Health Information and Service Locator with JavaScript Testing

Overview

Develop a "Health Information and Service Locator" web application that provides comprehensive health-related information and assists users in locating health services. The application will utilize NHS APIs for data retrieval. A key component of this project is the implementation of JavaScript testing to ensure code reliability and functionality.

Objectives

Create a user-friendly and informative platform for health service information.

Implement robust JavaScript testing to ensure application reliability.

Make the application accessible and functional across various devices.

Key Features

Health Service Locator: Enable users to find healthcare providers and pharmacies, integrating NHS API data for detailed information.

Medication Information: Provide detailed medication information using NHS Prescribing and Pharmacy APIs.

Health Tips and News: Regularly updated health tips and news, sourced from NHS content.

Symptom Checker: A tool for basic symptom analysis with a disclaimer for professional medical advice.

Technical Requirements

Front-End Development: Use HTML, CSS, and JavaScript for development with a focus on a responsive design.

API Integration: Implement NHS APIs for real-time data processing and display.

Asynchronous JavaScript: Efficiently handle API calls using async/await.

Testing Requirements

Unit Testing: Implement unit tests for individual components/functions using a framework like Jest or Mocha. This ensures that each part of the application works correctly in isolation.

Integration Testing: Perform integration tests to verify that different parts of the application work together as expected.

End-to-End Testing: Use tools like Cypress or Selenium for end-to-end testing to simulate real user scenarios and ensure the application behaves correctly from start to finish.

Test Coverage: Aim for a high level of test coverage, ensuring most of the codebase is tested.

Additional Considerations

User Experience: Prioritize intuitive navigation and ease of use.

Data Privacy: Adhere to data protection regulations and best practices in handling user data.

Scalability: Design the application with potential future enhancements in mind.

Deliverables

A fully functional web application with the specified features.

Comprehensive test suite covering unit, integration, and end-to-end tests.

Documentation including a user guide, codebase annotations, and technical specifications.

A presentation showcasing application features and the development and testing process.

**Understanding the NHS Pathway**

GP Consultation: The journey often starts with a GP, who is the primary point of contact.

Referral to Specialists: If needed, the GP refers the patient to a specialist.

Diagnostic Tests: These may include X-rays, MRIs, etc.

Specialist Consultation: Post-diagnosis, discussing treatment options.

Treatment: This could be surgery, therapy, medication, etc.

Aftercare: Such as physiotherapy or follow-up appointments.

Potential Areas for Your App to Add Value

Hospital and Specialist Information: While GPs do recommend hospitals or specialists, patients may still want to research them. Your app could provide detailed information about hospitals' specializations, facilities, success rates in specific treatments, patient reviews, etc.

Waiting Times: Information on average waiting times for various treatments or consultations at different hospitals could be immensely valuable.

Travel and Accessibility Information: Details on how to get to the hospital, parking facilities, and accessibility for people with disabilities.

Appointment Preparation: Tips on what to expect, questions to ask the doctor, and how to prepare for appointments.

Medication and Treatment Details: Information about prescribed medications, their side effects, and details about recommended treatments.

Aftercare and Rehabilitation Services: Information on physiotherapy services, rehabilitation centers, and support groups.

Second Opinion Options: While the NHS does operate on referrals, patients do have the right to seek second opinions. Your app could guide them on how to go about this.

Emergency Services: Guidance on when and how to seek emergency care, and the nearest facilities for the same.

Use Case Scenarios

Choosing a Hospital for Specialized Care: A patient diagnosed with a specific condition wants to find the best hospital for their treatment within the NHS. They use your app to compare hospitals based on success rates, patient reviews, and facilities for that particular treatment.

Managing Chronic Conditions: A patient with a chronic condition uses the app to find local support groups, information on managing their condition, and updates on new treatments or research.

Seeking Second Opinions: A patient unsure about a recommended surgery uses the app to understand how to get a second opinion within the NHS and to find relevant specialists.

Navigating Emergency Care: In a non-life-threatening emergency, a user consults the app to find the nearest appropriate emergency unit, thus avoiding unnecessary visits to overburdened A&E departments.

Post-Treatment Care: After surgery, a patient uses the app to find local physiotherapy services covered by the NHS, read about recovery experiences from other patients, and get tips for faster recovery.

Conclusion

While it's true that the NHS is largely referral-based, there is still a significant role for an app that provides comprehensive, user-friendly information to help patients make informed decisions and navigate the system more effectively. Your app could bridge the gap between medical advice and patient empowerment, making the healthcare journey smoother and more transparent.

| Organisation type ID | Type name | Display name |
| --- | --- | --- |
| CCG | Clinical Commissioning Group | Clinical Commissioning Group |
| LA | Local Authority | Local Authority |
| LAT | Area Team | Area Team |
| GPB | GP | GP |
| GPP | GP Practice | GP Practice |
| STP | Sustainability and Transformation Partnership | Sustainability and Transformation Partnership |
| HOS | Hospital | Hospital |
| TRU | Trust | Trust |
| MIU | Minor Injury Unit | Minor Injury Unit |
| SHA | Strategic Health Authority | Strategic Health Authority |
| UNK | Unknown | Unknown |
| HA | Health Authority | Health Authority |
| RAT | Regional Area Team | Regional Area Team |
| GDOS | Generic Directory of Services | Generic Directory of Services |
| OPT | Optician | Optician |
| SCL | Social Care Provider Location | Social Care Provider Location |
| DEN | Dentists | Dentists |
| All | All | All organisations |
| HWB | Health and Wellbeing Board | Health and Wellbeing Board |
| PHA | Pharmacy | Pharmacy |
| CLI | Clinics | Clinics |
| GSD | Generic Service Directory | Generic Service Directory |
| SCP | Social Care Provider | Social Care Provider |
| UC | Urgent Care | Urgent Care |

organisations:

Area Team

Care homes and care at home

Clinic

Clinical Commissioning Group

Dentists

GP

GP practice

Generic Directory of Services

Generic Service Directory

Health Authority

Health and Wellbeing Board

Hospital

Local Authority

Minor Injury Unit

Opticians

Pharmacy

Regional Area Team

Social care provider

Strategic Health Authority

Sustainability and Transformation Partnership

Trust

Urgent Care

Service Codes

You can use the following service codes to search for services.

| Service code | Description |
| --- | --- |
| SRV0002 | Adult Mental Illness |
| SRV0279 | Anticoagulant monitoring and dosing - provided in-house |
| SRV0280 | Asthma Clinic |
| SRV0243 | Audiology services (community) |
| SRV0315 | Care services for people with learning disabilities |
| SRV0317 | Caring for adults over 65 |
| SRV0408 | Child and adolescent mental health services (CAMHS) |
| SRV0016 | Child and Adolescent Psychiatry |
| SRV0309 | Child health and development |
| SRV0282 | Child Immunisations |
| SRV0017 | Children's & Adolescent Services |
| SRV0019 | Cognitive behavioural therapy services |
| SRV0195 | Community care services |
| SRV0020 | Community mental health services |
| SRV0022 | Consultation services |
| SRV0209 | Continence services |
| SRV0284 | COPD clinic with spirometry |
| SRV0196 | COPD services |
| SRV0156 | Counselling services |
| SRV0025 | Day treatment services |
| SRV0028 | Dermatology |
| SRV0287 | Diabetes Clinic providing insulin initiation |
| SRV0009 | Diagnostic Imaging |
| SRV0327 | Diagnostic Physiological Measurement |
| SRV0290 | Drug and alcohol Services |
| SRV0240 | DVT services |
| SRV0034 | Eating disorders (inpatient) |
| SRV0218 | Family planning services |
| SRV0039 | Forensic Psychiatry |
| SRV0125 | GP services |
| SRV0055 | Inpatient mental health services |
| SRV0295 | Joint injections |
| SRV0308 | Laser/cosmetic services - not available on NHS |
| SRV0057 | Learning Disabilities |
| SRV0492 | Learning disability health check |
| SRV0242 | Learning disability services (community) |
| SRV0294 | Long-Acting Reversible Contraception (LARC - eg IUD or implant) |
| SRV0060 | Memory services |
| SRV0061 | Mental Health - Adults of all ages |
| SRV0298 | Minor surgery (e.g. removal of moles and skin lesions) - provided in-house |
| SRV0228 | Musculo-skeletal services |
| SRV0134 | Nursing services |
| SRV0058 | Obstetrics |
| SRV0067 | Occupational therapy services |
| SRV0068 | Old Age Psychiatry |
| SRV0069 | Older people's services |
| SRV0073 | Orthopaedics |
| SRV0074 | Outpatient mental health services |
| SRV0360 | Palliative care |
| SRV0079 | Personality disorder services |
| SRV0267 | Pharmacy Service (NHS): Chlamydia screening and treatment |
| SRV0495 | Pharmacy Service (NHS): Condom supply |
| SRV0498 | Pharmacy Service (NHS): Emergency contraception |
| SRV0261 | Pharmacy Service (NHS): Medication review service |
| SRV0198 | Pharmacy Service (NHS): Minor ailment service |
| SRV0507 | Pharmacy Service (NHS): Stop smoking voucher service |
| SRV0258 | Pharmacy Service (NHS): Supervised consumption of medicines |
| SRV0508 | Pharmacy Service (NHS): Vaccination service |
| SRV0510 | Pharmacy Service (Non-NHS): Blood pressure monitoring |
| SRV0531 | Pharmacy Service (Non-NHS): Chlamydia screening and treatment |
| SRV0530 | Pharmacy Service (Non-NHS): Emergency contraception |
| SRV0529 | Pharmacy Service (Non-NHS): Healthcheck |
| SRV0514 | Pharmacy Service (Non-NHS): Seasonal flu vaccination service (not at risk groups) |
| EPS0004 | Pharmacy Service: Internet Pharmacy |
| SRV0177 | Pharmacy Service: Appliance dispensing |
| EPS0002 | Pharmacy Service: Appliance Dispensing |
| SRV0520 | Pharmacy Service: Appointment booking available for consultations |
| SRV0521 | Pharmacy Service: Appointment booking for consultations not required |
| SRV0557 | Pharmacy Service: Collect Lateral Flow Device |
| EPS0002 | Pharmacy Service: Community Pharmacy |
| EPS0001 | Pharmacy Service: Electronic Prescription Service |
| SRV0523 | Pharmacy Service: Inhaler recycling |
| SRV0524 | Pharmacy Service: Multi-lingual staff |
| SRV0257 | Pharmacy Service: New medicine service |
| SRV0519 | Pharmacy Service: Prescription collection from local General Practices |
| SRV0522 | Pharmacy Service: Prescription delivery service |
| SRV0526 | Pharmacy Service: Private consultation room |
| SRV0527 | Pharmacy Service: Public Health |
| SRV0277 | Pharmacy Service: Seasonal flu vaccination service (at risk groups) |
| SRV0299 | Phlebotomy |
| SRV0081 | Physiotherapy |
| SRV0083 | Podiatry |
| SRV0285 | Primary care counselling service |
| SRV0230 | Psychiatric intensive care unit |
| SRV0085 | Psychiatric liaison services |
| SRV0086 | Psychiatry services |
| SRV0163 | Respite care services |
| SRV00376 | Rehabilitation care services |
| SRV0137 | Sexual health services |
| SRV0095 | Speech and language services |
| SRV0100 | Therapy services |
| SRV0302 | Travel health with yellow fever |
| SRV0303 | Travel health without yellow fever |
| SRV0103 | Urology |
| SRV0112 | Vascular services |
| SRV0104 | Vascular surgery |

Has <https://odsportal.digital.nhs.uk/Organisation/Search> but it is incomplete