Introduction to Shiny in R

Tutor	Dr Nicolas Attalides
Organization	Digital Skills, University of Lucerne
Language	English
ECTS-Points	
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Dates and time	Online Friday 21st April 2023 (Day 1) Saturday 22nd April 2023 (Day 2) 9:30 – 16:30
Content	Shiny is an R package that has revolutionised the R programming language! It has made R even more exciting and accessible to wider audiences. With Shiny you can create interactive web applications by writing code only in R. You, as the shiny app developer, have full control to design a reactive user interface that contains a suite of widgets such as sliders, drop-down lists, buttons, checkboxes etc. When you share your shiny application, a user can very easily interact with data, visualisations, and tables that you created without any technical knowledge. This two-day course focuses on introducing the shiny package to the participants and teaches the main building blocks required to design and build an interactive web application in R. The course is structured in the following main parts: • Get started with R and Shiny • Build your first Shiny app • Construct the inputs • Construct the outputs • Reactivity in Shiny apps • User Interface design, layout, and buttons • Deploy and share your app
Prerequisites/ Materials	Course participants are expected to have some basic knowledge of the R programming language. Prior experience in basic data analysis (such as data manipulation and visualisation) would help the learning experience but is not required. *Note: You do not need prior knowledge of HTML, CSS, or JavaScript… everything is built using R!* Participants should have their own laptop with R, RStudio and the relevant packages installed. Instructions for the technical setup will be circulated by the instructor before the course. Learning material such as slides, code and solutions to exercises will be circulated by the instructor after the course.

Teaching method	This course includes a range of activities such as shiny application demos, live-coding sessions, interactive quizzes, and practical exercises to work individually or in a group. Active participation and contribution are recommended.