

Shiny Application and Reproducible Pitch

12 September 2022

Overview

- ▶ This pitch and shiny application was built for the “Developing Data Products” assignment.
- ▶ The developed shiny app for this assignment is available in this presentation and at: <https://bswift.shinyapps.io/shinyapp/>
- ▶ The source codes of ui.R and server.R and also the presentation are available on the GitHub repo: <https://github.com/kiprotich01/Shiny-Application-and-Reproducible-Pitch.git>

Parabola

Formula

$$y = \text{'Stretch or compress'} * (\text{'X intercept'} - x)^2 + \text{'Y intercept'}$$

Stretch or compress

- ▶ Stretch (> 1.0) or compress (< 1.0) parabola
- ▶ Value between 0.2 and 1.8

X intercept

- ▶ Vertex position on the x axis
- ▶ Value between -10 and 10

Y intercept

- ▶ Vertex position on the y axis
- ▶ Value between -10 and 10

Shiny App: Parabola

Sidebar panel

- ▶ sliderInput for Stretch or compress ($\text{min}=0.2$, $\text{max}=+1.8$, $\text{step}=0.2$)
- ▶ sliderInput for X Intercept ($\text{min}=-10$, $\text{max}=+10$, $\text{step}=0.5$)
- ▶ sliderInput for Y Intercept ($\text{min}=-10$, $\text{max}=+10$, $\text{step}=0.5$)

Main panel (ggplot)

- ▶ Title contains the customized parabola formula
- ▶ Customized parabola (blue)
- ▶ Marked vertex of customized parabola (red)
- ▶ Normal parabola and its vertex (light grey)

Shiny App: Example

The developed shiny app for this assignment is also available at:
<https://bswift.shinyapps.io/shinyapp/>