Interactive Form Design

Meals on Wheels Application

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February 5, 2023 | Spring 2023 Principles of Interaction

Project Deliverables

Imagine you are a designer with the municipal government. You must create a form allowing town residents to apply for a meal-on-wheels service.

Required Fields
- Person being served
- Your name (if not the same person)
- Age
- Disabled: Yes or No – If yes, then upload/provide documentation
- Services requested: The meal plan
- Full 21 meals
- Lunch and dinner
- Only dinner
- Which days of the week
- Any additional information about accessing the property
    - i.e., condo gate, phone first, the dog will eat you, etc.
- Notification: how do we reach you

Design the form allowing for all the information listed above. Include annotation to explain any logic or functionality. Include rationale on which patterns or principles you are pulling from to help guide your decision.

Consider the UI/UX patterns and principles: content hierarchy, digital affordances, pliancy, how type and color can support, and other IxD principles we discussed (simplicity, consistency, error prevention, detection, and recovery.)

"Nearly 7.4 million seniors have incomes below the poverty line... incomes of $240 a week or less, which, after housing, utility, and medical expenses, leaves very little for food." - Meals On Wheels

Research & Direction

My focus was to keep the signup process as streamlined as possible. Goals:

- #1: the user can quickly and easily complete the signup process
- Clean, alignment with helpful hints, and error prevention
- Group-like information and a sensical hierarchy
- Place complex tasks towards the end of the flow (a best practice)
- Ensure only necessary information is collected; make fields optional where possible

To do so, I conducted a simple competitive analysis to understand current application processes within municipalities and non-profit Meals-on-Wheels websites within the United Sites.

The research found some lengthy registration processes, with over 20 steps and payment requirements upfront. Others were simple contact forms. Some websites didn't have a signup process online and required either a phone call or going through a social program to start receiving free meals.

Additionally, demographics were analyzed to understand the right persona(s) to fit the narrative of this project. Statistical information was pulled from the national Meals-on-Wheels website and provided a very empathetic background on who this website form needs to serve.

In addition to those research methods, I also applied the best practices and principles for designing web forms and for accessibility and the elderly. Some of the top things considered were:

- Simple, easy-to-read labels (top-left)
- Provide hints or assistive example text for inputs
- Spacing & Alignment
- Button size and placement
- Color contrast
- Font family and size
- Grouped related inputs
- Flow information simple to hardest
- Progress bars (for longer forms) to provide insight and direction
- Clearly labeled Call-to-Action buttons
- Highlight fields with focus states
- Provide more than color for indication of an error (icon)

References:
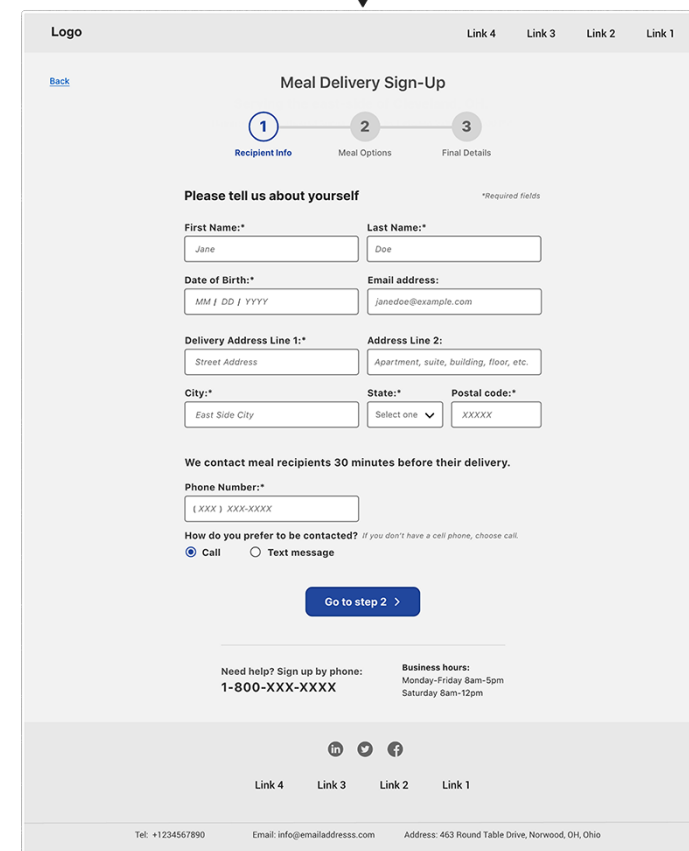https://www.toptal.com/designers/ui/ui-design-for-older-adults
https://www.w3.org/WAI/tips/designing/
https://www.drip.com/blog/form-design-best-practices

Flow 1 - Self Flow

Self-flow is for the person who fills out the form by choosing the option "myself" - the meal recipient.
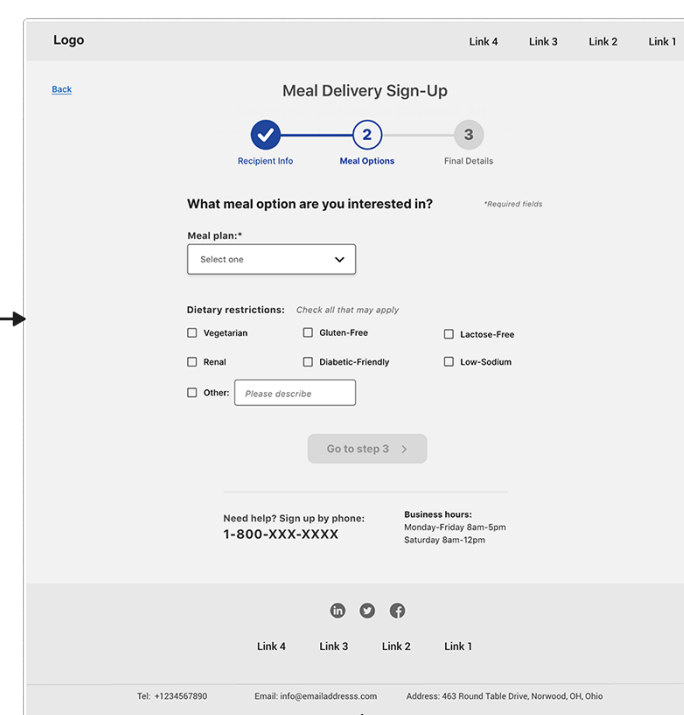
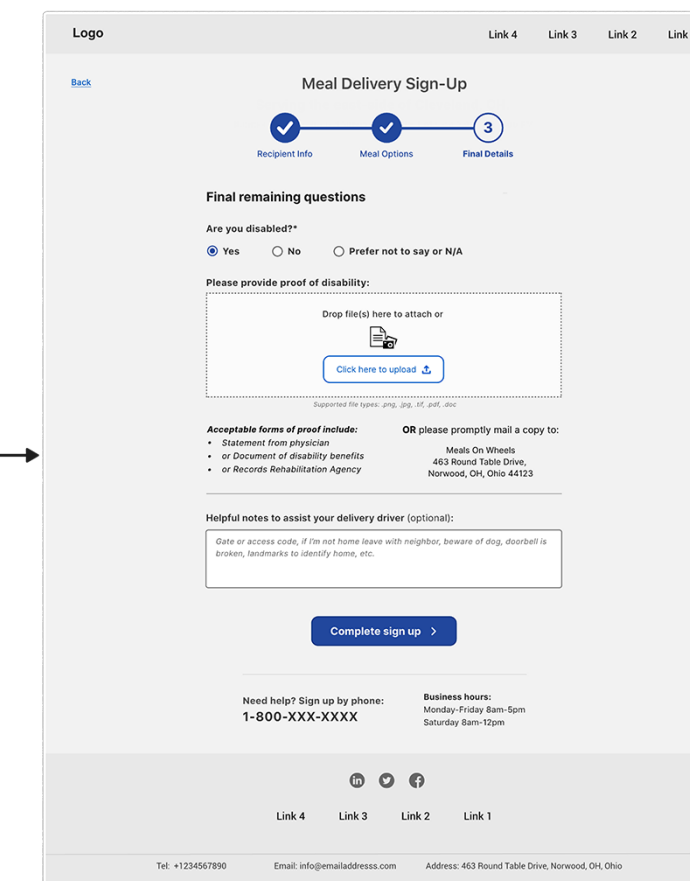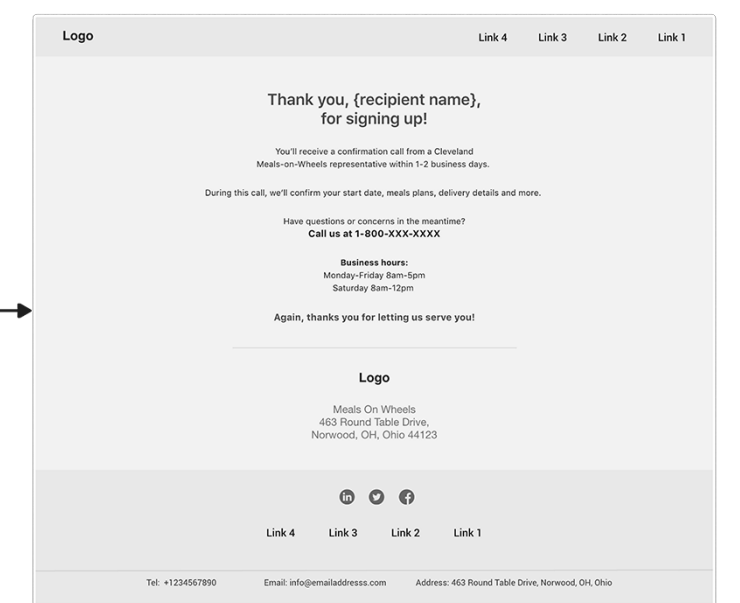*Low-Fidelity Prototype: https://xd.adobe.com/view/ 1f96ada5-74a7-4ac8-adc7- df17b2222623-4ac5/?fullscreen*

Starter
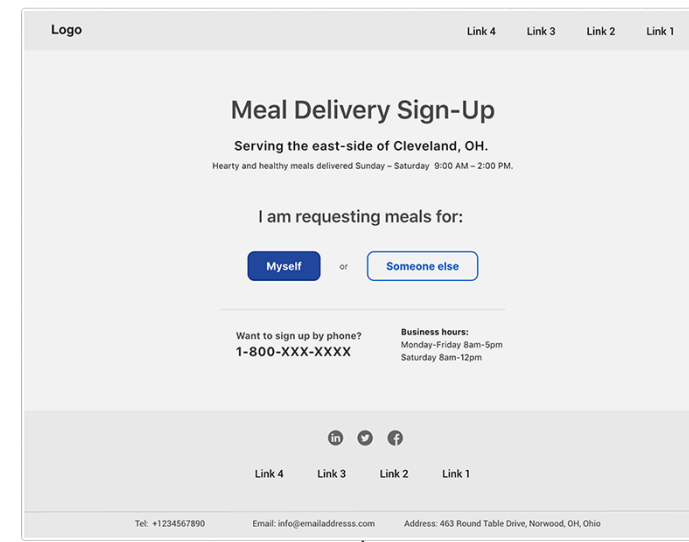
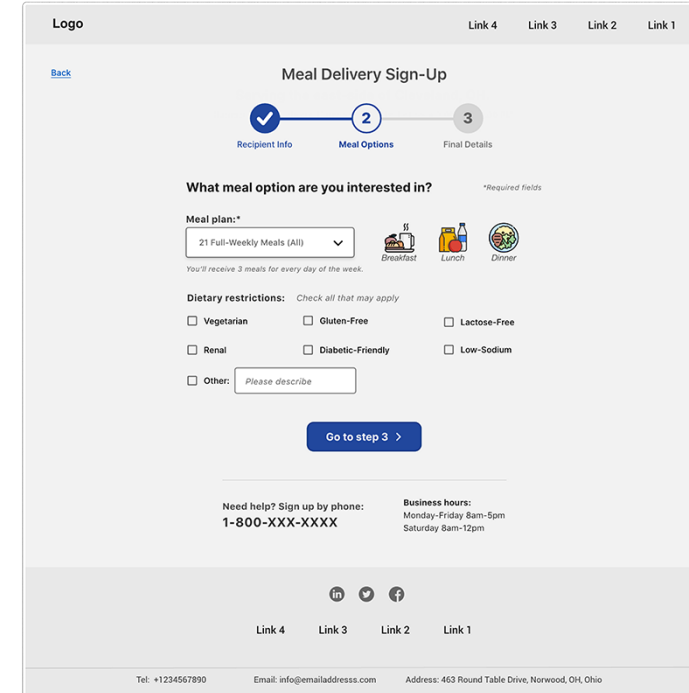**Step 1 - Recipient Info**

Step 2 - Meal Options
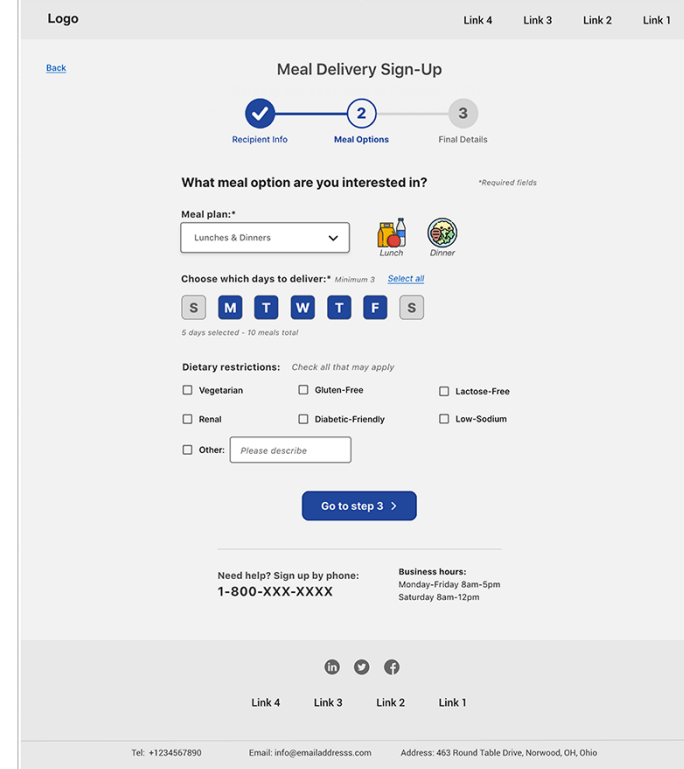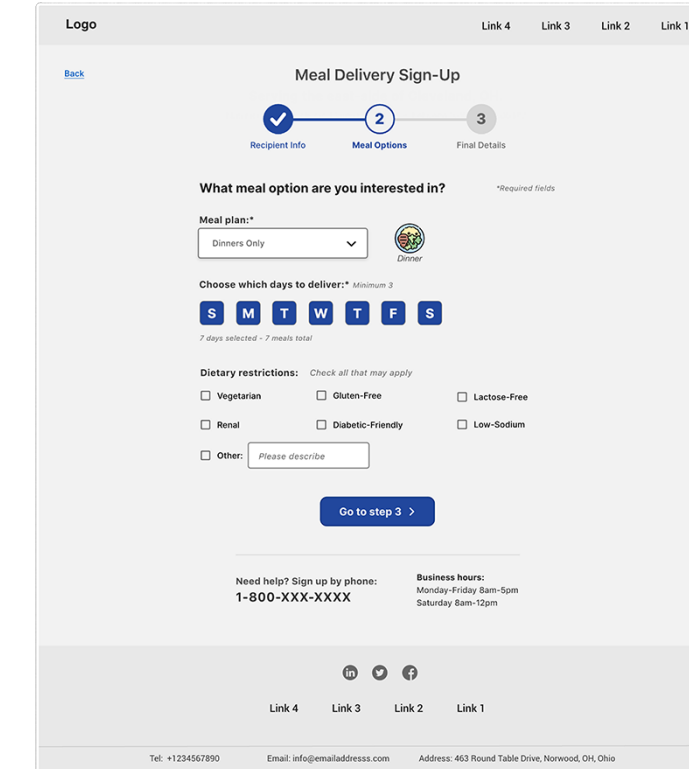

Step 3 - Final Details

Confirmation

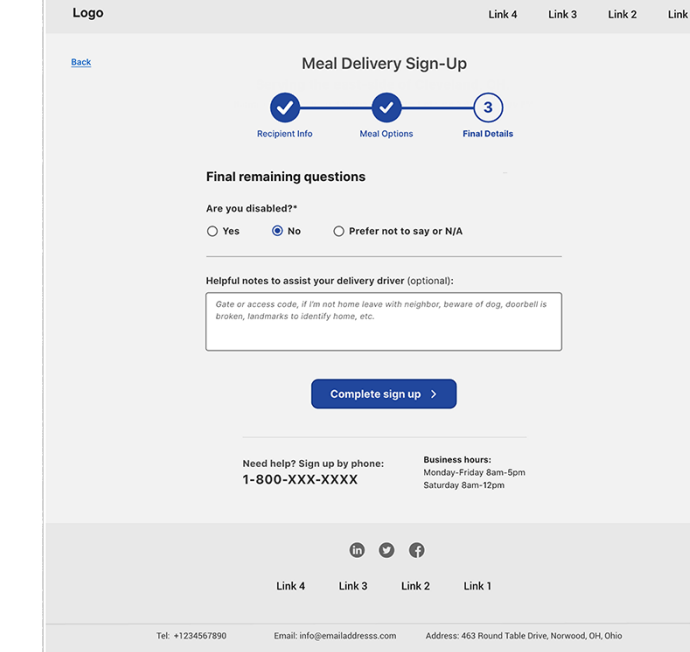**Meal Plan 1 - 21 Full meals - No day selections**

Meal Plan 2 - Lunch & Dinner - Day selections

Meal Plan 3 - Dinners Only - Day selections

Meal Plan 3 - Dinners Only - Day selections

Start Screen

1 **Content hierarchy**
Detailed headlines include information about the serviced area and additional delivery details.

Bold and large text is used to call more attention to crucial information.

2 **Large, spatial buttons**
A user would be given the option to apply for themselves or someone else with primary and secondary buttons.

One persona type may face visual issues, shakiness, and other accessibility considerations, so large buttons with plenty of surface area and margins were all considerations.

3 **Additional consideration**
Although the form was designed to be as simple, a phone number was added throughout the flow for the person who prefers to call or if they find the online process too intimidating.

Logo   Link 4   Link 3   Link 2   Link 1

1 **Meal Delivery Sign-Up**

Serving the east-side of Cleveland, OH.

Hearty and healthy meals delivered Sunday – Saturday 9:00 AM – 2:00 PM.

I am requesting meals for:

2 **Myself**   or   **Someone else**

3 **Want to sign up by phone?**
1-800-XXX-XXXX

Business hours:
Monday-Friday 8am-5pm
Saturday 8am-12pm

Link 4   Link 3   Link 2   Link 1

Tel: +1234567890   Email: info@emailaddresss.com   Address: 463 Round Table Drive, Norwood, OH, Ohio

Logo   ☰

Meal Delivery Sign-Up

Serving the east-side of Cleveland, OH.

Hearty and healthy meals delivered Sunday – Saturday 9:00 AM – 2:00 PM.

I am requesting meals for:

Myself

or

Someone else

Want to sign up by phone?
1-800-XXX-XXXX

Business hours:
Monday-Friday 8am-5pm
Saturday 8am-12pm

4

Step 1
Recipient Info - Self Flow

1 Tertiary "back" option
If a user believes they made an error, they'll have the option to go back to the previous step throughout the flow. A tertiary-styled button allows for this ability but doesn't call attention to itself as it's not a primary function.

2 Progress bar
A simple 1-2-3 step progress bar alludes to a simple sign-up process.

Using color, shape, font boldness, and icons helps the user understand where they are in the flow.

2a Mobile Progress bar
The process bar would hang over/off the screen and move center for smaller mobile screens depending on the user's current step.

3 User inputs
Users are to provide mainly *required information about themselves. Predictive text is a possible feature for address fields to assist the user. Each field has example/hint text and flows in a Z pattern.

4 Field formatting
When the user fills out fields with specific formatting like date of birth and phone number, the field will auto-tab and format to the values entered instead of requiring the user to fill it out a particular way.

For example, when entering the date of birth, when the user types two digits for the month, they don't have to type the slashes, and the cursor moves to the day position.

5 Email optional
Although not required to attain, including an email option is a fail-safe in case the user happens to enter their phone number incorrectly. Meals-on-wheels would have an alternative contact method to confirm sign-up.

6 Why city, state, & zip?
There are many Meals-on-wheels (MOW) programs out there. Even doing a localized search can cause different municipalities to appear in online searches. It's essential to verify that users apply for the correct local program.

7 Call to action
Making it clear that they have more information to provide before their application is complete. The bold button stands out, so there is no guesswork on where they should click.

Logo

Link 4   Link 3   Link 2   Link 1

1 Back

Meal Delivery Sign-Up

2 ① Recipient Info — ② Meal Options — ③ Final Details

Please tell us about yourself   *Required fields*

3 First Name:*
Jane

Last Name:*
Doe

4a Date of Birth:*
MM | DD | YYYY

Email address:
janedoe@example.com **5**

Delivery Address Line 1:*
Street Address

Address Line 2:
Apartment, suite, building, floor, etc.

6 City:*
East Side City

State:*
Select one ⌄

Postal code:*
XXXXX

We contact meal recipients 30 minutes before their delivery.

4b Phone Number:*
(XXX) XXX-XXXX

How do you prefer to be contacted? *If you don't have a cell phone, choose call.*
● Call   ○ Text message

7 **Go to step 2 ›**

Need help? Sign up by phone:
1-800-XXX-XXXX

Business hours:
Monday-Friday 8am-5pm
Saturday 8am-12pm

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Link 4   Link 3   Link 2   Link 1

Tel: +1234567890   Email: info@emailaddresss.com   Address: 463 Round Table Drive, Norwood, OH, Ohio

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Logo ☰

Back

Meal Delivery Sign-Up

① Recipient Info — ②Meal Op

Please tell us about yourself
Required fields

First Name:*
Jane

Last Name:*
Doe

Date of Birth:*
MM | DD | YYYY

Email address:
janedoe@example.com

Delivery Address Line 1:*
Street Address

Address Line 2:
Apartment, suite, building, floor...

City:*
East Side City

State:*
Select one ⌄

Postal code:*
XXXXX

We contact meal recipients 30 minutes before their delivery.

Phone Number:*
(XXX) XXX-XXXX

How do you prefer to be contacted?
If you don't have a cell phone, choose call.
● Call   ○ Text message

5

Step 2
Meal Plan - Self Flow

1 Meal & food options
For the second grouping of information collected, users can choose how frequently they want to receive meals and on what days.

1a 21 Full-Meals
When users choose this plan, there will be visual iconography (showing breakfast, lunch, and dinner) plus text to explain what the recipient will receive.

They will also not have the option to select days to receive meals as this plan includes every day.

1b Lunches and Dinners
Iconography showing lunch and dinner will appear to mimic the dropdown choice. A delivery day selector will appear (conditional logic), allowing them to select no less than three days while explaining their options and meal totals. E.g. 5 days = 10 meals.

1c Dinners Only
Like the previous, the "dinners only" option will show an icon to mimic the dropdown choice and provide a delivery day selector (conditional logic) with the meal total. If the user happens to select all seven days, that "select all" link will disappear.

2 Optional Dietary restrictions
Many Meals-on-Wheels websites have the option to customize meals based on dietary needs. Since dietary concerns are a focus for this demographic, it was opted for in this design. Optional, of course, and design denotes a "check all" for any that apply.

The user also has the option to enter a dietary concern not listed.

3 Stacking and wrapping
Responsive design is an example of pliancy, showing how fields and features would adjust from desktop to the smallest mobile size.

4 Disabled buttons
Until required information is selected or provided, buttons are disabled (more conditional logic.) In this example, a meal plan isn't specified.

Step 3
Final Details - Self Flow

1 Disability question
If someone answers "yes" to the disabilities, question, they will be prompted to upload documentation to provide proof. Documentation upload was placed further in the flow because of the cognitive load it may present to the user - the more complex the task, the later it should present itself in a form.

Because of the intimidation and complexity factor, an alternative option is presented for the user to mail in their documentation. The design allows for examples of valid forms of documentation.

The drop/upload field is optional if the participant doesn't have documentation or isn't clear on how that functionality works.

1a No disability or N/A
If the user answers no or prefers not to say (or perhaps does not have proper documentation at the time), then they will not be asked to provide proof, and the upload box and all related information will hide.

2 Helpful notes
Additional notes for the delivery driver felt like a "loose end" item and positioned at the form's end. These are possible minor details rather than more extensive, critical details. If MOWs call recipients before delivery (as established earlier in the flow), they may be able to verify some of this information before delivery.

3 Submit CTA
Letting the user know they're completing the sign-up process by clicking the button one last time.

Logo   Link 4   Link 3   Link 2   Link 1

Back

Meal Delivery Sign-Up

✓ Recipient Info —— ✓ Meal Options —— ③ Final Details

Final remaining questions

Are you disabled?*
1 ⦿ Yes   ◯ No   ◯ Prefer not to say or N/A

Please provide proof of disability:

Drop file(s) here to attach or

[Click here to upload ⬆]

Supported file types: .png, .jpg, .tif, .pdf, .doc

Acceptable forms of proof include:
- Statement from physician
- or Document of disability benefits
- or Records Rehabilitation Agency

OR please promptly mail a copy to:

Meals On Wheels
463 Round Table Drive,
Norwood, OH, Ohio 44123

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2 **Helpful notes to assist your delivery driver** (optional):

Gate or access code, if I'm not home leave with neighbor, beware of dog, doorbell is broken, landmarks to identify home, etc.

3 [**Complete sign up** ❯]

Need help? Sign up by phone:
1-800-XXX-XXXX

Business hours:
Monday-Friday 8am-5pm
Saturday 8am-12pm

(in) (twitter) (f)   Link 3   Link 2   Link 1

emailaddresss.com   Address: 463 Round Table Drive, Norwood, OH, Ohio

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Final remaining questions

Are you disabled?*
1a ◯ Yes   ⦿ No   ◯ Prefer not to say or N/A

Helpful notes to assist your delivery driver (optional):

Gate or access code, if I'm not home leave with neighbor, beware of dog, doorbell is broken, landmarks to identify home, etc.

Logo   ☰

Back

Meal Delivery Sign-Up

✓ Details —— ③ Final Details

Final remaining questions
*Required fields

Are you disabled?*
⦿ Yes
◯ No
◯ Prefer not to say or N/A

Please provide proof of disability:

Drop file(s) here to attach or

[Click here to upload ⬆]

Supported file types: .png, .jpg, .tif, .pdf, .doc

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Gate or access code, if I'm not home leave with neighbor, beware of dog, doorbell is broken, landmarks to identify home, etc.

[**Complete sign up** ❯]

Need help? Sign up by phone:
1-800-XXX-XXXX

Business hours:

7

Confirmation
Self Flow

① **Personalization & info**

Letting the user know their sign-up was submitted with some added personalization gives the confirmation page a more personal touch.

Clean and evenly spaced additional information is meant to reassure of what's to come in the upcoming follow-up with MOWs.

② **Address once again**

The design provides the mailing address again for anyone who may need to send in the disability documentation and may have forgotten to write it down on the previous page in the flow. Because the form is officially submitted, there is no "back" button to take the user to the last (step 3) screen.

Logo   Link 4   Link 3   Link 2   Link 1

Thank you, {recipient name}, for signing up!

You'll receive a confirmation call from a Cleveland Meals-on-Wheels representative within 1-2 business days.

During this call, we'll confirm your start date, meals plans, delivery details and more.

Have questions or concerns in the meantime?
Call us at 1-800-XXX-XXXX

Business hours:
Monday-Friday 8am-5pm
Saturday 8am-12pm

Again, thanks you for letting us serve you!

Logo

Meals On Wheels
463 Round Table Drive,
Norwood, OH, Ohio 44123

Link 4   Link 3   Link 2   Link 1

Tel: +1234567890   Email: info@emailaddresss.com   Address: 463 Round Table Drive, Norwood, OH, Ohio

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Logo

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Monday-Friday 8am-5pm
Saturday 8am-12pm

Again, thanks you for letting us serve you!

Logo

Meals On Wheels
463 Round Table Drive,
Norwood, OH, Ohio 44123

Link 4   Link 3   Link 2   Link 1

Tel: +1234567890

Flow 2 - Caregiver Flow (Simplified)

Caregiver-flow is the internal name I gave the flow for the applicant who is filling out the form on behalf of "someone else."

This flow shows the additional step for the "caregiver" not seen in the self-flow. The main changes include headline, field labeling, and copy changes.

This flow would still have all the conditional logic as the self-flow.

Starter

Step 1 - Applicant's Info

Step 2 - Recipient Info

Step 3 - Meal Options (x3 options plus days)

Step 4 - Final Details

Confirmation

Step 1

Applicant's Info - Caregiver Flow

1 **An additional step**
The non-recipient applicant will have an additional step in the flow that separates their information from the meal recipient.

2 **Headlines**
Updating wording is reiterating and addressing the current user to let them know what information is needed.

3 **Important details**
It may be essential to know who is submitting the form on behalf of the meal recipient. Random strangers or potential scam artists could often submit applications, and there may be some additional confirmation to rule out foul play.

4 **Emergency Contact**
Something that came up in peer discussions and wasn't initially considered - in case of an emergency (meal delays, delivery cancelations, or recipient isn't answering calls/door, Meals-on-Wheels would need to contact the "caregiver" applicant.

Link 4   Link 3   Link 2   Link 1

Back

Meal Delivery Sign-Up

1 ① Applicant's Info — ② Recipient Info — ③ Meal Options — ④ Final Details

2 **Provide your info as the non-meal recipient**   *Required fields

First Name:*
| Jane |

Last Name:*
| Doe |

3 **Relationship to recipient:***
| Child, neighbor, caregiver, etc. |

Email address:
| janedoe@example.com |

Phone Number:*
| (XXX) XXX-XXXX |

4 **Can we consider you an emergency contact?***
In case of delivery delays, disruptions or possible medical emergencies, we will call.

◉ Yes   ○ No

Go to step 2 ›

Need help? Sign up by phone:
1-800-XXX-XXXX

Business hours:
Monday-Friday 8am–5pm
Saturday 8am–12pm

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Link 4   Link 3   Link 2   Link 1

Tel: +1234567890   Email: info@emailaddresss.com   Address: 463 Round Table Drive, Norwood, OH, Ohio
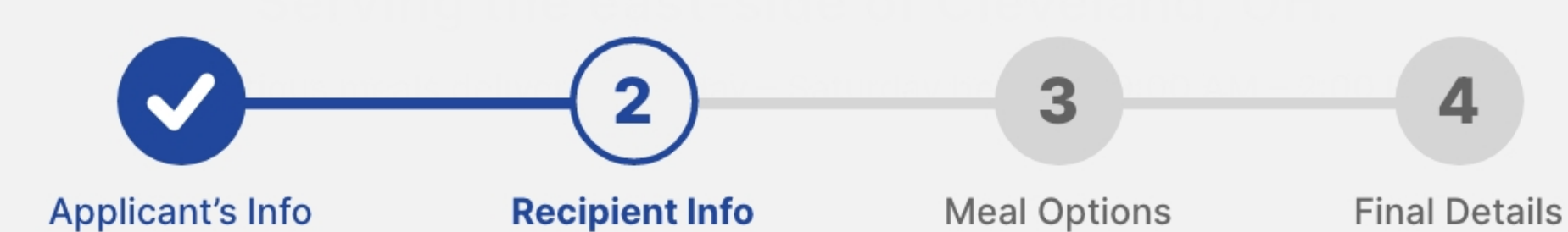
Step 2

Recipient Info - Caregiver Flow

1 **Minor adjustments**
Minor headline & wording adjustments tell the user that this particular part of the form focuses on the meal recipient.

Back

Meal Delivery Sign-Up

✓ ────── ② ────── ③ ────── ④
Applicant's Info   **Recipient Info**   Meal Options   Final Details

1 **Tell us about the meal recipient**   *Required fields*

First Name:*
Jane

Last Name:*
Doe

Date of Birth:*
MM | DD | YYYY

Delivery Address Line 1:*
Street Address

Address Line 2:
Apartment, suite, building, floor, etc.

City:*
East Side City

State:*
Select one ▾

Postal code:*
XXXXX

We contact meal recipients 30 minutes before their delivery.

Phone Number:*
(XXX) XXX-XXXX

1 **How should we contact the recipient?** *If they don't have a cell phone, choose call.*
⦿ Call   ◯ Text message

Go to step 2 ›

Need help? Sign up by phone:
1-800-XXX-XXXX

Business hours:
Monday-Friday 8am-5pm
Saturday 8am-12pm

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Link 4   Link 3   Link 2   Link 1

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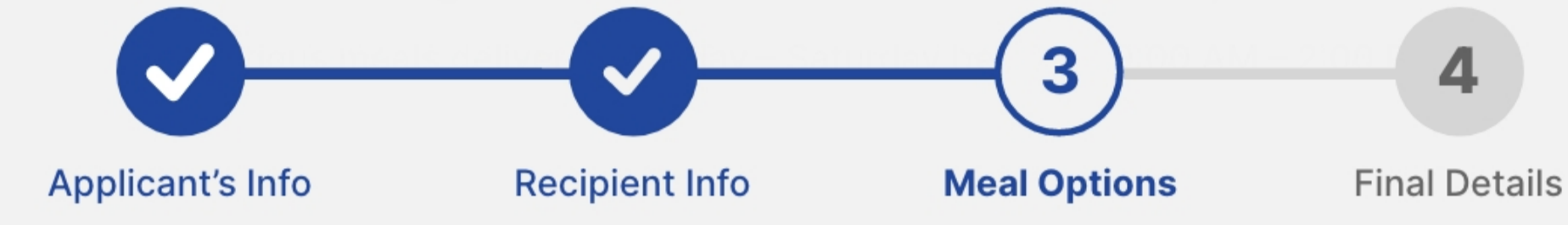
11

Step 3
Meal Plan - Caregiver Flow

1 **Minor adjustments**
Minor headline & wording adjustments tell the user that this particular part of the form focuses on the meal recipient.

Back

Meal Delivery Sign-Up

✓ Applicant's Info — ✓ Recipient Info — **3** Meal Options — **4** Final Details

1 **What meal option is needed?**   *Required fields*

Meal plan:*

[21 Full-Weekly Meals (All) ▾]

Breakfast   *Lunch*   *Dinner*

1 *Recipient will receive 3 meals for every day of the week.*

Dietary restrictions: *Check all that may apply*

☐ Vegetarian   ☐ Gluten-Free   ☐ Lactose-Free

☐ Renal   ☐ Diabetic-Friendly   ☐ Low-Sodium

☐ Other: [Please describe]

Go to step 3 >

Need help? Sign up by phone:
1-800-XXX-XXXX

Business hours:
Monday-Friday 8am-5pm
Saturday 8am-12pm

Step 4

Final Details - Caregiver Flow

1 **Reassure the finish line**
The final step brings upon the feeling of "almost there!"

2 **Question personalized**
Since the caregiver has given us the recipient's name in step 2, we can start creating a more personalized experienced. The developers could use the first name field entry to display the recipient's name in the question on this screen.

3 **Probability low**
The likeliness that someone other than a caregiver or relative of the recipient will have certified documentation of disability is low, so proof of disability documentation was made optional.

Logo   Link 4   Link 3   Link 2   Link 1

Back

Meal Delivery Sign-Up

✓ Applicant's Info — ✓ Recipient Info — ✓ Meal Options — **4** **Final Details**

1 **Final remaining questions**

2 **Is {recipients fname} disabled?***

3 ⦿ Yes   ○ No   ○ Prefer not to say or N/A

If possible, please provide proof of disability on their behalf:

Drop file(s) here to attach or

[Click here to upload ⬆]

Supported file types: .png, .jpg, .tif, .pdf, .doc

Acceptable forms of proof include:
- Statement from physician
- or Document of disability benefits
- or Records Rehabilitation Agency

OR please promptly mail a copy to:

Meals On Wheels
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Norwood, OH, Ohio 44123

Helpful notes to assist delivery driver (optional):

Gate or access code, if not home leave with neighbor, beware of dog, doorbell is broken, landmarks to identify home, etc.

Complete sign up ›

Need help? Sign up by phone:
1-800-XXX-XXXX

Business hours:
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Saturday 8am-12pm

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Link 4   Link 3   Link 2   Link 1

Tel: +1234567890   Email: info@emailaddresss.com   Address: 463 Round Table Drive, Norwood, OH, Ohio

Confirmation

Caregiver Flow

① Personalized Thank You

An example here shows how more personalization could make the overall experience seem more personalized and caring - something more governments (even small municipalities) could benefit from.

Link 4   Link 3   Link 2   Link 1

Thank you for registering
① {recipient name} for our program.

You'll receive a confirmation call from a Cleveland Meals-on-Wheels representative within 1-2 business days.

During this call, we'll confirm {recipients fname}'s start date, meals plans, delivery ① details and more.

Have questions or concerns in the meantime?
Call us at 1-800-XXX-XXXX

Business hours:
Monday-Friday 8am-5pm
Saturday 8am-12pm

Logo

Meals On Wheels
463 Round Table Drive,
Norwood, OH, Ohio 44123

Link 4   Link 3   Link 2   Link 1

Tel: +1234567890   Email: info@emailaddresss.com   Address: 463 Round Table Drive, Norwood, OH, Ohio

Bonus states

Additional design affordance/
states to consider

Field States

Field Label

| Input & Hint Text | | Activated |

Assistive or additional hint text

Field Label

| Input Text | | Hover |

Field Label

| Input Text | | Focused |

Field Label

| Input Text ⚠ | | Error |

Error message

Field Label

| Input Text | | Disabled |

Check Boxes

☐ Default (unselected)

☐ Hover (Mouse)

☐ Focused

☑ Selected

☐ Disabled

Radio Buttons

◉ Selected

◉ Focused

◉ Pressed

○ Deselected

○ Disabled

Dropdowns

| Expanded ⌄ |
| Hover |
| Pressed |
| Focused |

| Collaped ⌄ |

| Error ⌄ ⚠ |

Please select an option

Buttons

Primary

Button CTA › Default

Button CTA › Hover

Button CTA › Pressed

Button CTA Disabled

Secondary

Button CTA › Default

Button CTA › Hover

Button CTA › Pressed

Button CTA Disabled

Tertiary/Link

Example call-to-action copy

Example call-to-action copy

Day selectors

S M T W F Selected

S M T W F Deselected