

Starting

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on the right foot

Mine Çetinkaya-Rundel

- aminebocek y
- mine-cetinkaya-rundel 🎧
 - mine@rstudio.com 🔽



Create, teach, and give / receive feedback on first three minutes of a Shiny workshop.







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Which of the following four descriptions gives you a better sense of the final product?





Pineapple and Coconut Sandwich Cake





























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Which of the following four descriptions would give your learners (who are new to Shiny) a **better sense** of the final product?



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- applications with R.
- powerful applications with minimal effort.
- of reactive programming.



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What is Shiny?

shiny is an R package that makes it incredibly easy to build interactive web

In a Shiny app, automatic "reactive" binding between inputs and outputs and extensive prebuilt widgets make it possible to build beautiful, responsive, and

Today will will learn how to build Shiny apps, and along the way learn the basics





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learners?



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Which of the following two examples is more likely to be interesting for a wide range of





Uppercaser

Enter text to be converted to uppercase in the box below

Enter text here



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Uppercaser

Enter text to be converted to uppercase in the box below

hello world

HELLO WORLD





Movie browser

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But let's focus on the task at hand... The following is all we're asking students to do:

Your turn

The variable selected by default for the Y-axis of the plot is Audience Score. Update the app to make the default Y variable to be IMDB Score.



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With great apps, comes a great amount of code...





```
• • •
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```
# Select variable for y-axis
selectInput(inputId = "y",
            label = "Y-axis:",
            choices = c("IMDB rating" = "imdb_rating",
                        "IMDB number of votes" = "imdb_num_votes",
                        "Critics Score" = "critics_score",
                        "Audience Score" = "audience_score",
                        "Runtime" = "runtime"),
            selected = "audience_score"),
```



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Movie browser

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Show data table



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more?



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Which of the following two visualizations is more likely to motivate learners to want to learn













Histogram of waiting times





Movie browser

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Non-trivial examples can be motivating, but need to avoid ****!

How to draw an owl

1. Draw some circles

more on this later today...

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2. Draw the rest of the fucking owl

Suppose you start with an app like this...

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and ask students to add functionality take a random sample (of size input by the user) and plot it

What is wrong unideal about this solution?

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Students will encounter lots of new challenges along the way let that happen, and then provide a solution

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A better approach uses actionButton() and eventReactive()

Movie browser

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Take random sample	P	
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now there's a good motivation for introducing these not-so-simple concepts

hide the veggies

Impromptu workshop : Get in groups of three and run the first 3 minutes of a workshop for an audience of Shiny novices.

- You will first have 3 minutes to prepare your presentation. Keep it simple, and focus on how to start.
- At the end of each mini-presentation, spend 2 minutes giving feedback at least one strength and at least one area of improvement for the workshop beginning.

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Discussion

What worked, what didn't? What was easy to accomplish, what wasn't so much?

Use principles introduced in the workshop (yesterday + today) to build a 5-minute workshop snippet, including slides and/or other relevant teaching materials. Deliver it, and get feedback.

