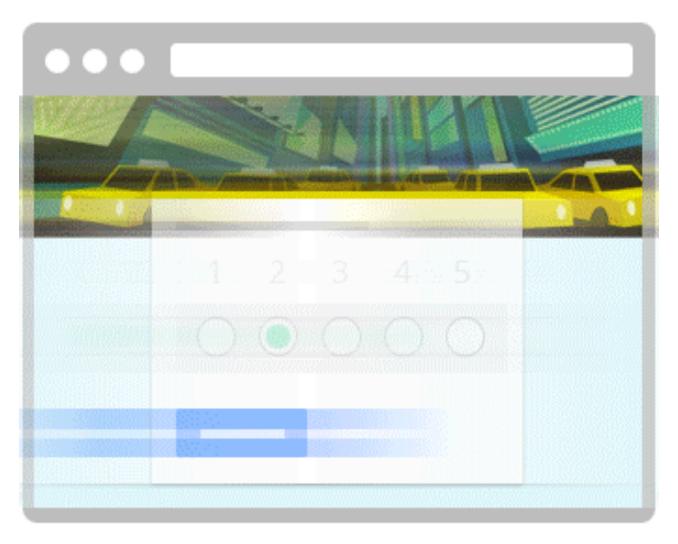
## surveydown:

# An Open-Source, Markdown-Based Platform for Interactive and Reproducible Surveys

Pingfan Hu, Bogdan Bunea, John Paul Helveston



# Typical experience making a survey

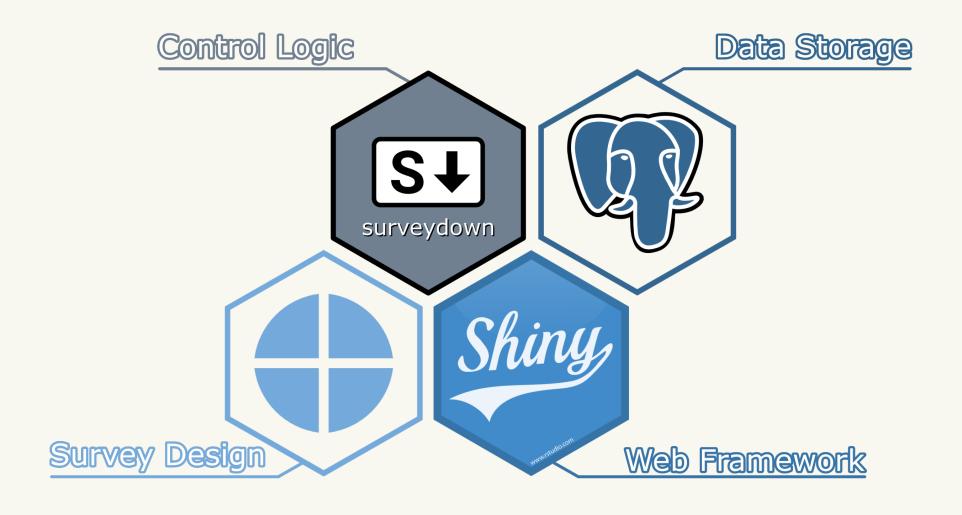


# Typical experience making a survey



- **X** Reproducible
- X Data Control
- Free to Use
- Open Source
- Lasy Collaboration
- Feature Packed

## Introducing surveydown



## Components

## survey.qmd

A **Quarto doc** defining the main survey content (pages, text, images, questions, etc).

### app.R

An **R** script defining the survey Shiny app. It sets up the database and server, and launches the survey.

```
1 ---
 2 format: html
 3 echo: false
 4 warning: false
 6
 7 ```{r}
 8 library(surveydown)
10
11 ::: {#welcome .sd-page}
12
13 # Welcome to our survey!
14
15 ```{r}
16 sd_question(
17 type = "mc",
18 id = "penguins",
19 label = "What's your favorite penguin?",
20 option = c(
21 "Adélie" = "adelie",
22 "Chinstrap" = "chinstrap",
"Gentoo" = "gentoo"
24 )
25 )
26
27 sd_next()
28 ...
29
30 :::
31
32 ::: {#end .sd-page}
33
34 This is the last page of the survey.
35
36 ```{r}
37 sd_close()
38 ```
39
40 :::
```

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YAML Header

Load Package

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38 ...
39
40 :::
```

```
Define pages using "fences":
```

```
::: {#id .sd-page}
:::
```

Page 1 (Welcome)

Page 2 (End)

```
1 ---
 2 format: html
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#### Contents of Page 1

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```

Question Definition

```
1 # Load Package
 2 library(surveydown)
3
 4 # Database Credentials
 5 sd_db_config()
 6
 7 # Connect to Database
8 db <- sd_db_connect()</pre>
10 # Server Setup
11 server <- function(input, output, session) {</pre>
12
    # Skip logic
13
14
     sd_skip_if(...)
15
16
     # Conditional display
17
     sd_show_if(...)
18
19
    # Server settings
20
     sd_server(
21
       db = db,
22
23
24 }
25
26 # Launch Survey
27 shiny::shinyApp(ui = sd_ui(), server = server)
```

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### Load Package

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```

Database Setup

We recommend using **Supabase** or any **PostgreSQL** database for the database setup.

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Server Setup

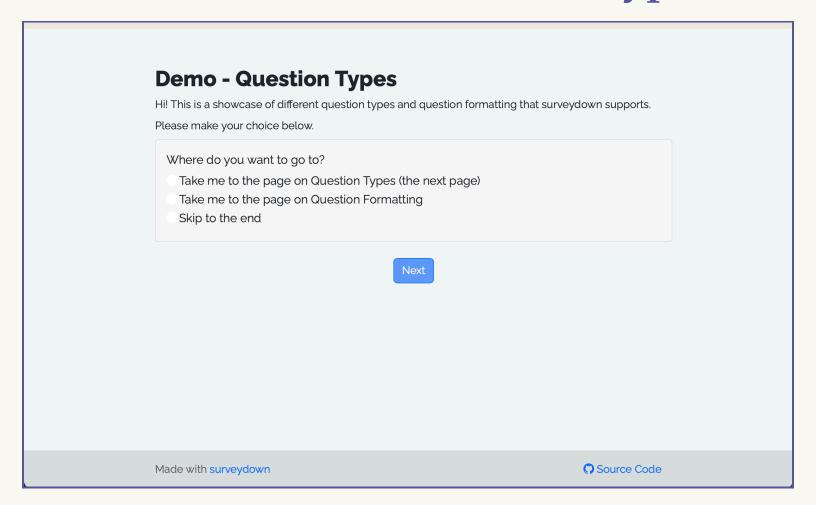
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Launch Survey

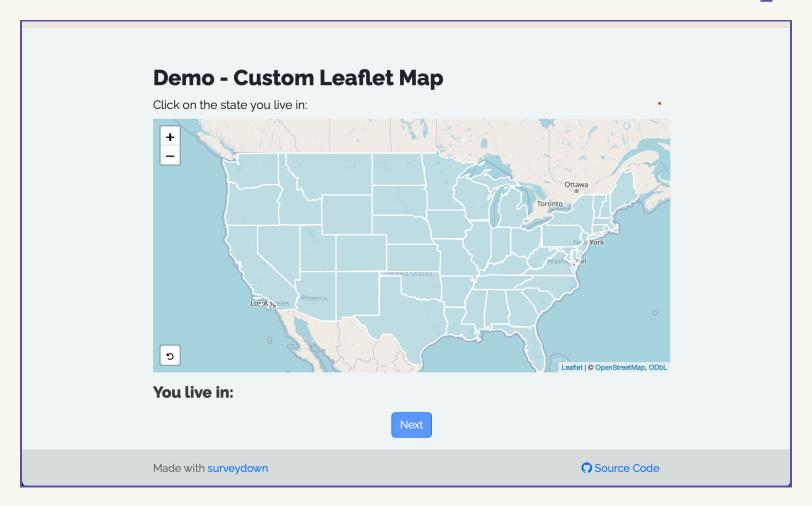


# Templates and demos are provided on surveydown.org for an easy start.

## **Demo: Built-in Question Types**



## Demo: Custom Question (leaflet Map)

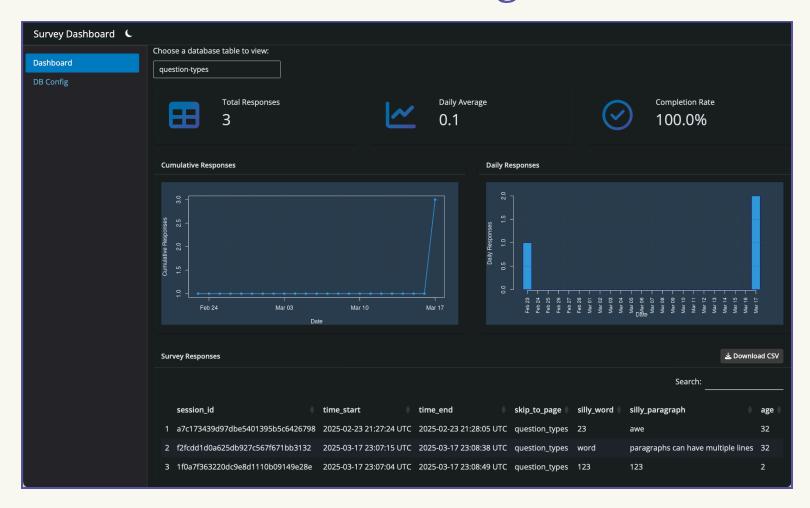


# **GUI: Data Management**

Survey Dashboard		
Dashboard	Current Database Settings	
DB Config	Host:	
	<b>Port:</b> 6543	
	Database: postgres	
	User:	
	GSS Mode: disable	
	Default Table: question-types	
	Update Database Connection	
	Host:	
	aws-0-us-east-1.pooler.supabase.com	
	Port:	
	6543	
	Database Name:	
	postgres	
	User:	
	postgres.hwumdvjnymbrgeemvrhq	

Credentials

## **GUI: Data Management**



Survey Data

## **Future Work**

GUI for defining surveys

More question types

...and more!

You can contribute!

Check out surveydown.org for more!