

Task Description

19 June 2021 17:02

Assignment notes

Assignment is to use selected technologies to create an application which will use the NHS Developer API to show up to date information "whilst considering design and usability"

Software, languages and frameworks

Asp.net Core MVC/RazorPages;

· C#;

· CSS/HTML;

· Javascript;

· JQuery;

· Git;

CSS/HTML

- Bootstrap 4.6

- CSS 3

- HTML 5

Git

- GitHub

Assignment for Student Software Developer 2021

Congratulations on being shortlisted for the above post!

For this next selection stage we would like you to complete an assignment.

For this task we would like you to research, design and develop a web based application utilising some or all of the following software, languages and frameworks:

- Asp.net Core MVC/RazorPages;
- C#;
- CSS/HTML;
- Javascript;
- JQuery;
- Git.

The web based application will need to contain information from the NHS Developer API (<https://developer.api.nhs.uk/>). The design and content of this application is down to you but will need to contain relevant and up to date information whilst considering design and usability.

We are specifically interested in your learning journey whilst addressing the above problem and less so in producing a working application.

Therefore in support of the application we would like you to produce a screen capture video between 5-15 mins (e.g. through OpenBroadcastSoftware <https://obsproject.com/> or Captivate) whilst you are talking through your work and your learning journey.

Please upload your video to a file sharing site (eg Box, DropBox, Vimeo, or Youtube). We would also be grateful if you could upload your code onto Github to allow us to explore this before the interview. Please provide links to your video and code repository.

The date for completion of this assignment is **Sunday 27 June 10pm**.

The meeting invite you will have received is for an interview via MS Teams for which the panel will consist of myself and two team managers. We will ask you questions about your assignment as well as further questions about your suitability for the role.

Good luck!

NHS API

Attribution - must include the credit to the nhs website.

Caching is recommended every 7 days

None of the contact need Manual refreshing

Usage caps

Trial - 10 calls a minute 1,000 a month

Full - 4,000 an hour without additional consent

Parameters

<https://developer.api.nhs.uk/nhs-api/documentation/59dc785b239906084407090d>

[api/documentation/59dc785b239906084407090d](https://developer.api.nhs.uk/nhs-api/documentation/59dc785b239906084407090d)

Api options

- Common health questions API
- Coronavirus (COVID-19)
- Health A-Z API
- Live Well API
- Medicines API
- Mental health
- NHS services
- Pregnancy
- Ratings and Reviews API
- Service Search - Organisation Types
- Service Search API - organisations
- Video API

Ideas

Better website design

Better big screen and mobile

Why idea?

Big screen implementation

Make information easy to access without

scrolling this makes the service more

accessible.

Notes

Modular content varies in size

Modular content doesn't always include more information e.g treatments overview

Pages use

ENDPOINTS

GET <https://api.nhs.uk/conditions/> Health topics

GET <https://api.nhs.uk/conditions/> Health A-Z index

Module	Description
Overview	Summary of what the condition is and any key symptoms, treatments or causes
Symptoms summary	Short summary of some of the main symptoms of the condition
Symptoms	Content on all the main symptoms of the condition
Treatment summary	Short summary of the main treatments for the condition
Self-care	Content on what patients can do to manage the condition
Medical treatments	Content on medical treatments for the condition
Causes summary	Short summary of the main causes of the condition
Prevention summary	Short summary of the main ways to help prevent the condition

From <https://developer.api.nhs.uk/about/modularisation>

Issues with current website

Difficult to navigate to information you are looking for e.g no quick navigation for chickenpox website

Example Data

Data from the NHS website

Home > [Health A to Z](#)

Overview

Acne

- Overview
- [Causes](#)
- [Diagnosis](#)
- [Treatment](#)
- [Complications](#)

Acne is a common skin condition that affects most people at some point. It causes spots, oily skin and sometimes skin that's hot or painful to touch.

Symptoms of acne

Acne most commonly develops on the:

- face – this affects almost everyone with acne
- back – this affects more than half of people with acne
- chest – this affects about 15% of people with acne

Home > [Health A to Z](#)

Chickenpox

Chickenpox is common and mostly affects children, although you can get it at any age. It usually gets better by itself after 1 to 2 weeks without needing to see a GP.

Coronavirus (COVID-19)

At the moment it can be hard to know what to do if your child is unwell.

It's important to trust your instincts and get medical help if you need it.

Check if it's chickenpox



1. Chickenpox starts with red spots. They can appear anywhere on the body and might spread or stay in a small area.



▼ (6) [{"-"}, {"-"}, {"-"}, {"-"}, {"-"}, {"-"}] 

▶ 0: {"@type": "WebPageElement", name: "overview", url: "https://api.nhs.uk/conditions/acn"} 

```

▼ (6) [{-}, {-}, {-}, {-}, {-}, {-}] ⓘ
  ► 0: {@type: "WebPageElement", name: "overview", url: "https://api.nhs.uk/conditions/acn
  ► 1: {@type: "WebPageElement", name: "symptoms", url: "https://api.nhs.uk/conditions/acn
  ► 2: {@type: "WebPageElement", name: "treatments_overview", url: "https://api.nhs.uk/con
  ► 3: {@type: "WebPageElement", name: "self_care", url: "https://api.nhs.uk/conditions/ac
  ► 4: {@type: "WebPageElement", name: "causes", url: "https://api.nhs.uk/conditions/acne/
  ► 5: {@type: "WebPageElement", name: "other_treatments", url: "https://api.nhs.uk/condit
    length: 6

▼ 2:
  @type: "WebPageElement"
  description: "You can often treat acne with creams and gels bought from a pharmacy. ..."
  name: "treatments_overview"
  text: ""
  title: ""
  url: "https://api.nhs.uk/conditions/acne/#treatments-summary"

```

Note

'text' element contains HTML but does not include classes so images are not automatically formatted



SCAPUL, J2124

```

▼ (5) [{-}, {-}, {-}, {-}, {-}] ⓘ
  ► 0: {@type: "WebPageElement", name: "overview", url: "https://api.nhs.uk/conditions/chicki...
  ► 1: {@type: "WebPageElement", name: "symptoms", url: "https://api.nhs.uk/conditions/chicki...
  ► 2: {@type: "WebPageElement", name: "treatments_overview", url: "https://api.nhs.uk/con...
  ► 3: {@type: "WebPageElement", name: "self_care", url: "https://api.nhs.uk/conditions/ch...
  ► 4: {@type: "WebPageElement", name: "causes", url: "https://api.nhs.uk/conditions/chick...
    length: 5

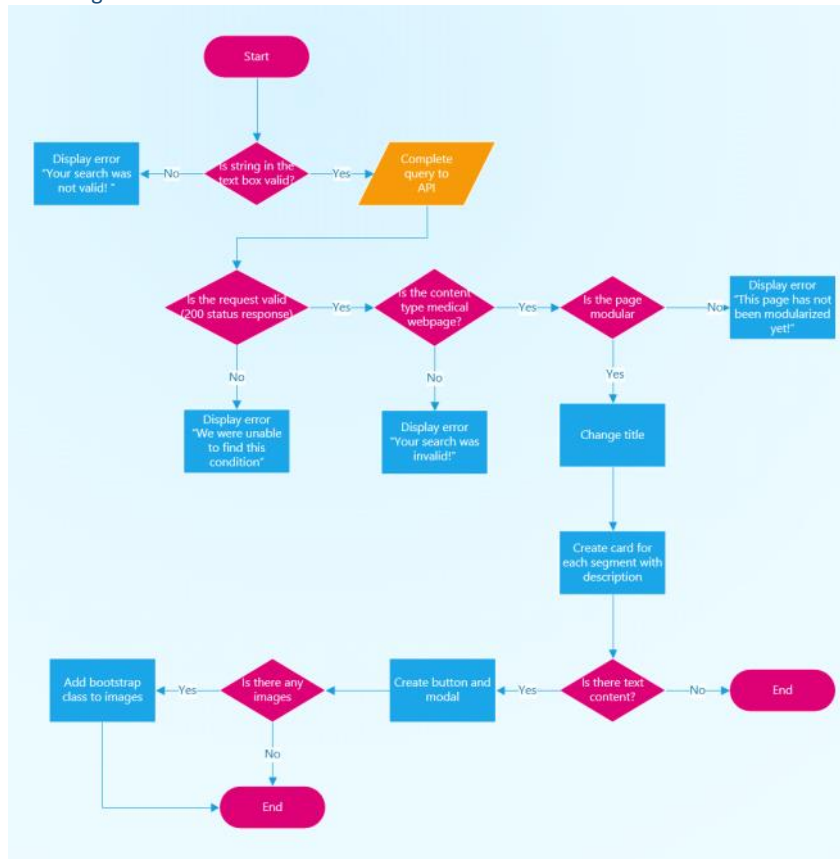
```

Modal

Modal will contain data from the segment. Text it already contains data in HTML form.

It is a method of allowing the user to focus on content selected makes it easier to read

Flow diagram



Testing

formatTextBox

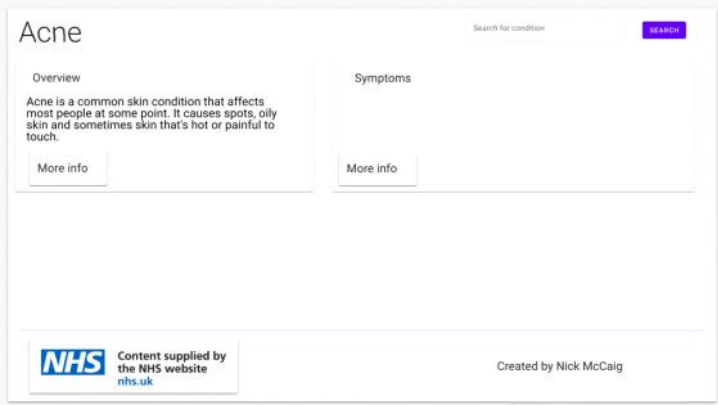
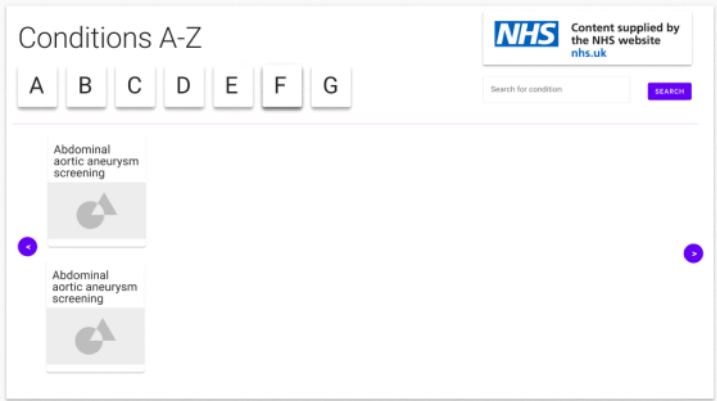
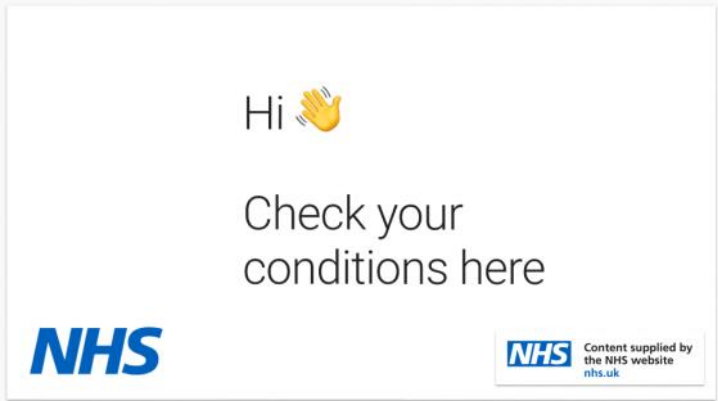
The text box must: change all letters to lower case, replace spaces with

Input	Expected output	Test Name	Results
chest infection	chest-infection	adding hyphens	Passed
chest-infection	chest-infection	No change one	passed
Acne	acne	to lower case	Passed
acne	acne	No change 2	Passed
" high blOod pressure hYpertension "	high-blood-pressure-hypertension	Extremely poor formatting	Passed
" Acne "	acne	Removing trailing and leading spaces	Passed(Originally failed)

Functionality Testing

Valid search

Input	Expected output	Test Name	Results
Acne	Acne is displayed	Valid search 1	Passed
Check infection	Check infection is displayed	Valid search 2	Passed
AAA	Your search was invalid message, title NHS A-Z	Invalid search	Passed
Baby	Non medical webpage displayed, title Baby	Non medical webpage	Passed
bipolar-disorder	Non modularized content displayed, title Bipolar Disorder	Not Modularized content	Passed



24 June 2021 18:50

User searches

Summery telling user where to find information and clear description that other treatments contains GP solutions

Self-care information shows after one click

User selects from list or search

User will either scroll
or see treatment and
click

User is shown **wrong** information about GP treatments and is unsure where to find self-treatment

- Do not wash affected areas of skin more than twice a day. Frequent washing can irritate the skin and make symptoms worse.
- Wash the affected area with a mild soap or cleanser and lukewarm water. Very hot or cold water can make acne worse.
- Do not try to "clean out" blackheads or squeeze spots. This can make them worse and cause permanent **scarring**.
- Avoid using too much make-up and cosmetics. Use water-based products that are described as non-comedogenic. This means the product is less likely to block the pores in your skin.
- Completely remove make-up before going to bed.
- If dry skin is a problem, use a fragrance-free water-based **emollient**.
- Regular exercise cannot improve your acne, but it can boost your mood and improve your self-esteem. Shower as soon as possible once you finish exercising as sweat can irritate your skin.
- Wash your hair regularly and try to avoid letting your hair fall across your face.

Although acne cannot be cured, it can be controlled with treatment.

If you develop mild acne, it's a good idea to speak to a pharmacist for advice.

Several creams, lotions and gels for treating spots are available to buy from pharmacies.

Products containing a low concentration of benzoyl peroxide may be recommended, but be careful as this can bleach clothing.

If your acne is severe or appears on your chest and back, it may need to be treated with [antibiotics](#) or stronger creams that are only available on prescription.

User has to scroll until they see the title they are looking for (scrolling can be difficult for those with reading difficulty's)

If I had more time

24 June 2021 19:43

- Search functionality in UI design
- CI/CD
- Automated testing
- Detailed unit testing for most functions
- Auto complete search box
- Enable the links from the API
- Angular