

Creating truly accessible forms

SDinGOV Virtual 2024

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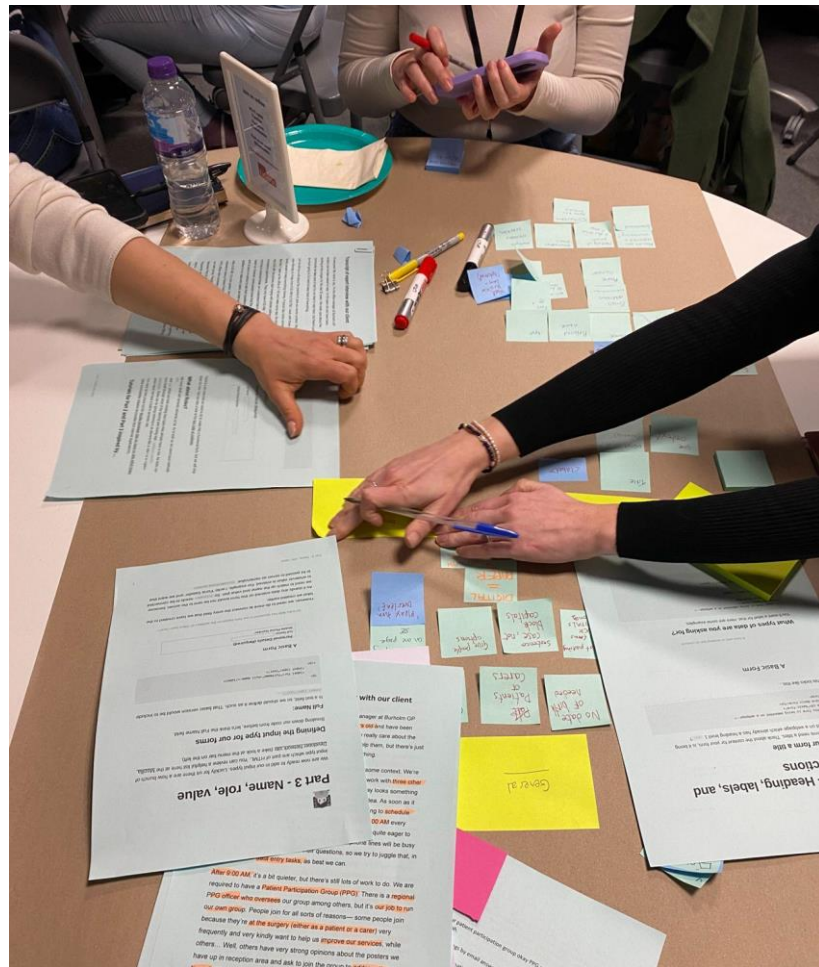
Ladies that UX Brighton ran a great in-person event

We'd like to thank everyone involved in preparing and running that event, the inspiration for this shorter workshop.

[Blog post about the in-person event](#)

[Original workshop resources on Notion](#)
(Creative Commons licensed).

[Find out more about Ladies that UX Brighton](#)



We are Caroline, Kiki, and Fiona

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Find the slides online

<https://bit.ly/SDGforms>



Agenda

Introductions

Challenge 1: Use the Web Content Accessibility Guidelines

Challenge 2: Use the GOV.UK design system

Challenge 3: Think about how we use phones

Challenge 4: Make a question protocol

Challenge 5: Think about types of disability

Challenge 6: Make a prototype

Wrap up

Is this a form?

GOV.UK/random

[Mr M Thewlis v Iceland Foods Ltd:
1805452/2020 - GOV.UK \(www.gov.uk\)](#)

[Home](#) > [Employment tribunal decisions](#)

Mr M Thewlis v Iceland Foods Ltd: 1805452/2020

Employment Tribunal decision.

From: [HM Courts & Tribunals Service](#) and [Employment Tribunal](#)

Published 18 February 2021

Country: [England and Wales](#)
Jurisdiction code: [Unfair Dismissal](#)
Decision date: **2 February 2021**

Read the full decision in [Mr M Thewlis v Iceland Foods Ltd: 1805452/2020 - Dismissal](#).

Is this a form?

Country: [England and Wales](#)
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Read the full decision in [Mr M Thewlis v Iceland Foods Ltd: 1805452/2020 - Dismissal](#).

Published 18 February 2021

Explore the topic

[Courts, sentencing and tribunals](#)

Is this page useful?

Yes

No

[Report a problem with this page](#)

Services and information

[Benefits](#)

[Births, death, marriages and care](#)

Government activity

[Departments](#)

Is this a form?

Help us improve GOV.UK

Don't include personal or financial information like your National Insurance number or credit card details.

What were you doing?

What went wrong?

Send

Cancel

Services and information

Government activity

[Benefits](#)

[Departments](#)

We know a form when we see it



Looks like a form and works like a form



Asks questions and expects answers



Allows someone to achieve a goal

A good form needs a lot of accessibility



Interaction design



Content design



Service design

Takeaway

A good form is easy to:

- read and use
- understand and answer
- get it done and move on

Today's focus is one specific question

Scenario

You have been asked to develop a digital version of a paper-based form. One of the form fields is 'phone number' - today we'll focus on this field in our design backlog.

We'll think about

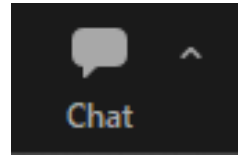
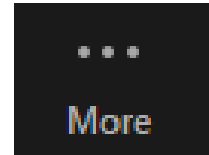
“What's the best way to ask for a phone number?”

What could possibly go wrong?

This is a workshop with some discussion in chat

Let's practice saying hi to each other in the chat

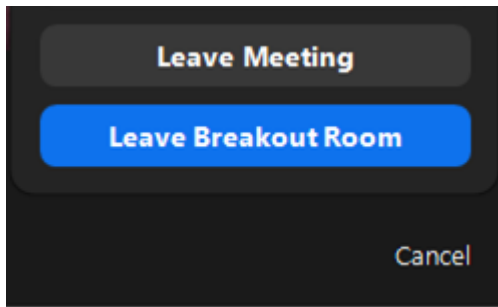
1 minute



We'll mostly work in breakout rooms

Let's practice getting into our breakout rooms, just to say hi

2 minutes



Review:

Did we all make it there and back?

Agenda

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Wrap up

Challenge 1:

Use the Web Content Accessibility Guidelines

Let's try to get some help from WCAG for
“the best way to ask for a phone number”

Have a look at
[Forms Tutorial | Web Accessibility Initiative \(WAI\) | W3C](#)

Compare notes
5 minutes



Review:

Did the Web Accessibility Content Guidelines help us with the best way to ask for a phone number?

This tutorial is mostly about interaction design, with a bit of content design

[Forms Tutorial | Web Accessibility Initiative \(WAI\) | W3C](#)

The screenshot shows the top portion of the W3C WAI website. At the top left is the W3C logo. To its right is the text 'Web Accessibility Initiative WAI'. Further right is a tagline: 'Strategies, standards, resources to make the Web accessible to people with disabilities'. A 'MENU' button is in the top right corner. Below this is a navigation bar with links for 'Get Involved', 'About W3C WAI', and a search box. A secondary navigation bar contains links for 'Accessibility Fundamentals', 'Planning & Policies', 'Design & Develop', 'Test & Evaluate', 'Teach & Advocate', and 'Standards/Guidelines'. The breadcrumb trail reads 'Home / Design & Develop / Tutorials / Forms'. The main heading is 'Forms Tutorial' with a sub-heading 'in Tutorials'. The text explains that forms are used for user interaction and provides an overview of the tutorial's content. A list of key concepts follows: Labeling Controls, Grouping Controls, Form Instructions, Validating Input, User Notifications, and Multi-Page Forms.

Skip to Content | Change Text Size or Colors | All Translations

W3C® Web Accessibility Initiative WAI

Strategies, standards, resources to make the Web accessible to people with disabilities

MENU

Get Involved | About W3C WAI Search

Accessibility Fundamentals Planning & Policies Design & Develop Test & Evaluate Teach & Advocate Standards/Guidelines

Home / Design & Develop / Tutorials / Forms

Forms Tutorial

in [Tutorials](#)

Forms are commonly used to provide user interaction on websites and in web applications. For example, login, registering, commenting, and purchasing. This tutorial shows you how to create accessible forms. The same concepts apply to all forms, whether they are processed client or server-side.

Aside from technical considerations, users usually prefer simple and short forms. Only ask users to enter what is required to complete the transaction or process; if irrelevant or excessive data is requested, users are more likely to abandon the form.

- **Labeling Controls:** Use the `<label>` element, and, in specific cases, other mechanisms (e.g. WAI-ARIA, `title` attribute etc.), to identify each form control.
- **Grouping Controls:** Use the `<fieldset>` and `<legend>` elements to group and associate related form controls.
- **Form Instructions:** Provide instructions to help users understand how to complete the form and individual form controls.
- **Validating Input:** Validate input provided by the user and provide options to undo changes and confirm data entry.
- **User Notifications:** Notify users about successful task completion, any errors, and provide instructions to help them correct mistakes.
- **Multi-Page Forms:** Divide long forms into multiple smaller forms that constitute a

There is a bit of service design there

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Strategies, standards, resources to make the Web accessible to people with disabilities

Get Involved | About W3C WAI Search

Accessibility Fundamentals | Planning & Policies | Design & Develop | Test & Evaluate | Teach & Advocate | Standards/Guidelines

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Challenge 2: Use the GOV.UK design system

We're looking for the best way to ask for a phone number

Try

[GOV.UK Design System \(design-system.service.gov.uk\)](https://design-system.service.gov.uk)

Compare notes

5 minutes



Review:

Did GOV.UK Design system help us with the best way to ask for a phone number?

This pattern is specifically about telephone numbers

[Telephone numbers – GOV.UK Design System \(design-system.service.gov.uk\)](https://design-system.service.gov.uk/Telephone%20numbers)

The screenshot shows the GOV.UK Design System website. At the top, there is a search bar with the text "Search Design System" and a magnifying glass icon. Below the search bar is a navigation menu with links for "Get started", "Styles", "Components", "Patterns", and "Community". The "Patterns" link is underlined. Below the navigation menu is a section titled "Accessibility".

The main content area is titled "Ask users for..." and lists various categories: "Addresses", "Bank details", "Dates", "Email addresses", "Equality information", "Gender or sex", "Names", "National Insurance numbers", "Passwords", "Payment card details", and "Telephone numbers". The "Telephone numbers" category is highlighted with a blue bar.

Below the list, there is a section titled "Help users to..." with links for "Check a service is suitable", "Check answers", and "Complete multiple tasks".

The "Telephone numbers" section is titled "Ask users for Telephone numbers". It contains the text: "This guidance is for government teams that build online services. [To find information and services for the public, go to GOV.UK.](#)"

Below this text is a box containing a link: "Open this example in a new tab". Below the link is a form field labeled "UK telephone number" with a text input box.

Below the form field are two links: "HTML" and "Nunjucks".

At the bottom of the page, the text "When to use this pattern" is visible.

We have to design “give users a choice about how they can be contacted”

[Check answers](#)

[Complete multiple tasks](#)

[Confirm a phone number](#)

[Confirm an email address](#)

[Contact a department or service team](#)

[Create a username](#)

[Create accounts](#)

[Exit a page quickly](#)

[Start using a service](#)

[Recover from validation errors](#)

[Pages](#)

[Confirmation pages](#)

[Cookies page](#)

[Page not found pages](#)

[There is a problem with the service pages](#)

[Question pages](#)

[Service unavailable pages](#)

[Step by step navigation](#)

When to use this pattern

Only collect telephone numbers from people if you genuinely need them. Not everyone has or can use a telephone, so make sure you give users a choice about how they can be contacted.

How it works

Allow different formats

Let users enter telephone numbers in whatever format is familiar to them. Allow for additional spaces, hyphens, dashes and brackets, and be able to accommodate country and area codes.

Validate telephone numbers

You should validate telephone numbers so you can let users know if they have entered one incorrectly. Google's [libphonenumber](#) library can validate telephone numbers from most countries.

Use the autocomplete attribute

Use the `autocomplete` attribute on telephone number inputs. This lets browsers autofill the information on a user's behalf if they've entered it previously.

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What do we have to design?

We have to design:

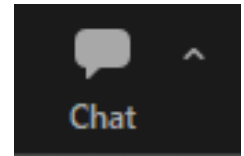
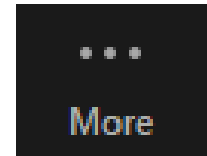
“give users a choice about how they can be contacted”

Is this the only way that organisations use the phone numbers that they collect?

Challenge 3:

Think about how we use phones

- Have a look at your phone
 - Is it a landline or mobile?
 - Is there only one or do you have several?
- Consider calls received and messages
 - What did you get and why?
 - How did you react?
- Think about someone, maybe in your family, who has a different experience to you. Any extra thoughts?



Review:

Is “your phone” a landline or mobile?

Any thoughts about messages and calls you received?

Any thoughts about different answers for someone else?

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A question protocol is a list of all the questions

[The question protocol: how to make sure every form field is necessary - Effortmark](#)

The question protocol: how to make sure every form field is necessary

▲ Caroline Jarrett 📅 7 June 2010

What is a question protocol?

A *question protocol* is a tool for finding out which form fields are required. It lists:

- every question you ask
- who within your organisation uses the answers to each question
- what they use them for
- whether an answer is required or optional
- if an answer is required, what happens if a user enters any old thing just to get through the form.



Question, by Noella, creative commons

The question protocol is different from the form itself, because it's about *how* you use the answers.



BETA

Contact the Service Manual team if you have feedback, questions or suggestions.

Service manual > Design

Design

[Give feedback about this page](#)

Structuring forms

From: [Design community](#)

Page contents:

- [Design your forms for the format they'll appear in](#)
- [Know why you're asking every question](#)
- [Design for the most common scenarios first](#)
- [Start with one thing per page](#)
- [Structure your form to help users](#)
- [Further reading](#)

This guide explains how to structure online forms.

Design your forms for the format they'll appear in

Paper forms and digital forms have different strengths and weaknesses. Design for both formats with the same amount of care and attention.

The movement from paper to digital is an opportunity to transform how your service is

Surprise!

Question protocols are in the GOV.UK Service Manual

[Structuring forms - Service Manual - GOV.UK \(www.gov.uk\)](#)

Here they are

[Structuring forms - Service Manual - GOV.UK \(www.gov.uk\)](#)

Page contents:

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- [Further reading](#)
- [Related guides](#)

Know why you're asking every question

Before you start, make a list of all the information you need from your users.

Only add a question if you know:

- that you need the information to deliver the service
- why you need the information
- what you'll do with it
- which users need to give you the information
- how you'll check the information is accurate
- how to keep the information up to date and secure

This list is called a 'question protocol' - it's different from the form itself because it's about how you'll use the answers.

A question protocol forces you (and your organisation) to question why you're asking users for each item of information. It gives you a way of challenging and pushing back against unnecessary questions if you need to.

Once you've worked out what you need to ask, you can start thinking about [how to ask the questions](#)

A question protocol keeps track of each question

Only add a question if you know:

- that you need the information to deliver the service
- why you need the information
- what you'll do with it
- which users need to give you the information
- how you'll check the information is accurate
- how to keep the information up to date and secure

An example of an entry in my question protocol

Column in the question protocol

Answer we need to get (data)

Why is it needed?

How will it be used?

Level of importance (must have, nice to have)

What happens if you get the wrong answer or no answer to this question?

(optional: include choice of interaction design)

Example for a newsletter sign-up form

Name

To be able to address the user
To identify the individual user

Hi, Caroline!

Nice to have

May have a strange interaction with the user

Open box (text area)

Split fields (three boxes)

Challenge 4: Make question protocol entry



There's a question protocol with two entries:

<https://bit.ly/SDGqp> - there is a tab for your group

20					
21					
22					

+ ≡ Template ▾ Group 1 - use this ▾ Group 2 - use this ▾ Group 3 - use this ▾

Try creating an entry for our challenge: a phone number
10 minutes



Review:

How was the question protocol?

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Challenge 5: Think about types of disability

Touch



One arm



Arm injury



New parent

Hear



Deaf



Ear infection



Bartender

See



Blind



Cataract



Distracted driver

Speak



Non-verbal

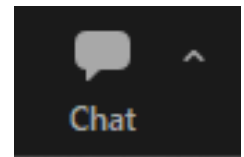
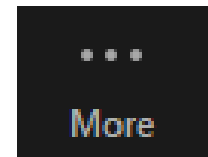


Laryngitis



Heavy accent

[Inclusive101Guidebook.pdf \(microsoft.design\)](#)



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Challenge 6: Make a prototype

Design a truly accessible question

Your question must:

- Obtain a phone number
- Allow for some sort of choice

15 minutes



Review:

Show and tell on the prototypes

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It's worth putting extra effort into 'easy' questions

Question	Mean abandon rate
Name	6%
Email	6%
Password	11%
Phone	6%
Postcode	5%
Address	5%

Users want to know why you want to know

“Users hate giving you their phone number - It’s a sad truth but users are very suspicious of you asking for their number. They fear being spammed by sales calls so would rather drop out of the process than hand it over ...

If you really must ask then explain why you need it. A simple line saying that you need their number in case there are any issues with delivery will do wonders for the completion rate on your phone field.”

Forgiving interaction design really matters, too

“Format confusion - More than any field, phone numbers have a cornucopia of ways you can potentially enter the information. Do you add a ‘+’? The country code? How about spaces or dashes? <HEAD EXPLODES EMOJI>”

Please help dyscalculics

1. If you already have a phone number for us, don't ask again
2. Let us copy the phone number into the form
3. Allow for typical characters such as plus, dash, and space
4. Be very specific in the error message
5. Give us extra time

[Fill in the information you have \(accessiblenumbers.com\)](https://accessiblenumbers.com)

[Improve Validation Errors with Adaptive Messages \(98% Don't\) – Articles – Baymard Institute](#)

A good form needs a lot of accessibility



Interaction design



Content design



Service design

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