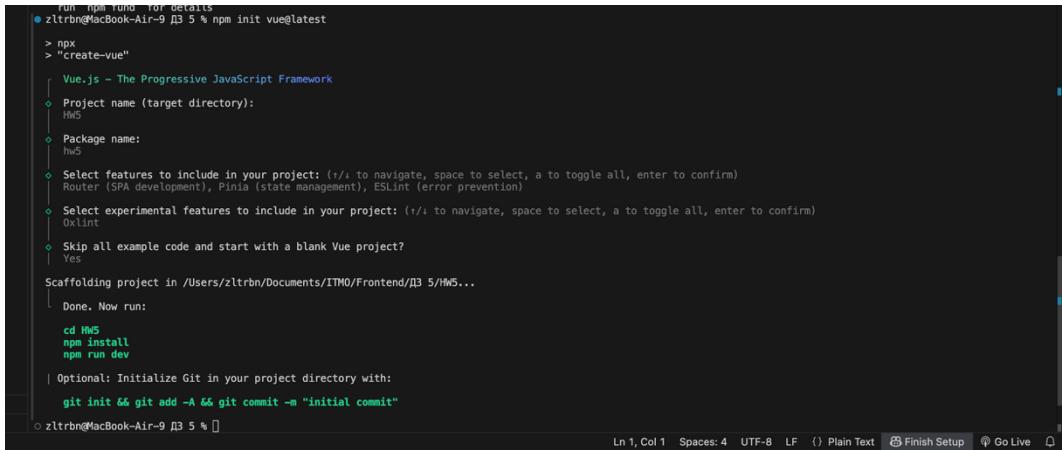
Перед началом работы инициализируем проект (рис. 1-5):



```
zitrbnMacBook-Air-9 13 5 % sudo npm install -g vue/cli
npm WARN EBADENGINE Unsupported engine {
  npm WARN EBADENGINE   package: '@achirinza/node-ipc@9.2.9',
  npm WARN EBADENGINE   required: {
  npm WARN EBADENGINE     node: '^8 || 9 || 10 || 11 || 12 || 13 || 14 || 15 || 16 || 17 || 18 || 19 || 20 || 21 || 22'
  npm WARN EBADENGINE   },
  npm WARN EBADENGINE   current: { node: 'v24.11.1', npm: '11.6.2' }
}
npm WARN EBADENGINE
npm warn deprecated urix@0.1.0: Please see https://github.com/lydell/urix#deprecated
npm warn deprecated resolve-url@0.2.1: https://github.com/lydell/source-map-url#deprecated
npm warn deprecated source-map-url@4.1: See https://github.com/lydell/source-map-url#deprecated
npm warn deprecated source-map-resolve@0.5.3: See https://github.com/lydell/source-map-resolve#deprecated
npm warn deprecated rimraf@2.6.3: Rimraf versions prior to v4 are no longer supported
npm warn deprecated proposal-nullish-coalescing-operator@8.6: This proposal has been merged to the ECMAScript standard and thus this plugin is no longer maintained
  . Please use @babel/plugin-transform-nullish-coalescing-operator instead.
npm warn deprecated @babel/plugin-proposal-nullish-coalescing-operator@7.18.6: This proposal has been merged to the ECMAScript standard and thus this plugin is no longer maintained
  . Please use @babel/plugin-transform-nullish-coalescing-operator instead.
npm warn deprecated @babel/plugin-proposal-optional-chaining@7.21.0: This proposal has been merged to the ECMAScript standard and thus this plugin is no longer maintained
  . Please use @babel/plugin-transform-optional-chaining instead.
npm warn deprecated glob@7.2.3: Glob versions prior to v4 are no longer supported
npm warn deprecated glob@7.2.3: The 'glob' package is not supported and leaks memory. Do not use it. Check out lru-cache if you want a good and tested way to coalesce asynchronous requests by a key value, which is much more comprehensive and powerful.
npm warn deprecated rimraf@3.0.2: Rimraf versions prior to v4 are no longer supported
npm warn deprecated apollo-server-plugin-base@0.7.2: The 'apollo-server-plugin-base' package is part of Apollo Server v2 and v3, which are now end-of-life (as of October 22nd 2023 and October 22nd 2024, respectively). This package's functionality is now found in the '@apollo/server' package. See https://www.apollographql.com/docs/apollo-server/previous-versions/ for more details.
npm warn deprecated apollo-server-errors@3.1.1: The 'apollo-server-errors' package is part of Apollo Server v2 and v3, which are now end-of-life (as of October 22nd 2023 and October 22nd 2024, respectively). This package's functionality is now found in the '@apollo/server' package. See https://www.apollographql.com/docs/apollo-server/previous-versions/ for more details.
npm warn deprecated apollo-datasource@3.3.2: The 'apollo-datasource' package is part of Apollo Server v2 and v3, which are now end-of-life (as of October 22nd 2023 and October 22nd 2024, respectively). See https://www.apollographql.com/docs/apollo-server/previous-versions/ for more details.
npm warn deprecated apollo-server-env@4.2.1: The 'apollo-server-env' package is part of Apollo Server v2 and v3, which are now end-of-life (as of October 22nd 2023 and October 22nd 2024, respectively). This package's functionality is now found in the '@apollo/utils.fetcher' package. See https://www.apollographql.com/docs/apollo-server/previous-versions/ for more details.
npm warn deprecated apollo-reporting-protobuf@3.4.0: The 'apollo-reporting-protobuf' package is part of Apollo Server v2 and v3, which are now end-of-life (as of October 22nd 2023 and October 22nd 2024, respectively). This package's functionality is now found in the '@apollo/usage-reporting-protobuf' package. See https://www.apollographql.com/docs/apollo-server/previous-versions/ for more details.
npm warn deprecated apollo-server-types@3.8.0: The 'apollo-server-types' package is part of Apollo Server v2 and v3, which are now end-of-life (as of October 22nd 2023 and October 22nd 2024, respectively). This package's functionality is now found in the '@apollo/server' package. See https://www.apollographql.com/docs/apollo-server/previous-versions/ for more details.
npm warn deprecated apollo-server-core@3.13.0: The 'apollo-server-core' package is part of Apollo Server v2 and v3, which are now end-of-life (as of October 22nd 2023 and October 22nd 2024, respectively). This package's functionality is now found in the '@apollo/server' package. See https://www.apollographql.com/docs/apollo-server/previous-versions/ for more details.
npm warn deprecated subscriptions-transport-ws@0.11.0: The 'subscriptions-transport-ws' package is no longer maintained. We recommend you use 'graphql-ws' instead. For help migrating Apollo software to 'graphql-ws', see https://www.apollographql.com/docs/apollo-server/previous-versions/switching-from-subscriptions-transport-ws/ for general help using 'graphql-ws', see https://github.com/enisdenjo/graphql-ws/blob/master/README.md
npm warn deprecated apollo-server-express@3.13.0: The 'apollo-server-express' package is part of Apollo Server v2 and v3, which are now end-of-life (as of October 22nd 2023 and October 22nd 2024, respectively). This package's functionality is now found in the '@apollo/server' package. See https://www.apollographql.com/docs/apollo-server/previous-versions/ for more details.
npm warn deprecated vue@2.7.16: Vue 2 has reached EOL and is no longer actively maintained. See https://v2.vuejs.org/eol/ for more details.

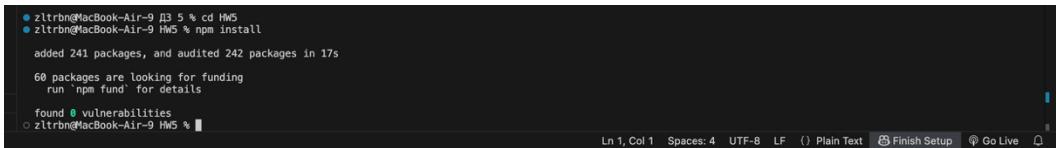
added 842 packages in 14s
88 packages are looking for funding
  run 'npm fund' for details
zitrbnMacBook-Air-9 13 5 %
```

Рисунок 1 – Установка vue и vue-cli



```
zltrbn:~/Documents/ITMO/Frontend/ДЗ 5 % npx create-vue hw5
> npx
> <create-vue>
  Vue.js - The Progressive JavaScript Framework
  Project name (target directory): hw5
  Package name: hw5
  Select features to include in your project: (r/i to navigate, space to select, a to toggle all, enter to confirm)
    Router (SPA development), Pinia (state management), ESLint (error prevention)
  Select experimental features to include in your project: (r/i to navigate, space to select, a to toggle all, enter to confirm)
  Oeslint
  Skip all example code and start with a blank Vue project?
  Yes
  Scaffolding project in /Users/zltrbn/Documents/ITMO/Frontend/ДЗ 5 /hw5...
  Done. Now run:
  cd hw5
  npm install
  npm run dev
  | Optional: Initialize Git in your project directory with:
  git init && git add -A && git commit -m "initial commit"
zltrbn:~/Documents/ITMO/Frontend/ДЗ 5 %
```

Рисунок 2 – Инициализация проекта



```
zltrbn:~/Documents/ITMO/Frontend/ДЗ 5 % cd hw5
zltrbn:~/Documents/ITMO/Frontend/ДЗ 5 % npm install
  added 241 packages, and audited 242 packages in 17s
  60 packages are looking for funding
    run 'npm fund' for details
  found 0 vulnerabilities
zltrbn:~/Documents/ITMO/Frontend/ДЗ 5 %
```

Рисунок 3 – Установка зависимости



Visit [vuejs.org](https://vuejs.org) to read the documentation

Рисунок 4 – Проверка localhost



```

● zlitrn@MacBook-Air-9: ~ % sudo npm i axios pinia-persist bootstrap -s
Password:
added 27 packages, and audited 269 packages in 3s
68 packages are looking for funding
  run 'npm fund' for details
found 0 vulnerabilities
○ zlitrn@MacBook-Air-9: ~ %

```

Рисунок 5 – Запуск проекта

## 2 Необходимые файлы

Основные файлы приложения – компонента NodeCard.vue, notes.js,

NotesPage.vue:

1) NodeCard.vue:

```

<template>
<div class="card">
  <div class="card-body">
    <h5 class="card-title">{{ name }}</h5>
    <p class="card-text">
      {{ text }}
    </p>
  </div>
</div>
</template>

<script>
export default {
  name: 'NoteCard',
  props: {
    name: {
      type: String,
      required: true
    },
    text: {
      type: String,
      required: false
    }
  }
}
</script>

```

2) notes.js:

```

import { defineStore } from 'pinia'
import { notesApi } from '@/api'

const useNotesStore = defineStore('notes', {
  state: () => ({
    notes: []
  }),
  actions: {
    async loadNotes() {
      const response = await notesApi.getAll()

      this.notes = response.data

      return response
    },
    async createNote(data) {
      const response = await notesApi.createNote(data)

      this.notes = response.data

      return response
    }
  }
})

export default useNotesStore

```

### 3) NotesPage.vue:

```

<template>
  <base-layout>
    <h1>Notes app</h1>

    <form
      ref="noteForm"
      @submit.prevent="createCard"
      class="d-flex flex-column my-5">
      <input
        type="text"
        v-model="form.name"
        class="my-1"
        placeholder="Заголовок заметки">

      <textarea
        cols="30"
        rows="10"
        v-model="form.text"
        class="my-1">
    
```

```
placeholder="Текст заметки"
/>>

<button type="submit" class="btn btn-primary">
  Отправить
</button>
</form>

<div class="row row-cols-1 row-cols-md-2 g-4 mt-5" id="notes">
  <div
    class="col"
    v-for="note in notes"
    :key="note.id"
  >
    <note-card
      :name="note.name"
      :text="note.text"
    />
  </div>
  </div>
</base-layout>
</template>

<script>
  import { mapActions, mapState } from 'pinia'

  import BaseLayout from '@/layouts/BaseLayout.vue'
  import NoteCard from '@/components/NoteCard.vue'
  import useNotesStore from '@/stores/notes'

  export default {
    name: 'NotesPage',

    components: {
      BaseLayout,
      NoteCard
    },

    data() {
      return {
        form: {
          name: '',
          text: '',
          userId: 1
        }
      }
    },
    computed: {
      ...mapState(useNotesStore, ['notes'])
    },
    methods: {
```

```

...mapActions(useNotesStore, ['loadNotes', 'createNote']),

async createCard() {
  await this.createNote(this.form)
  await this.loadNotes()

  this.$refs.noteForm.reset()
}

mounted() {
  this.loadNotes()
}

</script>

```

### 3 Проверка работоспособности

Откроем <http://localhost:8080> и проверим работу (рис. 6-8):

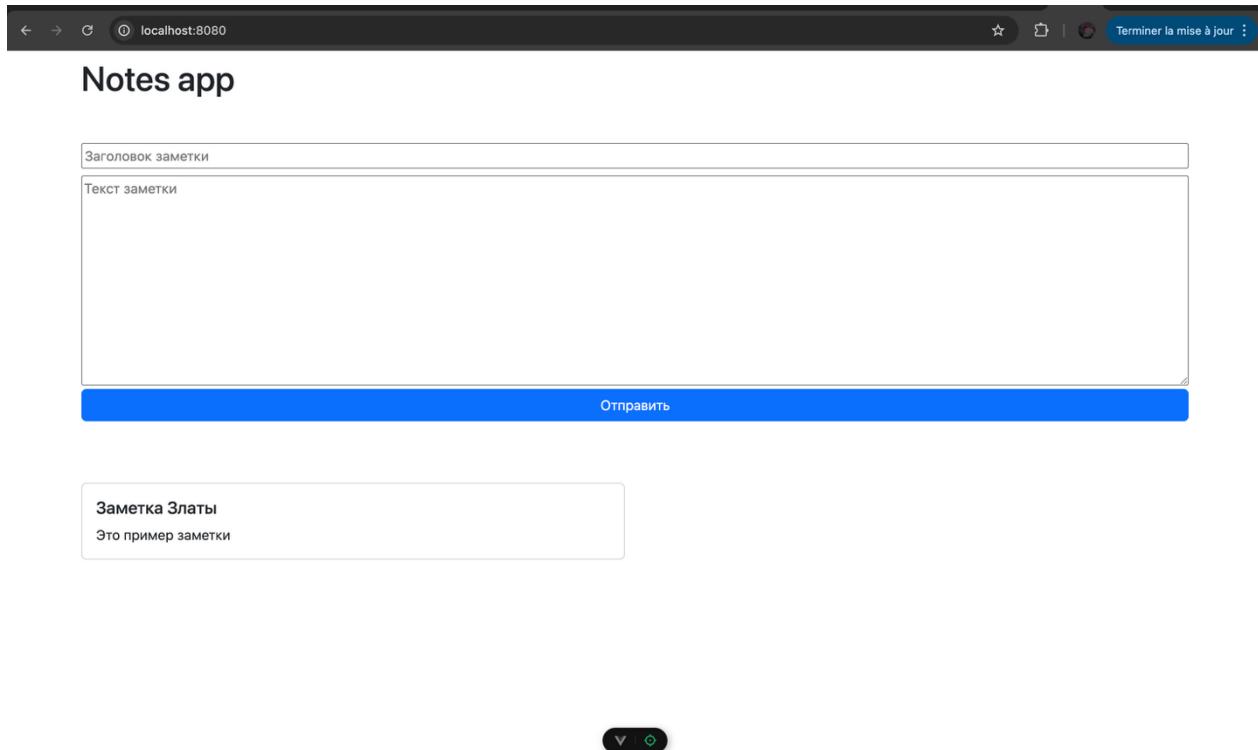


Рисунок 6 – Заметки

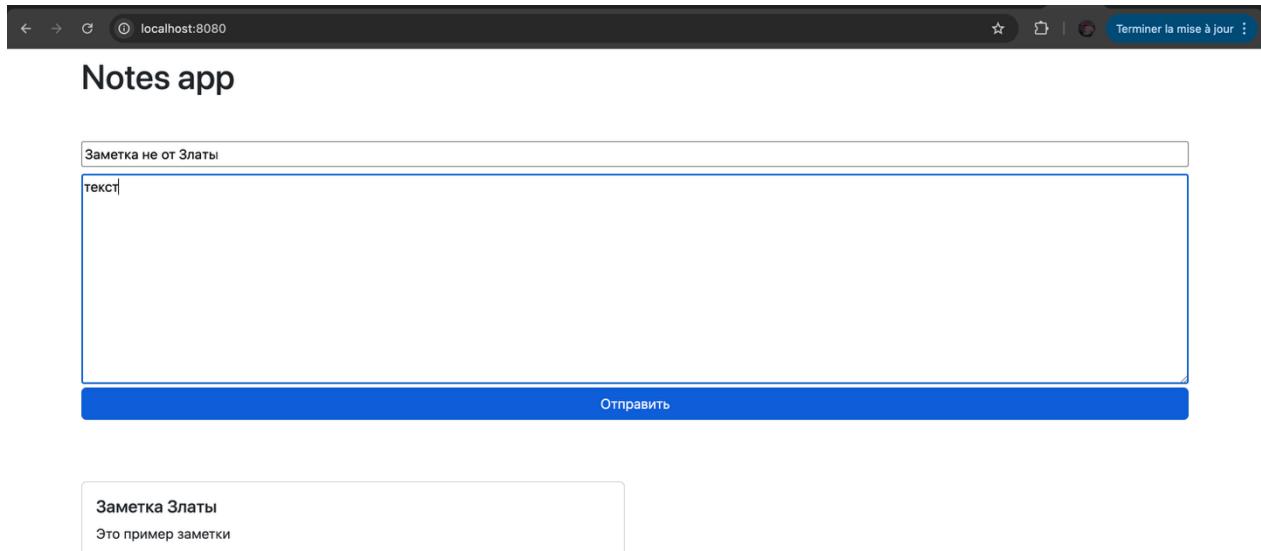


Рисунок 7 – Добавление новой заметки

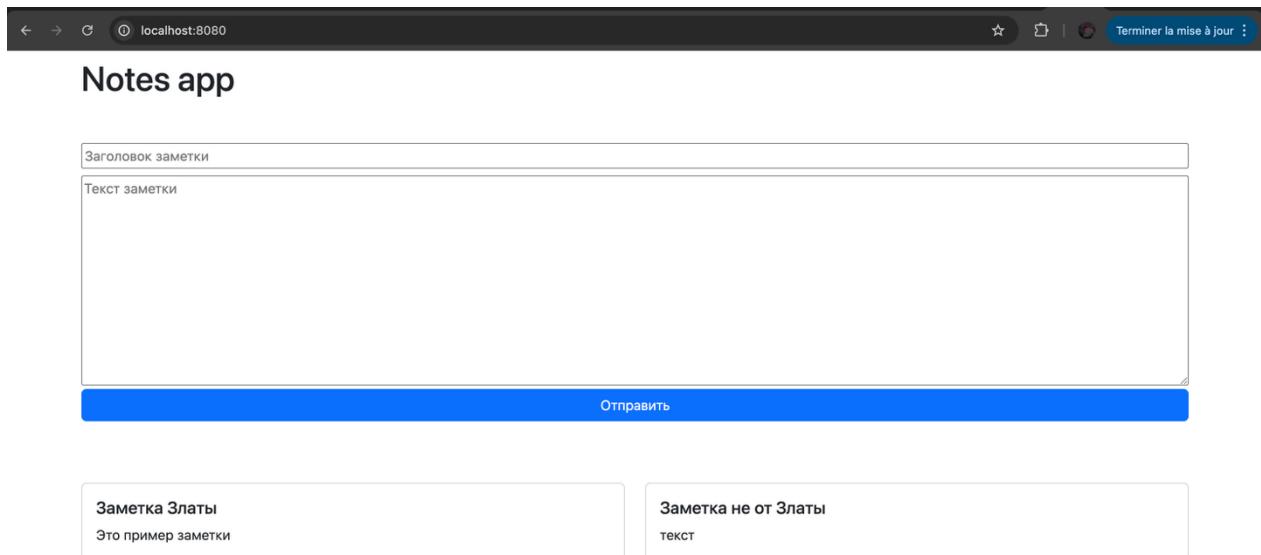


Рисунок 8 – Работа сайта

Приложение «Заметки» полностью работоспособно.

## **Вывод**

В ходе выполнения домашней работы были изучены основы работы с пакетным менеджером NPM и процесс инициализации проекта на фреймворке Vue.js. Был создан и настроен Vue-проект, подключены необходимые зависимости, а также реализована структура приложения с использованием компонентов, роутинга и менеджера состояния Pinia. В процессе работы были закреплены навыки работы с директивами Vue (*v-model*, *v-for*), формами и жизненным циклом компонентов.

В результате было разработано простое веб-приложение «Заметки», позволяющее просматривать и добавлять записи. Приложение корректно взаимодействует с API, отображает данные и обновляет интерфейс без перезагрузки страницы. Все поставленные в задании цели были достигнуты, приложение успешно запускается и является полностью работоспособным.