

Week 4: Intro to formr

m EMSE 6035: Marketing Analytics for Design Decisions

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Reminders

- Proposals due Sunday, 9/26 by midnight
- No class next week team meetings instead

Week 4: Intro to formr

- 1. Surveys in R
- 2. Surveys in formr

BREAK

3. Conjoint survey components

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Start in RMarkdown

See demoSurvey.Rmd

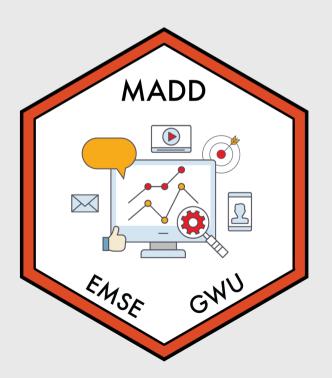
Some Guidelines

- Use —— to indicate new pages (this inserts a horizontal line)
- Be sure that any data / images are hosted somewhere on the web
- Consider each new page a **New R Session** (reload libraries, etc.)

Embedding images

I recommend just writing html code, like this

```
<img src="https://github.com/emse-madd-gwu/2021-
Fall/raw/master/images/madd_hex_sticker.png" width=300>
```



Centered image

I recommend just writing html code, like this

```
<center>
<img src="https://github.com/emse-madd-gwu/2021-
Fall/raw/master/images/madd_hex_sticker.png" width=300>
</center>
```

Check your urls carefully!

This is the link to the Github page with the class logo image:

https://github.com/emse-madd-gwu/2021-Fall/blob/master/images/madd_hex_sticker.png

This is the link to the actual image:

https://raw.githubusercontent.com/emse-madd-gwu/2021-Fall/master/images/madd_hex_sticker.png

- Open and edit the practiceSurvey.Rmd file.
- Pick a topic for your survey (a food, an animal, a sports team...whatever).
- Draft a survey about that topic. Include the following:
 - Page 1: A welcome message in large font ("Welcome to a survey about [topic]")
 and an image about the topic (find an image somewhere).
 - Page 2: Once simple multiple choice question about the topic (state the question and write the choice responses as bullets).
 - Page 3: Choose a data set from this page (pick a .csv file). Get the url to the .csv file you chose, read it in, and display only the first 6 rows of the data file (do not show any code only the output of your code).
 - Page 4: Show the last 6 rows of the same data file (again, only the output hide all code).

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formr principles

- Use RMarkdown / html to create survey elements
- Define surveys in Google Sheets
- Import Google Sheets into formr surveys
- Link surveys together in formr runs

Demo survey

formr row types (more here)

Туре	Description
note	Display content in label column
submit	Next page button
mc	Multiple choice question (single choice)
<pre>mc_multiple</pre>	Multiple choice question (multiple choices)
<pre>mc_button</pre>	Multiple choice question (large buttons)
select_one	Drop down menu (choose one)
text	Open text, single row
textarea	Open text, block

Two ways to define choice options

Add "choice" columns

Н	I	J	K
choice1	choice2	choice3	value
Yes!	Kind of	No :(

Use choices tab (when you have a lot of choices)

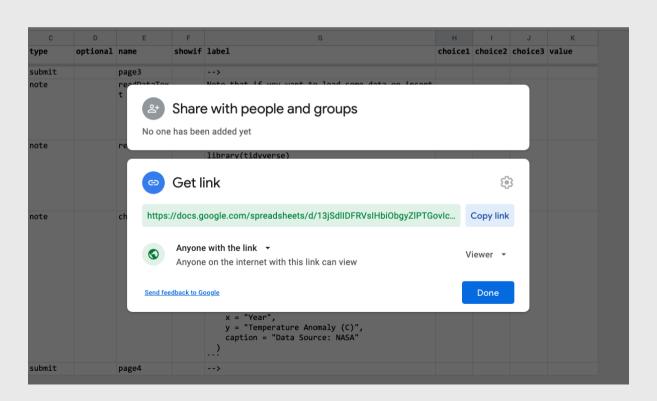
Example: "Year of birth" in demo survey

Control the way things look in class column (options here)

Importing survey into formr

formr.org --> Admin --> Surveys --> Create new survey

(Make sure your Google Sheet is visible!)



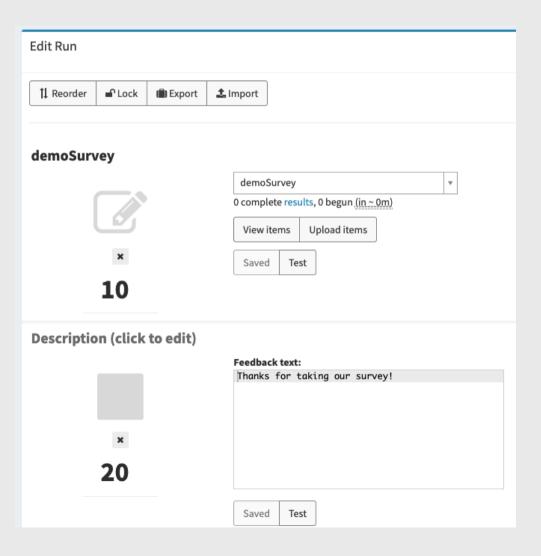
Make a run

formr.org --> Admin --> Runs --> Create new run

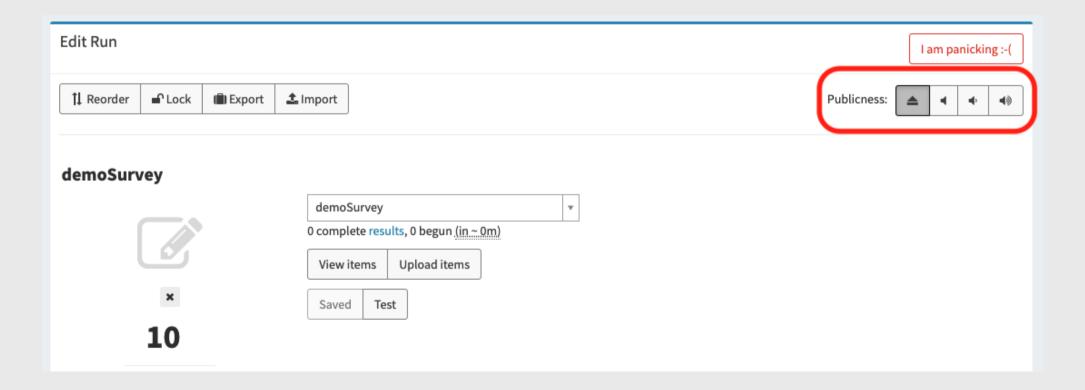
Insert survey with



Change order by adjusting numbers & clicking "Reorder"



Make it "live" with the volume buttons



Fine tune look & feel in "Settings"

Think Pair Share

- Using your team's Google account, create a new survey spreadsheet (you may wish to copy-paste from this one)
- Name your sheet "[netID]practice", replacing "[netID]" with your GW Net ID (e.g. "jphpractice")
- Insert the content in your practiceSurvey Rmd file into your Google Sheet.
- Using your team's formr account, import your Google Sheet as a survey in formr (use the same "[netID]practice" name for your survey).
- Create a run that includes your survey and a stop.
- Test it!

Break



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3 Parts

- Part 1: Intro
- Part 2: Conjoint questions
- Part 3: Other / demographic questions

3 Parts

- Part 1: Intro --> screen for target population
- Part 2: Conjoint questions --> screen for random answers
- Part 3: Other / demographic questions

Think of your survey as a conversation

• Include "transition" pages (e.g. Great job! Now we'll ask you about...)

Part 1: Intro

Start with a welcome page

Welcome!

Thank you for participating in this survey. With your responses, we are looking forward to understanding your perspective as a consumer. This research is part of an effort from the George Washington University.



Consent form

This survey is being conducted by students at the George W University. We will not be collecting any identifying data suc name or address. The whole survey will take approximately minutes to complete. Your participation is voluntary and you stop the survey at any time.	h as your 10 to 15
If you would like to participate, please answer the following	questions:
I am age 18 or older	
Yes	0
No	0
I have read and understand the above information	
Yes	0
No	0

Eligibility questions: who is your target population?

Filter out respondents here

No	0
Yes, and I plan to buy one in the next few months	0
Yes, and I plan to buy one in within the next year	0

Part 2: Conjoint questions

Education information

In this survey, we are going to ask you about your preferences for the following vehicle attributes:

- Price
- Fuel Economy
- Acceleration Time
- Powertrain

But before we ask you any question, let's learn a little bit more about each of these attributes.

Education information

Price is the final price you will pay for the vehicle you are buying (including all taxes and fees)



>>

POWERTRAIN

The type of engine in the vehicle

Gasoline



Gasoline engine vehicle.

Electric



Electric motor vehicle.

Must be plugged into an electrical outlet to be refueled. (6 – 10 hours to fully charge).

34 / 45

Can be helpful to provide relative comparisons

Weight:

- 1/2 lbs (similar to 1 cup water)
- 8 lbs (similar to 1 gallon of milk)

Conjoint intro

In the next few pages, we will show you options of different vehicles and we'll ask you to select which you would choose.

Let's try a practice question - on the next page, click the round button under the option you most prefer.

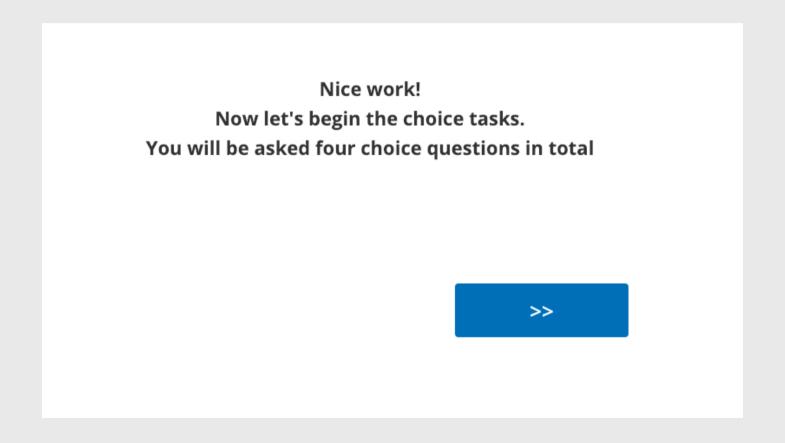


Practice conjoint (also attention check)

May also filter out respondents here

	Choice 1	Choice 2	Choice 3
Price	20	15	25
Fuel Economy	20	30	15
Acceleration Time	7	6	8
Powertrain			
	0	0	0

Transition to actual conjoint questions



Conjoint questions

May also filter out respondents at the end

(e.g. chose all same answers)

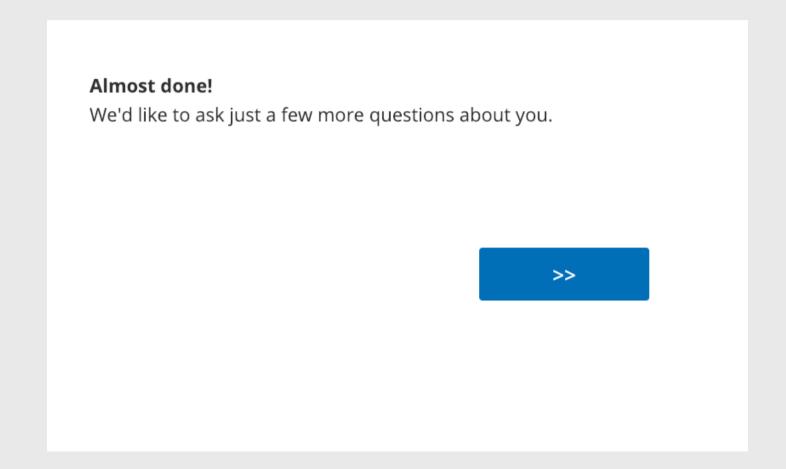
(1 of 4) Choose your preferred option from the choices below:

	Choice 1	Choice 2	Choice 3	None
Price	25	25	15	
Fuel Economy	30	25	25	
Acceleration Time	8	7	7	None of these
Powertrain				options
	0	0	0	0



Part 3: Other / demographic questions

Transition



Critical respondent information

How many ver	nicles does your	nousenoid cu	irrently own	_
			>>	

Demographic / other questions

What is yo	ur age?
M/bat is vo	ur total appual bousehold income?
what is yo	ur total annual household income?
	*
What is yo	ur gender?
	*
Which of t	he following best describes your highest achieved education
level?	

Finale

We thank you for your time spent taking this survey. Your response has been recorded.

Blog post on conjoint in formr

Project survey plan

Sign up for meeting slot next week (link in #project channel)