Timeframe: 9:45 am – 1 pm

**Introduction to Shiny**

Start at 9:45 am, introductions and discussion of approach – 10-15 min

* Use the etherpad - http://pad.software-carpentry.org/ResBaz2018\_shiny
* Clone the lesson git repository

Overview of morning’s activities – 10 min

What can Shiny do? some inspiration – 15-20 min

* show SoSSS tool
* breaking it down: show examples from shiny gallery
* breaking it down further: show widget gallery

What actually is shiny? – 10 min

* What is its relationship to R?
* Who can use it?
* What prerequisite knowledge do you need?

15 min BREAK (@~11am)

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**Getting started**

Reconvene at 11:15

Lesson 1 – ‘hello shiny!' & ‘shiny text’ – 20 min

* Download all the required packages (put this up on the etherpad earlier in the morning)
* Core elements of a shiny app & necessary setup
* Walkthrough ‘hello shiny’ app - shiny::runExample("01\_hello")
* Walkthrough ‘shiny text’ app - shiny::runExample("02\_text") <https://shiny.rstudio.com/articles/basics.html>

Lesson 2 – Interactive data explorer (part 1) – 25 min

* Exercise: create an app with a load data input widget and renderPlot output
* Run shiny app

Break for 7 min

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**Building interactivity**

Reconvene at 12:15

Lesson 3 – Arranging the UI – 15 min

* Use <https://shiny.rstudio.com/articles/build.html> as base
* show off some different arrangements
* discuss separating inputs from outputs
* Exercise: rearrange UI of Lesson 2 app

Lesson 6 – Understanding reactive programming (if time allows) – 20 min

* <https://shiny.rstudio.com/articles/basics.html> Example 3 - Reactivity
* <https://shiny.rstudio.com/articles/reactivity-overview.html>
* <https://shiny.rstudio.com/articles/understanding-reactivity.html>
* <https://towardsdatascience.com/get-started-with-examples-of-reactivity-in-in-shiny-apps-db409079dd11>

Lesson 7 – Getting hands on with data (if time allows) – 10 min

* Brushing / drawing boxes
* Could be a walkthrough

Wrap-up – 5 min [12:30]

* Useful links & info
* Thanks for coming
* jamerlawson