🚀 Implementación del App Shell para NutriTrack Pro

Te ayudo a implementar un App Shell funcional basado en tu arquitectura. Aquí está el plan completo:

```
## Estructura Actualizada del Cliente
. . .
client/
 --- public/
   ├— index.html
            # Service Worker
   ⊢— sw.js
  — manifest.json # Web App Manifest
  icons/
    ├— icon-192.png
    ├— icon-512.png
  --- src/
   ├— App.vue # App Shell principal
   ├— main.js
   -- components/
     — AppHeader.vue # Encabezado
     ├— AppFooter.vue # Pie de página
     — AppMenu.vue # Menú principal
      — LoadingSpinner.vue
    -views/
```

```
├— Splash.vue # Pantalla de inicio
     ├— Home.vue # Vista principal con contenido dinámico
     ├— Diary.vue # Otra vista de contenido
      — Settings.vue
    --- router/
    index.js # Configuración de rutas
   --- stores/
    app.js # Estado de la aplicación
    — utils/
    api.js # Simulación de datos dinámicos
## 1. 🚣 **Estructura del App Shell**
### **`src/App.vue` - App Shell Principal**
```vue
<template>
 <div id="app" class="app-shell">
 <!-- Splash Screen -->
 <SplashScreen v-if="showSplash" @complete="hideSplash" />
 <!-- App Shell Principal -->
 <div v-else class="app-layout">
 <AppHeader @toggle-menu="toggleMenu" />
```

```
<div class="app-content">
 <AppMenu
 :is-open="menuOpen"
 @navigate="handleNavigation"
 @close="menuOpen = false"
 />
 <main class="main-content" :class="{ 'menu-open': menuOpen }">
 <router-view v-slot="{ Component }">
 <transition name="fade" mode="out-in">
 <component :is="Component" />
 </transition>
 </router-view>
 </main>
 </div>
 <AppFooter/>
 </div>
 </div>
</template>
<script setup>
import { ref, onMounted } from 'vue'
import { useRouter } from 'vue-router'
import SplashScreen from './views/Splash.vue'
```

```
import AppHeader from './components/AppHeader.vue'
import AppMenu from './components/AppMenu.vue'
import AppFooter from './components/AppFooter.vue'
const router = useRouter()
const showSplash = ref(true)
const menuOpen = ref(false)
const hideSplash = () => {
 showSplash.value = false
}
const toggleMenu = () => {
 menuOpen.value = !menuOpen.value
}
const handleNavigation = (route) => {
 router.push(route)
 menuOpen.value = false
}
// Registrar Service Worker al cargar la app
onMounted(() => {
 if ('serviceWorker' in navigator) {
 navigator.serviceWorker.register('/sw.js')
 .then(registration => console.log('SW registered: ', registration))
```

```
.catch(error => console.log('SW registration failed: ', error))
}
})
</script>
<style scoped>
.app-shell {
 height: 100vh;
 display: flex;
flex-direction: column;
}
.app-layout {
 display: flex;
 flex-direction: column;
height: 100%;
}
.app-content {
 display: flex;
 flex: 1;
 position: relative;
 overflow: hidden;
}
.main-content {
```

```
flex: 1;
 transition: transform 0.3s ease;
 overflow-y: auto;
 padding: 1rem;
}
.main-content.menu-open {
transform: translateX(250px);
}
.fade-enter-active,
.fade-leave-active {
transition: opacity 0.3s ease;
}
.fade-enter-from,
.fade-leave-to {
opacity: 0;
}
</style>
**` src/components/AppHeader.vue` **
```vue
<template>
 <header class="app-header">
```

```
<button class="menu-button" @click="$emit('toggle-menu')">
  <span class="hamburger">≡</span>
  </button>
 <h1 class="app-title"> NutriTrack Pro</h1>
  <div class="header-actions">
  <button class="icon-button" @click="toggleDarkMode">
   {{ darkMode ? ' () ': ' \( \) '}}
  </button>
  <button class="icon-button" @click="refreshData"> \sum 
 </div>
 </header>
</template>
<script setup>
import { ref } from 'vue'
defineEmits(['toggle-menu'])
const darkMode = ref(false)
const toggleDarkMode = () => {
 darkMode.value = !darkMode.value
document.body.classList.toggle('dark-mode', darkMode.value)
```

}

```
const refreshData = () => {
 // Simular actualización de datos
window.dispatchEvent(new CustomEvent('refresh-data'))
}
</script>
<style scoped>
.app-header {
 display: flex;
 align-items: center;
 justify-content: space-between;
 padding: 1rem;
 background: linear-gradient(135deg, #22c55e, #16a34a);
 color: white;
 box-shadow: 0 2px 10px rgba(0,0,0,0.1);
}
.menu-button {
 background: none;
 border: none;
 color: white;
 font-size: 1.5rem;
 cursor: pointer;
 padding: 0.5rem;
}
```

```
.app-title {
font-size: 1.2rem;
 font-weight: 600;
 margin: 0;
}
.header-actions {
 display: flex;
gap: 0.5rem;
}
.icon-button {
 background: rgba(255,255,255,0.2);
 border: none;
 border-radius: 50%;
 width: 2.5rem;
 height: 2.5rem;
 cursor: pointer;
 font-size: 1rem;
 display: flex;
 align-items: center;
 justify-content: center;
transition: background 0.3s;
}
```

```
.icon-button:hover {
background: rgba(255,255,255,0.3);
}
</style>
### **` src/components/AppMenu.vue` **
```vue
<template>
 <aside v-if="isOpen" class="app-menu" @click="$emit('close')">
 <nav class="menu-content" @click.stop>
 <div class="menu-header">
 <h2>Menú</h2>
 <button class="close-button" @click="$emit('close')">×</button>
 </div>
 ul class="menu-items">
 v-for="item in menuItems":key="item.route" class="menu-item">
 <but
 class="menu-link"
 @click="$emit('navigate', item.route)"
 :class="{ active: $route.path === item.route }"
 >
 {{ item.icon }}
 {{ item.text }}
 </button>
```

```
<div class="menu-footer">
 <div class="user-info">
 <div class="user-avatar"> 2 </div>
 <div class="user-details">
 Alex García
 <small>Objetivo: 2200 kcal</small>
 </div>
 </div>
 </div>
 </nav>
 </aside>
</template>
<script setup>
import { computed } from 'vue'
import { useRoute } from 'vue-router'
defineProps({
isOpen: Boolean
})
defineEmits(['navigate', 'close'])
```

```
const route = useRoute()
const menultems = computed(() => [
{ icon: ' 1 ', text: 'Inicio', route: '/' },
{ icon: 'iii', text: 'Mi Diario', route: '/diary' },
{ icon: ' b', text: 'Alimentos', route: '/foods' },
{ icon: ' & ', text: 'Ejercicios', route: '/workouts' },
{ icon: ' , text: 'Configuración', route: '/settings' }
])
</script>
<style scoped>
.app-menu {
 position: fixed;
 top: 0;
 left: 0;
 width: 100%;
 height: 100%;
 background: rgba(0,0,0,0.5);
 z-index: 1000;
}
.menu-content {
 position: absolute;
 top: 0;
 left: 0;
```

```
width: 250px;
 height: 100%;
 background: white;
 display: flex;
 flex-direction: column;
 box-shadow: 2px 0 10px rgba(0,0,0,0.1);
}
.menu-header {
 display: flex;
justify-content: space-between;
 align-items: center;
 padding: 1rem;
 background: #f8fafc;
 border-bottom: 1px solid #e2e8f0;
}
.menu-header h2 {
 margin: 0;
 color: #1e293b;
}
.close-button {
 background: none;
 border: none;
 font-size: 1.5rem;
```

```
cursor: pointer;
 color: #64748b;
}
.menu-items {
flex: 1;
 list-style: none;
 padding: 0;
 margin: 0;
}
.menu-item {
border-bottom: 1px solid #f1f5f9;
}
.menu-link {
 display: flex;
 align-items: center;
 width: 100%;
 padding: 1rem;
 background: none;
 border: none;
 text-align: left;
 cursor: pointer;
transition: background 0.3s;
}
```

```
.menu-link:hover {
background: #f1f5f9;
}
.menu-link.active {
 background: #dcfce7;
color: #16a34a;
}
.menu-icon {
 font-size: 1.2rem;
 margin-right: 0.75rem;
}
.menu-text {
font-weight: 500;
}
.menu-footer {
 padding: 1rem;
 background: #f8fafc;
 border-top: 1px solid #e2e8f0;
}
.user-info {
```

```
display: flex;
 align-items: center;
 gap: 0.75rem;
}
.user-avatar {
 width: 2.5rem;
 height: 2.5rem;
 background: #22c55e;
 border-radius: 50%;
 display: flex;
 align-items: center;
justify-content: center;
 color: white;
}
.user-details {
flex: 1;
}
.user-details strong {
 display: block;
font-size: 0.9rem;
}
.user-details small {
```

```
color: #64748b;
font-size: 0.75rem;
}
</style>
**` src/components/AppFooter.vue` **
```vue
<template>
<footer class="app-footer">
 <div class="footer-content">
  © 2024 NutriTrack Pro - Tu compañero de nutrición
  <div class="footer-status">
   <span class="status-indicator" :class="connectionStatus">
    {{ connectionText }}
   </span>
  </div>
 </div>
 </footer>
</template>
<script setup>
import { ref, onMounted, onUnmounted } from 'vue'
const connectionStatus = ref('online')
const connectionText = ref('En línea')
```

```
const updateConnectionStatus = () => {
 if (navigator.onLine) {
  connectionStatus.value = 'online'
  connectionText.value = 'En línea'
 } else {
  connectionStatus.value = 'offline'
 connectionText.value = 'Sin conexión'
}
}
onMounted(() => {
 updateConnectionStatus()
 window.addEventListener('online', updateConnectionStatus)
window.addEventListener('offline', updateConnectionStatus)
})
onUnmounted(() => {
window.removeEventListener('online', updateConnectionStatus)
window.removeEventListener('offline', updateConnectionStatus)
})
</script>
<style scoped>
.app-footer {
 background: #1e293b;
```

```
color: white;
 padding: 1rem;
 border-top: 1px solid #334155;
}
.footer-content {
 display: flex;
justify-content: space-between;
 align-items: center;
 max-width: 1200px;
 margin: 0 auto;
}
.footer-content p {
 margin: 0;
 font-size: 0.875rem;
}
.status-indicator {
 padding: 0.25rem 0.75rem;
 border-radius: 1rem;
 font-size: 0.75rem;
 font-weight: 500;
}
.status-indicator.online {
```

```
background: #22c55e;
}
.status-indicator.offline {
background: #ef4444;
}
</style>
. . .
## 2. **Service Worker para App Shell**
### **` public/sw.js` **
```javascript
// Cache names
const CACHE_SHELL = 'nutritrack-shell-v1'
const CACHE_CONTENT = 'nutritrack-content-v1'
// App Shell assets to cache immediately
const SHELL_ASSETS = [
'/',
 '/manifest.json',
 '/icons/icon-192.png',
'/icons/icon-512.png'
]
```

```
// Content assets to cache on demand
const CONTENT_ASSETS = [
// Estas se cachearán dinámicamente
]
// Install event - cache App Shell
self.addEventListener('install', (event) => {
 console.log('Service Worker: Installing...')
 event.waitUntil(
 caches.open(CACHE_SHELL)
 .then(cache => {
 console.log('Service Worker: Caching App Shell')
 return cache.addAll(SHELL_ASSETS)
 })
 .then(() => {
 console.log('Service Worker: Install completed')
 return self.skipWaiting()
 })
)
})
// Activate event - cleanup old caches
self.addEventListener('activate', (event) => {
 console.log('Service Worker: Activating...')
```

```
event.waitUntil(
 caches.keys().then(cacheNames => {
 return Promise.all(
 cacheNames.map(cacheName => {
 if (cacheName !== CACHE_SHELL && cacheName !== CACHE_CONTENT) {
 console.log('Service Worker: Deleting old cache', cacheName)
 return caches.delete(cacheName)
 }
 })
)
 }).then(() => {
 console.log('Service Worker: Activate completed')
 return self.clients.claim()
 })
)
})
// Fetch event - Serve from cache, fallback to network
self.addEventListener('fetch', (event) => {
// Skip non-GET requests
 if (event.request.method !== 'GET') return
// Skip Chrome extensions
 if (event.request.url.startsWith('chrome-extension://')) return
```

```
event.respondWith(
 caches.match(event.request)
 .then(response => {
 // Return cached version or fetch from network
 return response || fetch(event.request)
 .then(fetchResponse => {
 // Check if we received a valid response
 if (!fetchResponse || fetchResponse.status !== 200 || fetchResponse.type !==
'basic') {
 return fetchResponse
 }
 // Clone the response
 const responseToCache = fetchResponse.clone()
 // Cache the fetched resource
 caches.open(CACHE_CONTENT)
 .then(cache => {
 cache.put(event.request, responseToCache)
 })
 return fetchResponse
 })
 .catch(error => {
 console.log('Fetch failed; returning offline page:', error)
```

```
// If it's a navigation request and we're offline, serve the shell
 if (event.request.mode === 'navigate') {
 return caches.match('/')
 }
 // You could return a custom offline page here
 return new Response('Network error happened', {
 status: 408,
 headers: { 'Content-Type': 'text/plain' }
 })
 })
 })
)
})
// Background sync for offline data
self.addEventListener('sync', (event) => {
 if (event.tag === 'background-sync') {
 console.log('Background sync triggered')
 event.waitUntil(doBackgroundSync())
}
})
async function doBackgroundSync() {
// Aquí iría la lógica para sincronizar datos pendientes
 console.log('Syncing background data...')
```

```
}
. . .
3. ## **Web App Manifest**
** `public/manifest.json` **
```json
{
 "name": "NutriTrack Pro",
 "short_name": "NutriTrack",
 "description": "Tu compañero de nutrición y ejercicio - PWA",
 "start_url": "/",
 "display": "standalone",
 "background_color": "#22c55e",
 "theme_color": "#22c55e",
 "orientation": "portrait-primary",
 "scope": "/",
 "lang": "es-ES",
 "categories": ["health", "fitness", "lifestyle"],
 "icons": [
  {
   "src": "/icons/icon-72.png",
   "sizes": "72x72",
```

```
"type": "image/png",
"purpose": "any maskable"
},
{
 "src": "/icons/icon-96.png",
 "sizes": "96x96",
 "type": "image/png",
"purpose": "any maskable"
},
 "src": "/icons/icon-128.png",
 "sizes": "128x128",
 "type": "image/png",
"purpose": "any maskable"
},
"src": "/icons/icon-144.png",
 "sizes": "144x144",
 "type": "image/png",
"purpose": "any maskable"
},
 "src": "/icons/icon-152.png",
 "sizes": "152x152",
"type": "image/png",
 "purpose": "any maskable"
```

```
},
{
 "src": "/icons/icon-192.png",
  "sizes": "192x192",
 "type": "image/png",
 "purpose": "any maskable"
},
 "src": "/icons/icon-384.png",
 "sizes": "384x384",
 "type": "image/png",
 "purpose": "any maskable"
},
 "src": "/icons/icon-512.png",
 "sizes": "512x512",
 "type": "image/png",
 "purpose": "any maskable"
}
],
"screenshots": [
  "src": "/screenshots/mobile.png",
 "sizes": "375x667",
 "type": "image/png",
```

```
"form_factor": "narrow"
 },
 {
  "src": "/screenshots/desktop.png",
  "sizes": "1280x720",
  "type": "image/png",
  "form_factor": "wide"
 }
]
}
## 4. | **Vista con Contenido Dinámico**
### **`src/views/Home.vue` **
```vue
<template>
<div class="home-view">
 <div class="welcome-section">
 <h1>¡Bienvenido, Alex! 🎺 </h1>
 Hoy es {{ currentDate }}
 </div>
 <!-- Resumen Nutricional -->
```

```
<section class="nutrition-summary">
<h2> | Resumen del Día</h2>
<div class="stats-grid">
 <div class="stat-card">
 <div class="stat-value">{{ dailyStats.calories }}</div>
 <div class="stat-label">Calorías</div>
 <div class="stat-progress">
 <div class="progress-bar">
 <div class="progress-fill":style="{ width: calorieProgress + '%' }"></div>
 </div>
 {{ Math.round(calorieProgress) }}%
 </div>
 </div>
 <div class="stat-card">
 <div class="stat-value">{{ dailyStats.protein }}g</div>
 <div class="stat-label">Proteína</div>
 <div class="stat-progress">
 <div class="progress-bar">
 <div class="progress-fill protein":style="{ width: proteinProgress + '%' }"></div>
 </div>
 {{ Math.round(proteinProgress) }}%
 </div>
 </div>
</div>
</section>
```

```
<!-- Comidas Recientes -->
 <section class="recent-meals">
 <div class="section-header">
 <h2> Comidas Recientes</h2>
 <button class="add-button" @click="addMockMeal">+ Agregar</button>
 </div>
 <div v-if="recentMeals.length === 0" class="empty-state">
 No hay comidas registradas hoy
 <button @click="addMockMeal" class="btn-primary">Agregar primera
comida</button>
 </div>
 <div v-else class="meals-list">
 <div v-for="meal in recentMeals" :key="meal.id" class="meal-card">
 <div class="meal-header">
 {{ meal.type }}
 {{ meal.time }}
 </div>
 <div class="meal-content">
 <h3>{{ meal.name }}</h3>
 <div class="meal-nutrition">
 {{ meal.calories }} kcal
 {{ meal.protein }}g proteina
 </div>
```

```
</div>
 <button class="delete-btn" @click="deleteMeal(meal.id)"> W </button>
 </div>
 </div>
 </section>
 <!-- Recordatorios -->
 <section class="reminders">
 <h2> A Recordatorios </h2>
 <div class="reminders-list">
 <div v-for="reminder in reminders" :key="reminder.id" class="reminder-card">
 {{ reminder.icon }}
 {{ reminder.text }}
 <button class="dismiss-btn"
@click="dismissReminder(reminder.id)"><//button>
 </div>
 </div>
 </section>
 </div>
</template>
<script setup>
import { ref, computed, onMounted, onUnmounted } from 'vue'
// Estado reactivo
const recentMeals = ref([])
```

```
const reminders = ref([
{ id: 1, icon: ' ♦ ', text: 'Toma un vaso de agua', time: '10:00' },
{ id: 2, icon: ' 5, ', text: 'Camina 10 minutos', time: '12:00' },
{ id: 3, icon: ' b', text: 'Registra tu almuerzo', time: '14:00' }
])
// Estadísticas del día
const dailyStats = computed(() => {
 const total = recentMeals.value.reduce((acc, meal) => ({
 calories: acc.calories + meal.calories,
 protein: acc.protein + meal.protein
 }), { calories: 0, protein: 0 })
 return total
})
// Progreso calculado
const calorieProgress = computed(() => (dailyStats.value.calories / 2200) * 100)
const proteinProgress = computed(() => (dailyStats.value.protein / 150) * 100)
// Fecha actual formateada
const currentDate = computed(() => {
 return new Date().toLocaleDateString('es-ES', {
 weekday: 'long',
 year: 'numeric',
 month: 'long',
```

```
day: 'numeric'
})
})
// Simular datos iniciales
const loadMockData = () => {
 const mockMeals = [
 {
 id: 1,
 type: 'Desayuno',
 time: '08:30',
 name: 'Yogur con granola y frutos rojos',
 calories: 320,
 protein: 15
 },
 {
 id: 2,
 type: 'Snack',
 time: '11:00',
 name: 'Manzana y almendras',
 calories: 180,
 protein: 6
 }
]
 recentMeals.value = mockMeals
}
```

```
// Agregar comida de ejemplo
const addMockMeal = () => {
 const newMeal = {
 id: Date.now(),
 type: 'Comida',
 time: new Date().toLocaleTimeString('es-ES', { hour: '2-digit', minute: '2-digit' }),
 name: 'Pechuga de pollo con ensalada',
 calories: 450,
 protein: 35
}
 recentMeals.value.unshift(newMeal)
}
// Eliminar comida
const deleteMeal = (mealId) => {
 recentMeals.value = recentMeals.value.filter(meal => meal.id !== mealId)
}
// Descartar recordatorio
const dismissReminder = (reminderId) => {
reminders.value = reminders.value.filter(reminder => reminder.id !== reminderId)
}
// Escuchar evento de actualización
const handleRefresh = () => {
```

```
console.log('Actualizando datos...')
loadMockData()
}
onMounted(() => {
 loadMockData()
window.addEventListener('refresh-data', handleRefresh)
})
onUnmounted(() => {
window.removeEventListener('refresh-data', handleRefresh)
})
</script>
<style scoped>
.home-view {
 max-width: 800px;
 margin: 0 auto;
 padding-bottom: 2rem;
}
.welcome-section {
 text-align: center;
 margin-bottom: 2rem;
 padding: 1rem;
 background: linear-gradient(135deg, #22c55e, #16a34a);
```

```
color: white;
 border-radius: 1rem;
}
.welcome-section h1 {
 margin: 0 0 0.5rem 0;
font-size: 1.5rem;
}
.welcome-section p {
 margin: 0;
opacity: 0.9;
}
section {
margin-bottom: 2rem;
}
section h2 {
 margin-bottom: 1rem;
 color: #1e293b;
font-size: 1.25rem;
}
.stats-grid {
 display: grid;
```

```
grid-template-columns: 1fr 1fr;
gap: 1rem;
}
.stat-card {
 background: white;
 padding: 1.5rem;
 border-radius: 1rem;
 box-shadow: 0 2px 10px rgba(0,0,0,0.1);
 text-align: center;
}
.stat-value {
font-size: 2rem;
 font-weight: bold;
 color: #22c55e;
 margin-bottom: 0.5rem;
}
.stat-label {
 color: #64748b;
 margin-bottom: 1rem;
}
.stat-progress {
 display: flex;
```

```
align-items: center;
 gap: 0.5rem;
}
.progress-bar {
 flex: 1;
 height: 8px;
 background: #e2e8f0;
 border-radius: 4px;
 overflow: hidden;
}
.progress-fill {
 height: 100%;
 background: #22c55e;
transition: width 0.3s ease;
}
.progress-fill.protein {
 background: #3b82f6;
}
.section-header {
 display: flex;
 justify-content: space-between;
 align-items: center;
```

```
margin-bottom: 1rem;
}
.add-button {
 background: #22c55e;
 color: white;
 border: none;
 padding: 0.5rem 1rem;
 border-radius: 0.5rem;
 cursor: pointer;
font-weight: 500;
}
.empty-state {
text-align: center;
 padding: 3rem 1rem;
 background: white;
 border-radius: 1rem;
box-shadow: 0 2px 10px rgba(0,0,0,0.1);
}
.btn-primary {
 background: #22c55e;
 color: white;
 border: none;
 padding: 0.75rem 1.5rem;
```

```
border-radius: 0.5rem;
 cursor: pointer;
 font-weight: 500;
 margin-top: 1rem;
}
.meals-list {
 display: flex;
 flex-direction: column;
gap: 1rem;
}
.meal-card {
 background: white;
 padding: 1rem;
 border-radius: 1rem;
 box-shadow: 0 2px 10px rgba(0,0,0,0.1);
 display: flex;
justify-content: between;
 align-items: center;
}
.meal-header {
 display: flex;
 flex-direction: column;
 min-width: 80px;
```

```
}
.meal-type {
font-weight: 600;
color: #1e293b;
}
.meal-time {
font-size: 0.875rem;
color: #64748b;
}
.meal-content {
flex: 1;
 margin: 0 1rem;
}
.meal-content h3 {
 margin: 0 0 0.5rem 0;
font-size: 1rem;
}
.meal-nutrition {
 display: flex;
 gap: 1rem;
 font-size: 0.875rem;
```

```
color: #64748b;
}
.delete-btn {
 background: none;
 border: none;
 cursor: pointer;
 font-size: 1.2rem;
 padding: 0.5rem;
}
.reminders-list {
 display: flex;
 flex-direction: column;
 gap: 0.5rem;
}
.reminder-card {
 background: white;
 padding: 1rem;
 border-radius: 0.75rem;
 box-shadow: 0 2px 10px rgba(0,0,0,0.1);
 display: flex;
 align-items: center;
gap: 1rem;
}
```

```
.reminder-icon {
font-size: 1.2rem;
}
.reminder-text {
flex: 1;
}
.dismiss-btn {
 background: #22c55e;
 color: white;
 border: none;
 width: 2rem;
 height: 2rem;
 border-radius: 50%;
 cursor: pointer;
 display: flex;
 align-items: center;
justify-content: center;
}
/* Responsive */
@media (max-width: 768px) {
 .stats-grid {
 grid-template-columns: 1fr;
```

```
}
 .meal-card {
 flex-direction: column;
 align-items: stretch;
 gap: 1rem;
}
 .meal-header {
 flex-direction: row;
 justify-content: space-between;
}
}
</style>
. . .
5. ___ **Configuración de Rutas**
`src/router/index.js`
```javascript
import { createRouter, createWebHistory } from 'vue-router'
import Home from '../views/Home.vue'
import Diary from '../views/Diary.vue'
import Settings from '../views/Settings.vue'
```

```
const routes = [
{
  path: '/',
  name: 'Home',
  component: Home
},
 {
  path: '/diary',
  name: 'Diary',
  component: Diary
 },
 {
  path: '/settings',
  name: 'Settings',
  component: Settings
}
]
const router = createRouter({
 history: createWebHistory(),
 routes
})
export default router
. . .
```

6. **Actualización del README**

Agrega esta sección a tu `README.md`:

```markdown

## 🚀 App Shell - Funcionalidad Offline

### Estructura del App Shell

- \*\*AppHeader\*\*: Encabezado con menú hamburguesa y acciones
- \*\*AppMenu\*\*: Menú lateral deslizante con navegación
- \*\*AppFooter\*\*: Pie de página con estado de conexión
- \*\*Vistas Dinámicas\*\*: Home, Diary, Settings con contenido actualizable

### Service Worker Configuration

El Service Worker (`public/sw.js`) implementa:

- \*\*Cache First\*\* para el App Shell
- \*\*Network First\*\* para contenido dinámico
- \*\*Fallback offline\*\* para navegación
- \*\*Background sync\*\* preparado para datos pendientes

### Cómo Probar la Funcionalidad Offline

1. \*\*Instalar la PWA\*\*:

```
```bash
 npm run dev
 Abre http://localhost:5173 y instala la app desde el navegador
2. **Probar offline**:
 - Abre DevTools → Application → Service Worker
 - Haz clic en "Offline"
 - Recarga la página - el App Shell debe cargar desde cache
3. **Ver contenido cacheado**:
 - DevTools → Application → Cache Storage
 - Verifica los caches `nutritrack-shell-v1` y `nutritrack-content-v1`
### Características PWA Implementadas
App Shell arquitectura
Service Worker con estrategias de cache
Web App Manifest con metadatos
Contenido dinámico simulando API
Diseño responsive y accesible
Estados de carga y errores
Indicador de conexión
Instalable como app nativa
Funcionamiento offline completo
```

- ## 6 **Próximos Pasos de Implementación**
- 1. **Ejecuta el proyecto:**
 - ```bash

npm run dev

. . .

- 2. **Prueba la funcionalidad offline** en DevTools
- 3. **Verifica el manifest** en DevTools → Application → Manifest
- 4. **Instala la PWA** desde el menú del navegador