



Getting started with surveydown

Meet your instructor!



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- 2010 BS in Engineering Science & Mechanics at Virginia Tech
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Meet the dev team!



John Paul Helveston



Pingfan Hu



Bogdan Bunea

Before we start...

1. Be sure to **install everything**
2. Download the **examples**

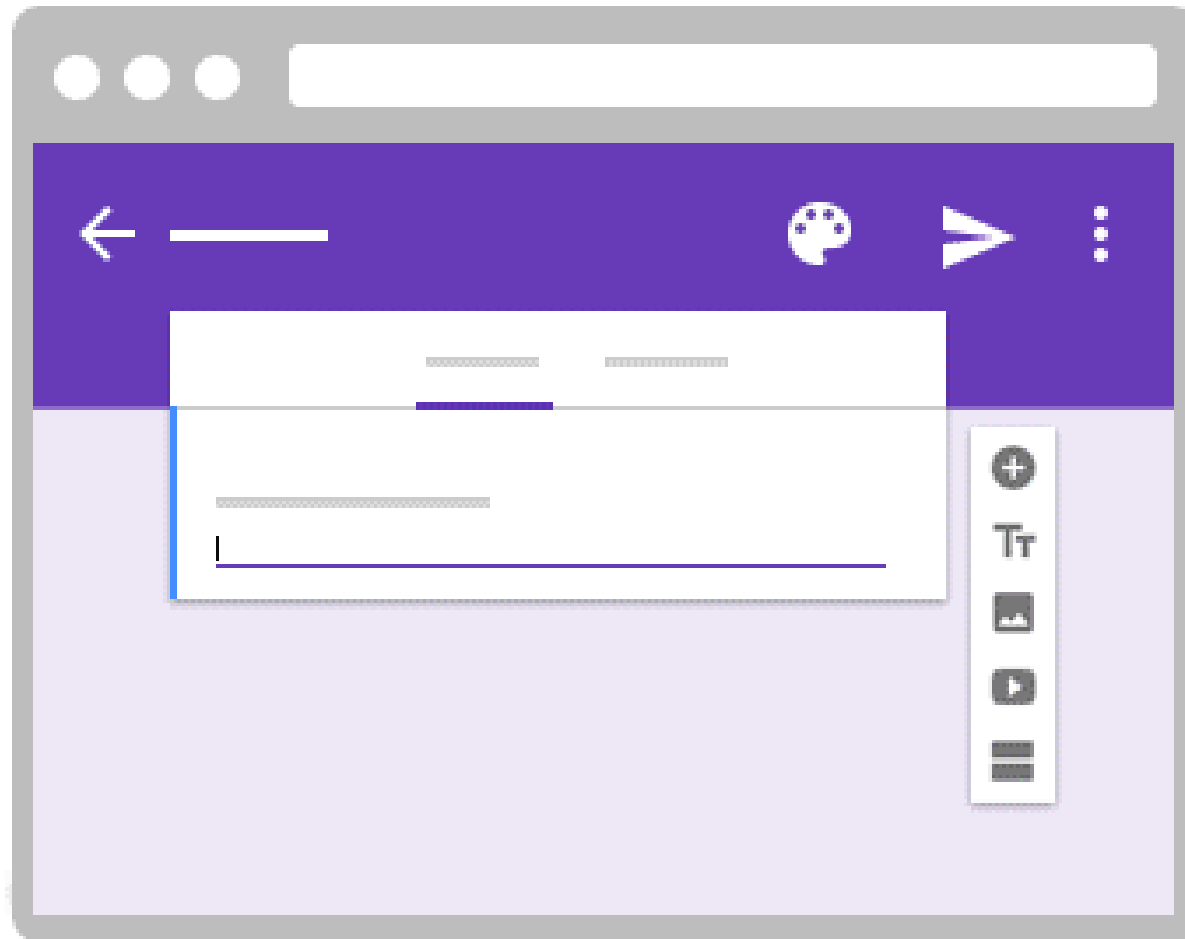
Getting started with surveydown

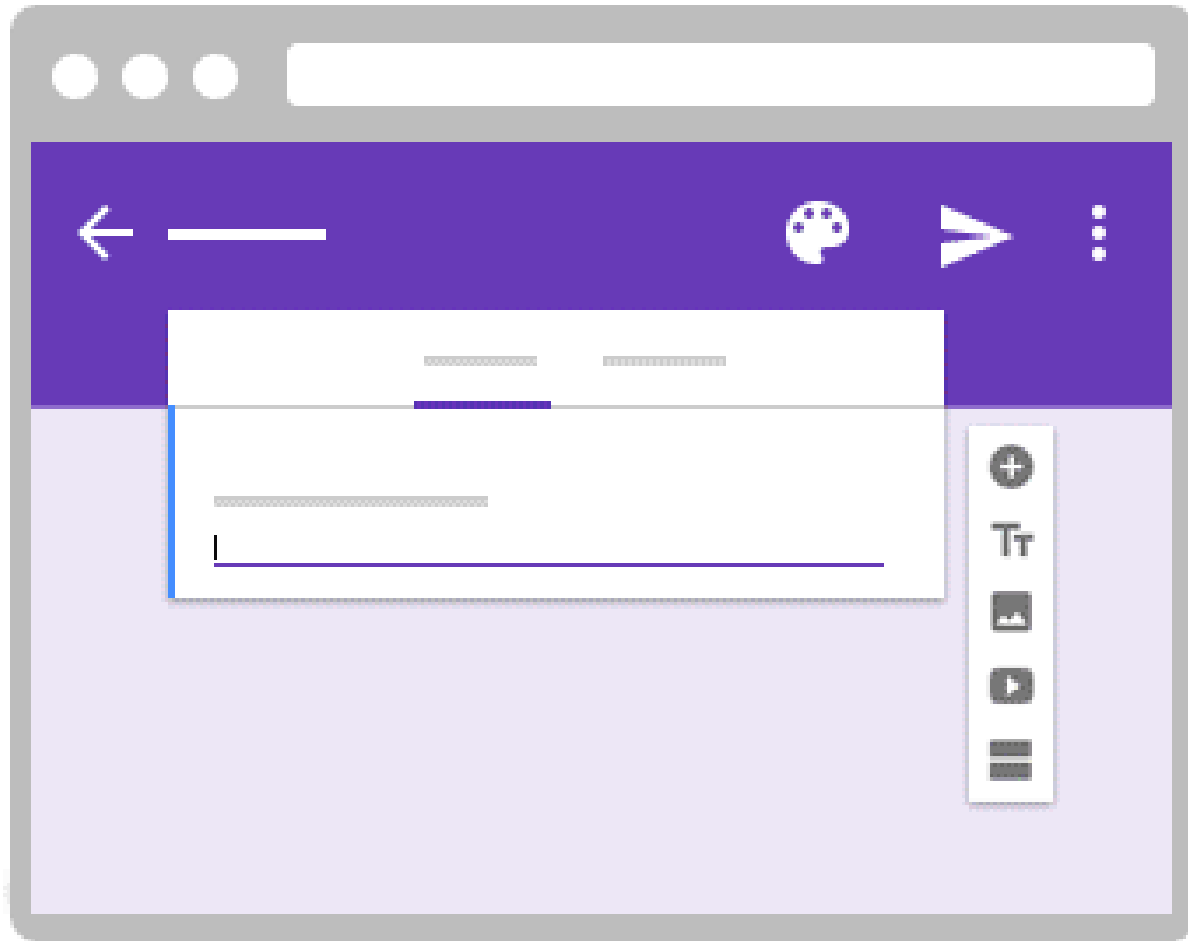
1. What is surveydown?
2. surveydown basics
3. Building your first surveydown survey!
4. Adding survey content

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Typical experience making a survey





✗ Reproducible

✗ Data Control

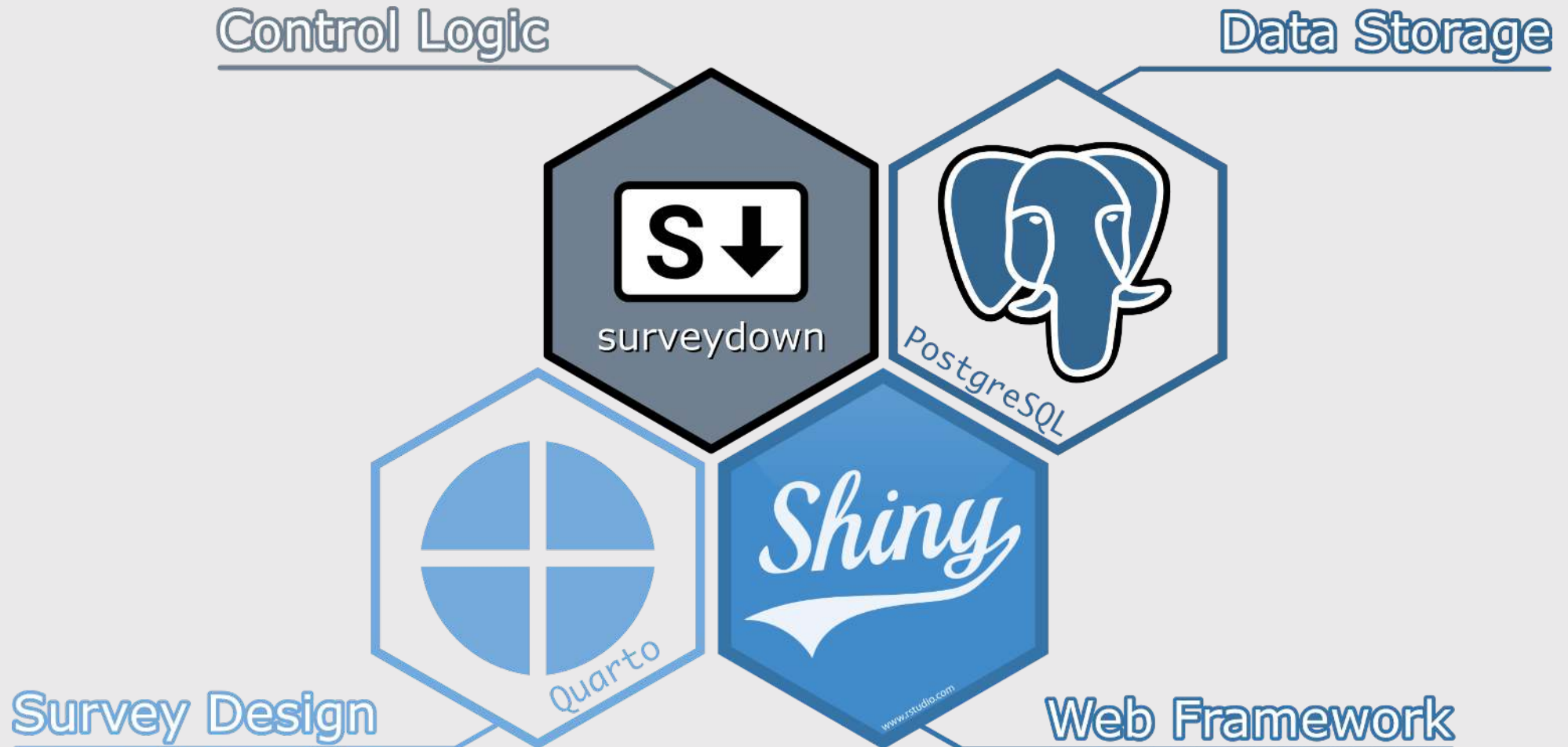
⚠ Free to Use

Open Source

Easy Collaboration

⚠ Feature Packed

Introducing surveydown



Getting started with surveydown

1. What is surveydown?
2. **surveydown basics**
3. Building your first surveydown survey!
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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.

survey.qmd

```
---
format: html
echo: false
warning: false
---

```{r}
library(surveydown)

::: {.sd_page id=welcome}

Welcome to our survey!

```{r}
sd_question(
  type = "mc",
  id = "penguins",
  label = "What's your favorite penguin?",
  option = c(
    "Adélie" = "adelie",
    "Chinstrap" = "chinstrap",
    "Gentoo" = "gentoo"
  )
)

sd_next()

:::

::: {.sd_page id=end}

This is the last page of the survey.

```{r}
sd_close()

:::
```

## YAML Header

Load `surveydown` package

```

format: html
echo: false
warning: false

```{r}
library(surveydown)

::: {.sd_page id=welcome}

# Welcome to our survey!

```{r}
sd_question(
 type = "mc",
 id = "penguins",
 label = "What's your favorite penguin?",
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 "Adélie" = "adelie",
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 "Gentoo" = "gentoo"
)
)

sd_next()

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This is the last page of the survey.

```{r}
sd_close()

:::
```

```

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format: html
echo: false
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  )
)

sd_next()

:::

::: {.sd_page id=end}

This is the last page of the survey.

```{r}
sd_close()

:::

```

## Define pages using "fences"

```
::: {.sd_page id=page_id}
```

Page content

```
:::
```

```

format: html
echo: false
warning: false

```{r}
library(surveydown)

::: {.sd_page id=welcome}

# Welcome to our survey!

```{r}
sd_question(
 type = "mc",
 id = "penguins",
 label = "What's your favorite penguin?",
 option = c(
 "Adélie" = "adelie",
 "Chinstrap" = "chinstrap",
 "Gentoo" = "gentoo"
)
)

sd_next()

:::

::: {.sd_page id=end}

This is the last page of the survey.

```{r}
sd_close()

:::

```

Use markdown for page content

Use `sd_question()` in code chunk for survey questions

Use `sd_next()` for next button

```
library(surveydown)

# Connects to database
db <- sd_db_connect()

# Main UI
ui <- sd_ui()

server <- function(input, output, session) {

  # Main server
  sd_server(db)

}

shiny::shinyApp(
  ui = ui,
  server = server
)
```

app.R


```
library(surveydown)
```

```
# Connects to database
```

```
db <- sd_db_connect()
```

```
# Main UI
```

```
ui <- sd_ui()
```

```
server <- function(input, output, session) {
```

```
  # Main server
```

```
  sd_server(db)
```

```
}
```

```
shiny::shinyApp(
```

```
  ui = ui,
```

```
  server = server
```

```
)
```

Load package

Connect to database

Make standard UI

Run surveydown server

Getting started with surveydown

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05:00

Your turn - start with a template

Step 1: In R console, run:

```
surveydown::sd_create_survey()
```

Optional: Specify a **path** and / or a **template**:

```
surveydown::sd_create_survey(  
  template = "question_types",  
  path      = "path/to/folder"  
)
```

Step 2: In your IDE, open the **app.R** file, click "Run App", or in R console run:

```
shiny::runApp('app.R')
```

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YAML Header

The YAML header is at the top of the `.qmd` file:

```
---  
format: html  
echo: false  
warning: false  
---
```

Change the survey theme

Pick a different [bootswatch theme](#) with the [theme](#) key:

```
---  
format: html  
echo: false  
warning: false  
theme: united  
---
```

Make a custom theme with a [custom.scss](#) file

```
---  
format: html  
echo: false  
warning: false  
theme: [united, custom.scss]  
---
```

Progress bar

You can modify the survey progress bar with the `barcolor` and `barposition` keys:

Change to any color with `barcolor`:

```
---  
format: html  
echo: false  
warning: false  
barcolor: #768692  
---
```

Change position: `top`, `bottom`, or `none`

```
---  
format: html  
echo: false  
warning: false  
barposition: bottom  
---
```

Inserting pages

Insert new pages with `:::` symbols, like this

```
::: {.sd_page id=page_id}  
Page content here  
:::
```

Insert next buttons with the `sd_next()` function, like this (blank goes to next page):

```
```\{r}  
sd_next('next_page_id')
\\`
```



# Inserting questions

Insert questions using the `sd_question()` function, like this:

## Code

```
sd_question(
 type = 'mc',
 id = 'fruit',
 label = "1. Do you like fruit?",
 option = c(
 'Yes!' = 'yes',
 'Kind of' = 'kind_of',
 'No :(' = 'no'
)
)
```

## Output

1. Do you like fruit?

- ☐ Yes!
  - ☐ Kind of
  - ☐ No :(
- \*

Format is "`Label = value`"

# surveydown supports lots of question types

Some common types you may want to use:

Type	Description
<code>mc</code>	Multiple choice question (single choice)
<code>mc_multiple</code>	Multiple choice question (multiple choices)
<code>mc_buttons</code>	Multiple choice question (large buttons)
<code>select</code>	Drop down menu (choose one)
<code>text</code>	Open text, single row
<code>textarea</code>	Open text, block

# Embed images with html

I recommend just writing html code, like this

```
<center>

</center>
```



# Embed images with markdown

```
{fig-align="center" width="250"}
```



Try out the surveydown **studio app**

```
sdstudio::launch()
```

# Your turn

10:00

- Open and edit the **survey.qmd** file that you previously made.
- 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).
  - Pages 2 to N: Add different questions about the topic using several different question types.
- Try out different themes to change the look and feel.