



Amanda Lin, Chao Qin,
Sharon Wang, Ted Zhong

Quazard

Final Presentation

Background

Qualtrics is a survey tool used by many social science researchers. It is similar to Google Forms but with more functionalities.

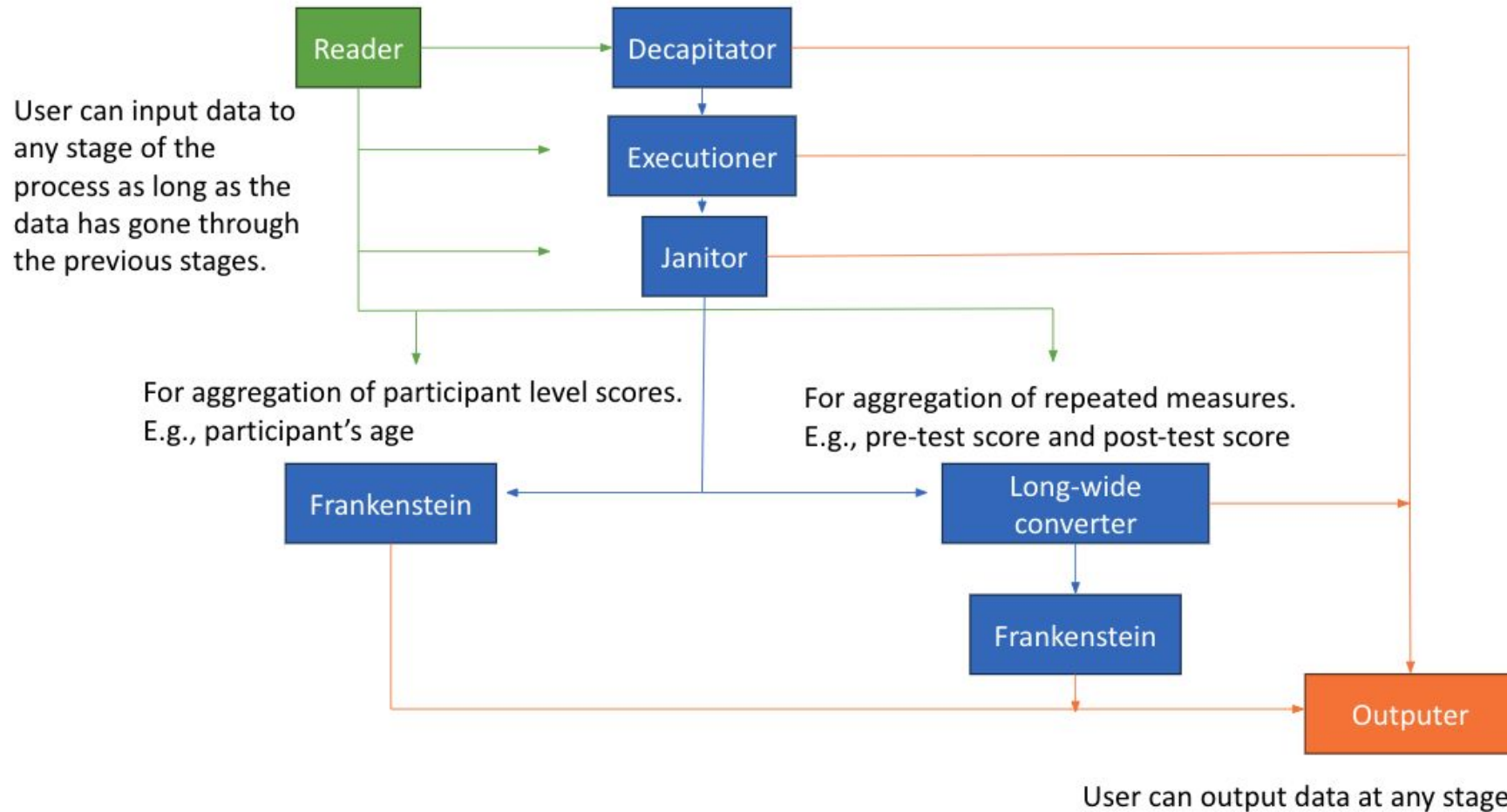
However, the exported data file from Qualtrics can be messy and requires cleaning and reorganizing by the user before data analysis can happen.

This project aimed to create a tool to quickly and easily clean, organize, and reorganize data collected using Qualtrics.

Components

1. Reader: converts a csv file into an internal dataframe
 2. Decapitator: removes duplicate header rows and re-infer the value type of columns
 3. Executioner: removes unwanted rows based on parameter input
 4. Janitor: removes unused columns based on input
 5. Long-wide Converter: reconfigure wide format data (each repeated measure/trial has its own column) to long format (each repeated measure/trial has its own row)
 6. Outputer: converts a dataframe into a csv file
 7. GUI: allows the user to interact with each component. Using Tkinter.
-

General Flow Chart



Demo

vt3 raw data - Excel

Zhiwei Zhong

File Home Insert Page Layout Formulas Data Review View Help Tell me what you want to do

Clipboard Font Alignment Number Styles Cells Editing Add-ins

BACKUP THIS DOCUMENT Access this file anywhere with OneDrive included in your subscription. Schedule Backup Later

A1 StartDate

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
1	StartDate	EndDate	Status	IPAddress	Progress	Duration	Finished	Recorded	Response	Location	Location	Distributio	UserLangu	Q_Recapt	Q3.14_1	Q3.15_1	Q3.21_1	Q3.22_1	Q3.28_1	Q3.34	Q3.36	Q3.37	Q3.38	Q3.39
2	StartDate	EndDate	Status	IPAddress	Progress	Duration	Finished	Recorded	Response	Location	Location	Distributio	UserLangu	Q_Recapt	Q3.14_1	Q3.15_1	Q3.21_1	Q3.22_1	Q3.28_1	Q3.34	Q3.36	Q3.37	Q3.38	Q3.39
3	ImportId	ImportId	ImportId	ImportId	ImportId	ImportId	ImportId	ImportId	ImportId	ImportId	ImportId	ImportId	ImportId	ImportId	ImportId	ImportId	ImportId	ImportId	ImportId	ImportId	ImportId	ImportId	ImportId	ImportId
4	Survey Preview				100	2433	TRUE	R_DTCOp	47.6859	-122.299	preview	EN								Do not				
5	Survey Preview				100	2295	TRUE	R_10P07g	47.6859	-122.299	preview	EN								Do not		Your location is not under warning		
6	IP Address 207.157.81				100	2802	TRUE	R_2E5bpK	33.1275	-86.8588	anonymou	EN	1			32	22		89	Do not			2	
7	IP Address 172.58.3.2				100	3113	TRUE	R_2FDH8z	33.7722	-84.3928	anonymou	EN	1	0				0	56	Do not		Your location is under warning		
8	IP Address 173.25.111				100	4103	TRUE	R_3mmEs	36.6089	-88.3031	anonymou	EN	0.9	45				66	76	Do not			2	
9	IP Address 76.18.250				100	3121	TRUE	R_3HMT0	31.2217	-81.5463	anonymou	EN	1	5				77	91	Do not			1	
10	IP Address 108.250.1				100	5495	TRUE	R_3P2FzW	37.3268	-87.4958	anonymou	EN	1			41	37		82	Do not		Your location is under warning		
11	IP Address 74.139.72				100	1766	TRUE	R_pbHBTI	37.1504	-84.5228	anonymou	EN	1			19	32		73	Do not		Your location is not under warning		
12	IP Address 64.251.96				100	2735	TRUE	R_AaLtk6	30.0794	-90.4919	anonymou	EN	1	8				77	93	Do not		Your location is not under warning		
13	IP Address 74.136.36				100	4484	TRUE	R_t0zOjyL	38.0052	-84.423	anonymou	EN	1			84	8		73	Do not			10	
14	IP Address 173.218.1				100	4912	TRUE	R_XQXc22	35.3071	-93.0676	anonymou	EN	1	5				48	100	Do not				0%
15	IP Address 24.99.186				100	2464	TRUE	R_3noY3S	34.0414	-84.5053	anonymou	EN	1	0				0	100	Do not			1	
16	IP Address 76.138.30				100	2570	TRUE	R_31LU0q	35.1128	-89.9085	anonymou	EN	1	0				1	96	Do not		Your location is not under warning		
17	IP Address 108.241.1				100	2752	TRUE	R_3jSW7o	34.1825	-84.8247	anonymou	EN	1	38				38	91	Do not			2	
18	IP Address 104.14.20				100	3418	TRUE	R_1dLCfs	30.443	-90.4386	anonymou	EN	0.9			17	1		74	Do not				0%
19	IP Address 152.97.21				100	3258	TRUE	R_1qecu4	35.7297	-85.4248	anonymou	EN	1	0				22	100	Do not			1	
20	IP Address 96.19.235				100	3160	TRUE	R_YXn6Eg	30.4105	-88.8963	anonymou	EN	1	0				4	21	Do not				10
21	IP Address 64.253.17				100	3226	TRUE	R_3p5YsK	32.8278	-83.6512	anonymou	EN	1			55	35		87	Do not		Your location is not under warning		
22	IP Address 99.29.151				100	2771	TRUE	R_30qs09j	34.9016	-87.5082	anonymou	EN	1			85	16		84	Do not		Your location is under warning		
23	IP Address 104.176.8				100	4128	TRUE	R_2rGH2K	30.4431	-91.1287	anonymou	EN	0.9			0	0		0	Do not		Your location is not under warning		
24	IP Address 173.216.1				100	2093	TRUE	R_30biPDj	34.9464	-92.0322	anonymou	EN	0.9			4	0		97	Do not			1	
25	IP Address 75.88.200				100	3577	TRUE	R_1C7P9zi	33.9978	-83.7124	anonymou	EN	0.9	2				16	82	Do not				0%
26	IP Address 72.210.65				100	2763	TRUE	R_3NP4Sv	32.8936	-83.743	anonymou	EN	1	42				66	55	Do not		Your location is under warning		
27	IP Address 66.38.103				100	3143	TRUE	R_5bgBI3x	36.7614	-86.1929	anonymou	EN	1	5				4	88	Do not				0%
28	IP Address 71.226.13				100	3349	TRUE	R_eycQvq	33.3601	-82.0084	anonymou	EN	0.8	73				81	76	Do not				50
29	IP Address 172.58.56				100	5344	TRUE	R_cOQJJ9	38.5774	-90.6709	anonymou	EN	0.9	13				65	65	Shelter in				10
30	IP Address 76.129.22				100	3020	TRUE	R_3i0d45k	35.9243	-83.9965	anonymou	EN	0.9			78	14		81	Do not			2	
31	IP Address 23.28.135				100	3957	TRUE	R_2rHJE9f	32.5109	-84.9794	anonymou	EN	1	45				18	24	Do not				0%

vt3 raw data

Ready Accessibility: Unavailable Display Settings 100%

Collaboration Strategies

- Each team member was responsible for a portion of the components
 - Code reviewing before merging code into main branch
 - Shared documents
 - Google Drive
 - Github
 - Discord (for asynchronous communication)
 - Tracking system for the progress of each component and project management
-

In the process...

Challenges

- Creating GUI
- Stylistic differences
- Combining components

Lessons Learned

- Importance of shared naming system/style
 - Debugging ability
 - Thorough documentation
-

Future Directions

- Ability for the wider community to suggest/request new components
- Having the project shipped as a self-contained executable so the users do not need to manually set up the environment.