Getting started with surveydown

Meet your instructor!

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- 2016-2018 Postdoc at Institute for Sustainable Energy, Boston University
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Meet the dev team!

John Paul Helveston

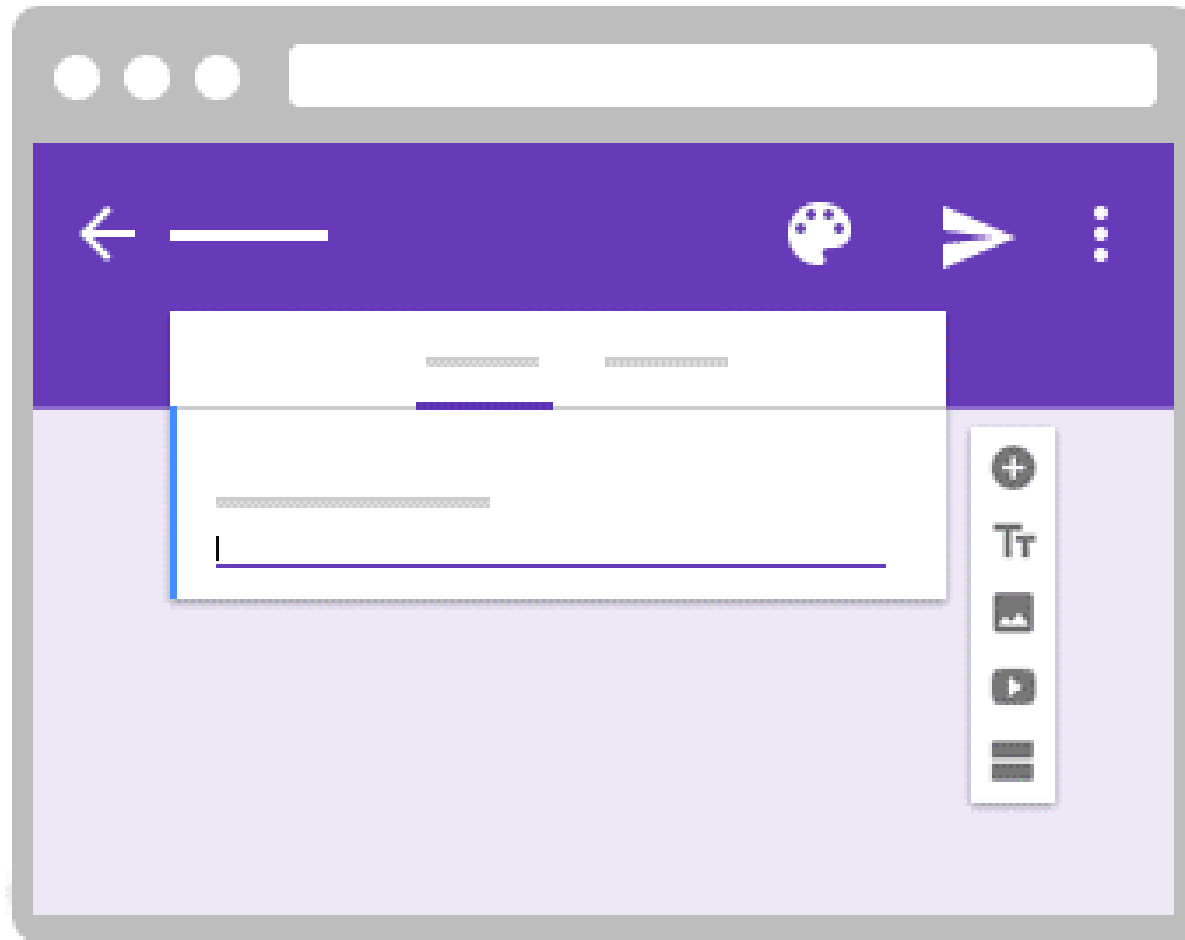**Pingfan Hu**

Bogdan Bunea
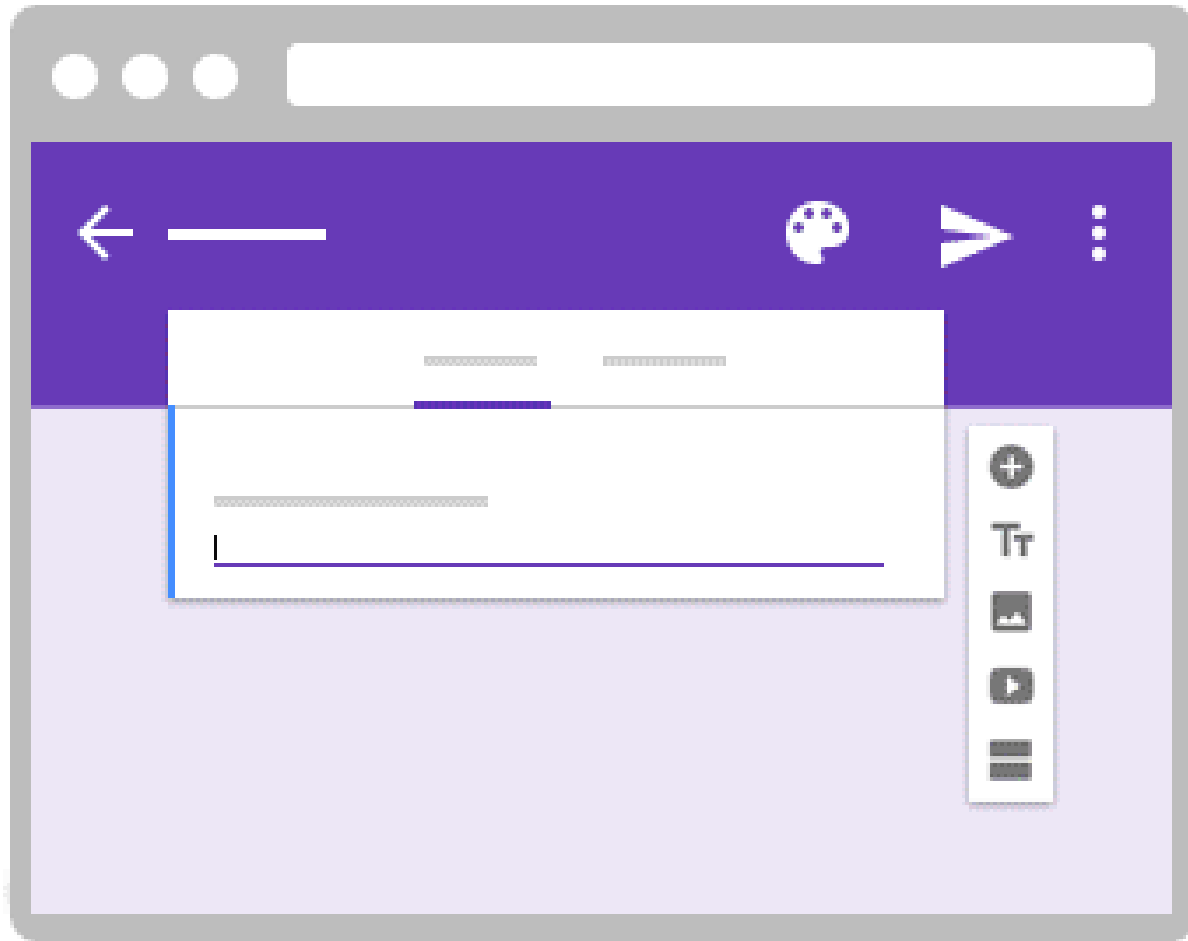
Getting started with surveydown

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
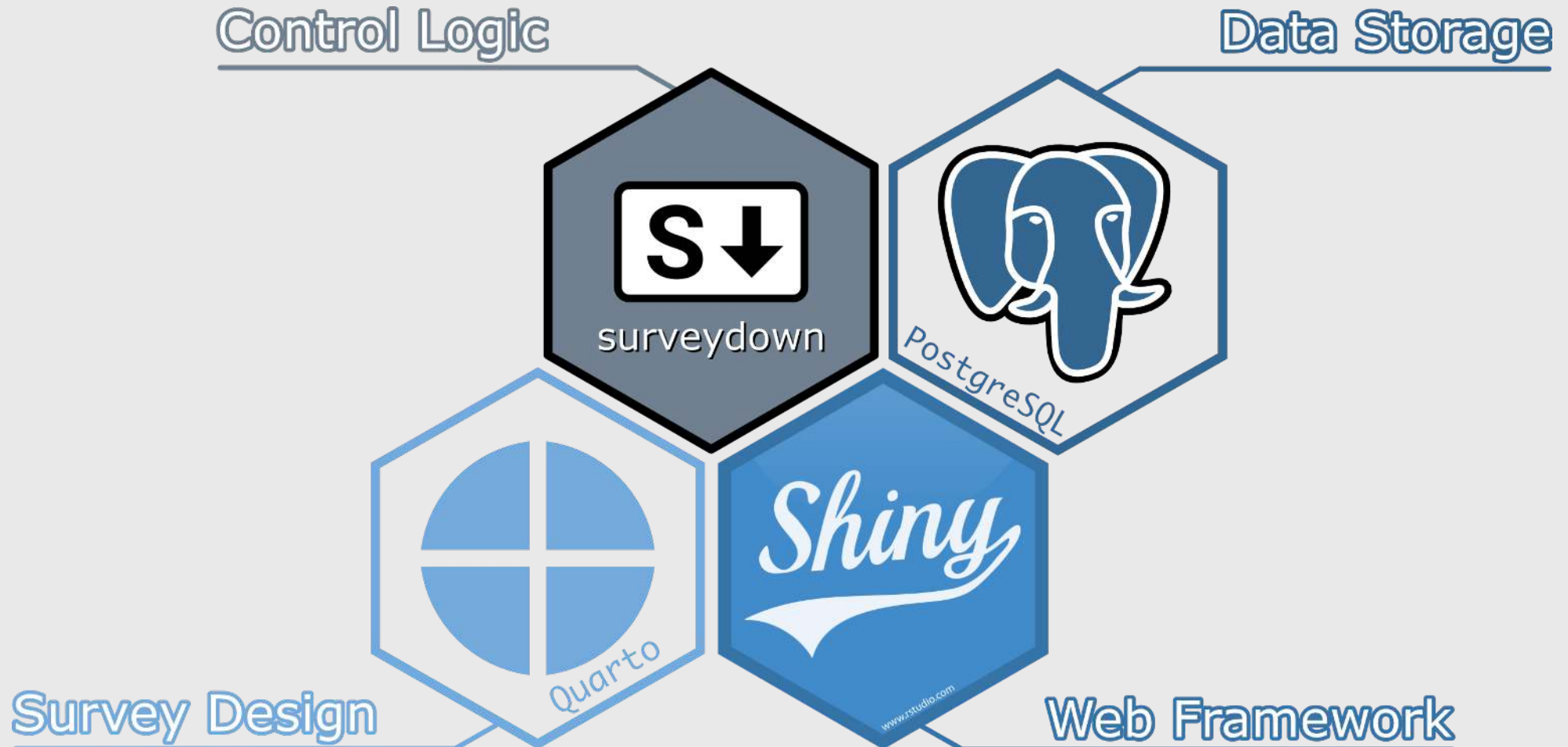
❌ Reproducible

❌ Data Control

⚠️ Free to Use

Open Source

Easy Collaboration

⚠️ Feature Packed

Introducing surveydown

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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()
```

:::
```

```
---
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?",
  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()
```

:::
```

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

```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
)
```

app.R

```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

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

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
`mc`	Multiple choice question (single choice)
`mc_multiple`	Multiple choice question (multiple choices)
`mc_buttons`	Multiple choice question (large buttons)
`select`	Drop down menu (choose one)
`text`	Open text, single row
`textarea`	Open text, block

Embedding images

I recommend just writing html code, like this

```
<img src="https://surveydown.org/images/logo.png" width=250>
```

Centered image

I recommend just writing html code, like this

```
<center>
<img src="https://surveydown.org/images/logo.png" width=250>
</center>
```

Try out the surveydown studio app

```
sdApps::sd_studio()
```

Your turn

- 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.