

**САНКТ-ПЕТЕРБУРГСКИЙ НАЦИОНАЛЬНЫЙ  
ИССЛЕДОВАТЕЛЬСКИЙ УНИВЕРСИТЕТ ИТМО**

**Дисциплина:** Фронт-энд разработка

Отчет

Лабораторная работа 3

Разработка одностраничного веб-приложения (SPA) с  
использованием фреймворка Vue.JS

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## Задача

Мигрировать ранее написанный сайт на фреймворк Vue.JS.

## Ход работы

Сайт перенесен на фреймворк Vue.js.

Некоторые использованные компоненты:

### 1. Навбар:

```
1 | <script setup>
2 | import { computed } from 'vue'
3 | import { useThemeStore } from '@stores/theme'
4 | import { useAuthStore } from '@stores/auth'
5 | import { useRouter } from 'vue-router'
6 |
7 | const themeStore = useThemeStore()
8 | const authStore = useAuthStore()
9 | const router = useRouter()
10 |
11 | const logout = async () => {
12 |   authStore.logoutUser()
13 |   router.push('/')
14 | }
15 |
16 | const theme = computed(themeStore.getThemeData)
17 | </script>
18 |
19 | <template>
20 |   <header
21 |     class="bg-custom-dark text-white text-center"
22 |     :style="{ '--nav-color': `${theme.navColor}` }"
23 |   >
24 |     <nav class="navbar navbar-expand-lg navbar-dark">
25 |       <div class="container-fluid">
26 |         <router-link to="/" class="navbar-brand text-white">Calorie calculator</router-link>
27 |         <button
28 |           class="navbar-toggler"
29 |           type="button"
30 |           data-bs-toggle="collapse"
31 |           data-bs-target="#navbarSupportedContent"
32 |           aria-controls="navbarSupportedContent"
33 |           aria-expanded="false"
34 |           aria-label="Open dropdown menu"
35 |         >
36 |           <span class="navbar-toggler-icon"></span>
37 |         </button>
```

## 2. Карточка продуктов

```
<script setup>
import { computed } from 'vue'
import { useUserStore } from '@stores/user'
import { useThemeStore } from '@stores/theme'
import { useNutritionStore } from '@stores/nutrition'

const userStore = useUserStore()
const themeStore = useThemeStore()
const theme = computed(themeStore.getThemeData)
const nutritionStore = useNutritionStore()

const props = defineProps({
  product: {
    type: Object,
    required: true
  }
})

const isFavorite = computed(() => !!userStore.user.favorites.find((e) => e === props.product.name))
const add = async () => {
  userStore.addToFavorites(props.product.name)
  nutritionStore.data = null
}
const remove = async () => {
  userStore.removeFromFavorites(props.product.name)
}
</script>

<template>
  <div class="my-card card"
    :style="{
      '--background-color': `${theme.backgroundColor}`,
      '--text-color': `${theme.textColor}`,
      '--border-color': `${theme.borderColor}`,
    }">
    <h4 class="my-card-header card-header">{{ product.name }}</h4>
    <div class="card-body my-card-body">
      <div class="my-card-body-text">
        <p class="my-card-text">Calorie content(for 100gr): {{ product.calories }}</p>
        <p class="my-card-text">Proteins: {{ product.protein_g }}</p>
        <p class="my-card-text">Fats: {{ product.fat_total_g }}</p>
        <p class="my-card-text">Carbohydrates: {{ product.carbohydrates_total_g }}</p>
      </div>
      <div>
        <button v-if="isFavorite" class="btn btn-custom remove-btn" @click="remove">
          <svg class="icon">
            <use xlink:href="../../svg/sprite.svg#deleteIcon"></use>
          </svg>
          Remove from favorites
        </button>
        <button v-else class="btn btn-custom add-btn" @click="add">
          <svg class="icon">
            <use xlink:href="../../svg/sprite.svg#addIcon"></use>
          </svg>
          Add to favorites</button>
      </div>
    </div>
  </div>
</template>
```

### 3. Карточки с информацией пользователя

```
1 <script setup>
2 import { useThemeStore } from '@stores/theme'
3 import { computed } from 'vue'
4
5 defineProps({
6   title: {
7     type: String,
8     required: true
9   },
10  data: {
11    type: Object,
12    required: true
13  }
14 })
15
16 const themeStore = useThemeStore()
17 const theme = computed(themeStore.getThemeData)
18 </script>
19
20 <template>
21   <div
22     class="card account-card"
23     :style="{
24       '--background-color': `${theme.backgroundColor}`,
25       '--border-color': `${theme.borderColor}`
26     }"
27   >
28     <h5 class="card-header">{{ title }}</h5>
29     <div class="account-card-body">
30       <p class="card-text" v-for="(item, index) in data" :key="index">{{ index }}: {{ item }}</p>
31       <slot></slot>
32     </div>
33   </div>
34 </template>
```

Созданные страницы:

#### 1. Основная

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

<template>
  <div class="background-image">
    <NavigationBar />

    <main class="main-container">
      <h2 class="display-4 text-center">Welcome!</h2>
      <p class="lead">Check out our calorie calculator and start tracking your nutrition.</p>
      <router-link to="/auth" class="btn btn-custom">Let's start</router-link>
    </main>
  </div>
</template>
```

## 2. Регистрация

```
1 |<script setup>
2 |import RegForm from '@components/RegForm.vue'
3 |import NavigationBar from '@components/NavigationBar.vue'
4 |import { useThemeStore } from '@stores/theme'
5 |import { computed } from 'vue'
6 |
7 |const themeStore = useThemeStore()
8 |const theme = computed(themeStore.getThemeData)
9 |</script>
10 |
11 |<template>
12 |  <NavigationBar />
13 |
14 |  <main
15 |    class="light-background"
16 |    :style="{
17 |      '--background-image': `url(${theme.backgroundImage})`,
18 |      '--text-color': `${theme.textColor}`
19 |    }"
20 |  >
21 |    <div class="reg-container">
22 |      <div class="col-lg-6 col-md-8">
23 |        <h2 class="reg-title">Registration</h2>
24 |        <RegForm />
25 |        <div
26 |          class="link-container"
27 |          :style="{
28 |            '--background-color': `${theme.backgroundColor}`,
29 |            '--border-color': `${theme.borderColor}`
30 |          }"
31 |        >
32 |          Already have an account? <router-link to="/auth">Log in</router-link>
33 |        </div>
34 |      </div>
35 |    </div>
36 |  </main>
37 |</template>
```

## 3. Авторизация

```
1 |<script setup>
2 |import NavigationBar from '@components/NavigationBar.vue'
3 |import LoginForm from '@components/LoginForm.vue'
4 |import { useThemeStore } from '@stores/theme'
5 |import { computed } from 'vue'
6 |
7 |const themeStore = useThemeStore()
8 |const theme = computed(themeStore.getThemeData)
9 |</script>
10 |
11 |<template>
12 |  <div
13 |    class="light-background"
14 |    :style="{
15 |      '--background-image': `url(${theme.backgroundImage})`,
16 |      '--text-color': `${theme.textColor}`
17 |    }"
18 |  >
19 |    <NavigationBar />
20 |    <LoginForm />
21 |  </div>
22 |</template>
```

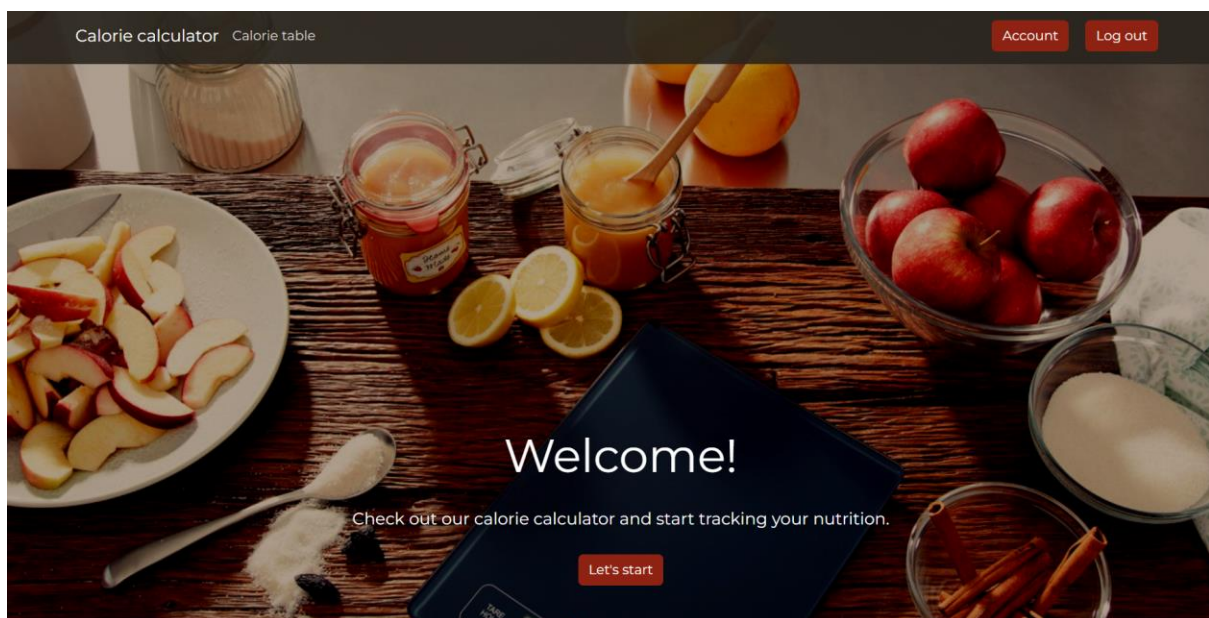
## 4. Личный кабинет

```
1  <script setup>
2  import NavigationBar from '@components/NavigationBar.vue'
3  import DataCard from '@components/DataCard.vue'
4  import RationList from '@components/RationList.vue'
5  import { ref, computed, onBeforeMount } from 'vue'
6  import { processInfoData } from '@modules/infoData'
7  import { processParams } from '@modules/paramsData'
8  import { useThemeStore } from '@stores/theme'
9  import { useUserStore } from '@stores/user'
10 import { useRouter } from 'vue-router'
11 import ProductCard from '@components/ProductCard.vue'
12
13 const themeStore = useThemeStore()
14 const userStore = useUserStore()
15 const router = useRouter()
16 const infoData = ref(null)
17 const paramData = ref(null)
18 const rationList = ref(null)
19 const theme = computed(themeStore.getThemeData)
20
21 onBeforeMount(async () => {
22   try {
23     await userStore.fetch()
24     userStore.getFavorites()
25   } catch (e) {
26     router.replace('/auth')
27     return
28   }
29   const userData = userStore.user
30   if (!userData) {
31     router.replace('/auth')
32     return
33   }
34   infoData.value = processInfoData(userData)
35   paramData.value = processParams(userData)
36
37   rationList.value = userData.daily_rations
38   console.log(rationList);
39 })
40
41 const onEditClick = () => {
42   router.push('/account/edit')
43 }
44
45 </script>
46
47 <template>
48   <div
49     class="light-background"
50     :style="{
51       '--background-image': `url(${theme.backgroundImage})`,
52       '--text-color': `${theme.textColor}`
53     }"
54   >
55     <NavigationBar />
56
57     <main class="col-md-8">
58       <div class="account-wrapper" id="accountInfo" v-if="infoData">
59         <DataCard title="Info" :data="infoData">
60           <button class="btn btn-custom" id="editData" @click="onEditClick">
61             <svg class="icon">
62               <use xlink:href="../../svg/sprite.svg#editIcon"></use>
63             </svg>
64             Edit data
65           </button>
66         </DataCard>
67         <DataCard title="Your paramenetrs" :data="paramData" />
68         <RationList :rationList="rationList" />
69       </div>
70     </main>
71   </div>
72 </template>
```

## 5. Таблица калорийности

```
1 <script setup>
2 import { computed, onBeforeMount } from 'vue'
3 import NavigationBar from '@components/NavigationBar.vue'
4 import SearchBar from '@components/SearchBar.vue'
5 import FilterButton from '@components/FilterButton.vue'
6 import { useThemeStore } from '@stores/theme'
7 import { useNutritionStore } from '@stores/nutrition'
8 import ProductCard from '@components/ProductCard.vue'
9 import { useUserStore } from '@stores/user'
10 import { useRouter } from 'vue-router'
11
12 const nutritionStore = useNutritionStore()
13
14 const userStore = useUserStore()
15 const router = useRouter()
16 const themeStore = useThemeStore()
17 const theme = computed(themeStore.getThemeData)
18
19 onBeforeMount(async () => {
20   try {
21     await userStore.fetch()
22     nutritionStore.data = null
23     if (!userStore.user) {
24       router.replace('/auth')
25     }
26   } catch (e) {
27     router.replace('/auth')
28   }
29 })
30 </script>
```

Итого получилось:



Calorie calculator

Calorie table

Log in

Registration

Login to your personal account

Email

11@mail.ru

Password

\*\*\*\*\*

Log in

Don't have an account? [Create](#)

Calorie calculator

Calorie table

Log in

Registration

Registration

Name\*

Email\*

11@mail.ru

Date of birth

ДД.ММ.ГГГГ

Gender

MaleFemale

Height

180

Weight

70

Password\*

\*\*\*\*\*

Calorie calculator

Calorie table

Account

Log out

Info

Name: Lya

Email: 11@mail.ru

Gender: female

Date of birth: 2011-11-11

Edit data

Your paramenetrs

Height: 180

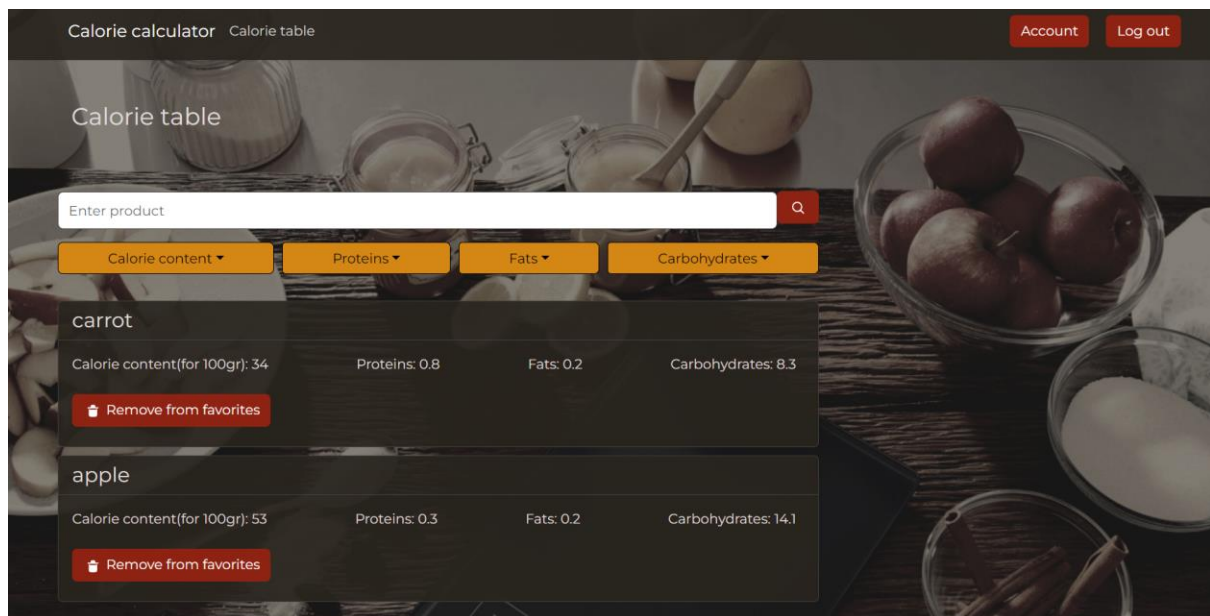
Weight: 70

Age: 12

Calorie intake: 1598

Daily rations: Add ration





## Вывод

Ранее написанный проект был мигрирован на Vue.js с сохранением всего задуманного ранее функционала