Course Introduction

Data Analysis for Psychology in R 1

DAPR1 Team

Department of Psychology
The University of Edinburgh

Contents

The DAPR1 Team

Course organisers

- Dr Umberto Noe
- Dr Patrick Sturt

Instructors

- Dr Patrick Sturt
- Dr Monica Truelove-Hill
- Dr Umberto Noe
- Dr Emma Waterston
- Dr Josiah King

Tutors

- Many knowledgeable and approachable tutors

DAPR1 and your degree

In DAPR1, we will teach you how to

- Deal with data in R
- Tidy, manipulate, and transform data
- Visualise data
- Using data to answer basic research questions.

DAPR1

Course aims

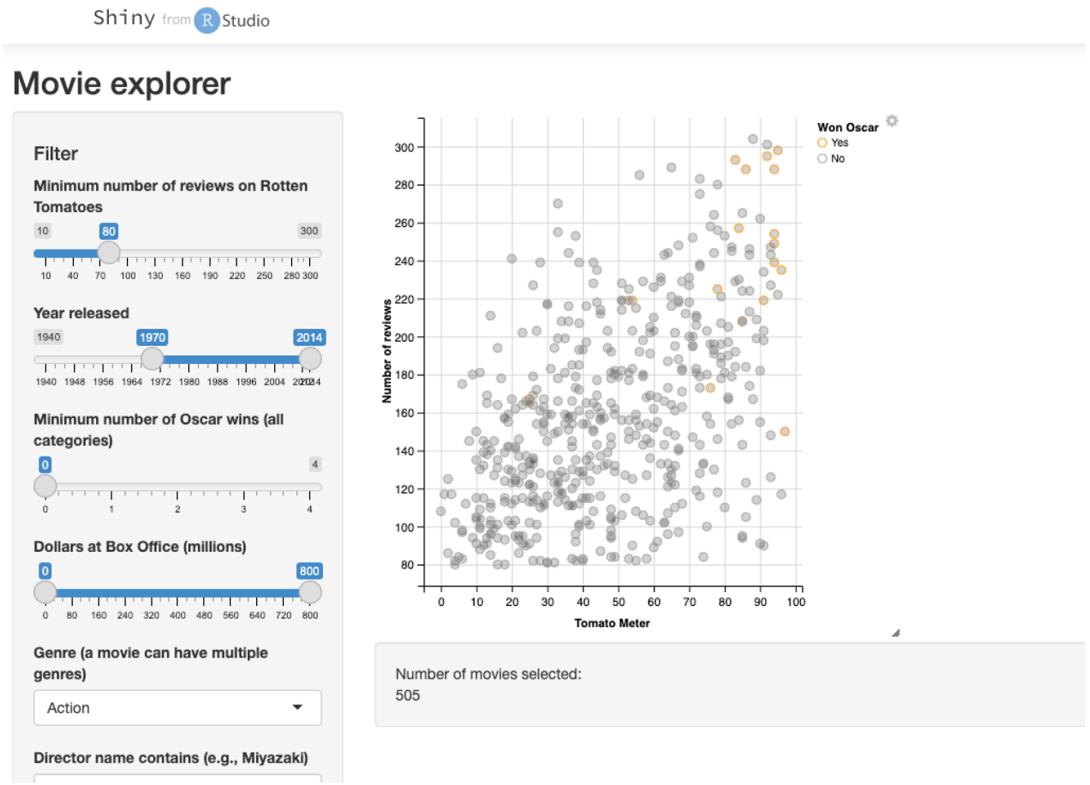
- Build the core data and R skills at a slow and steady pace.
- Introduce key statistical concepts.
- Help you develop an effective approach to studying data analysis.
- Encourage you as a cohort to be collaborative, supportive peers.
- Integrate with Psychology 1A and 1B.

What is R?

- A very flexible, free, programming language for working with data
    - It does pretty much any statistical method you can think of
    - But it does a lot more

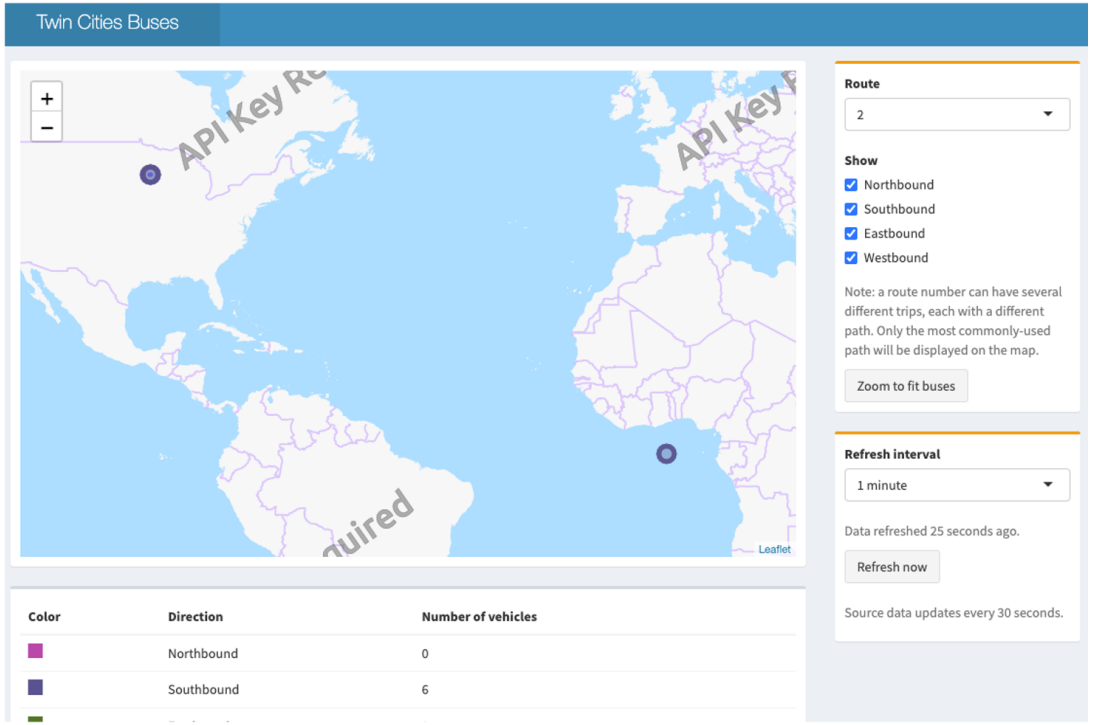
Interactive plots

For example: https://shiny.rstudio.com/gallery/movie-explorer.html



Interactive dahsboards

For example: https://gallery.shinyapps.io/086-bus-dashboard/

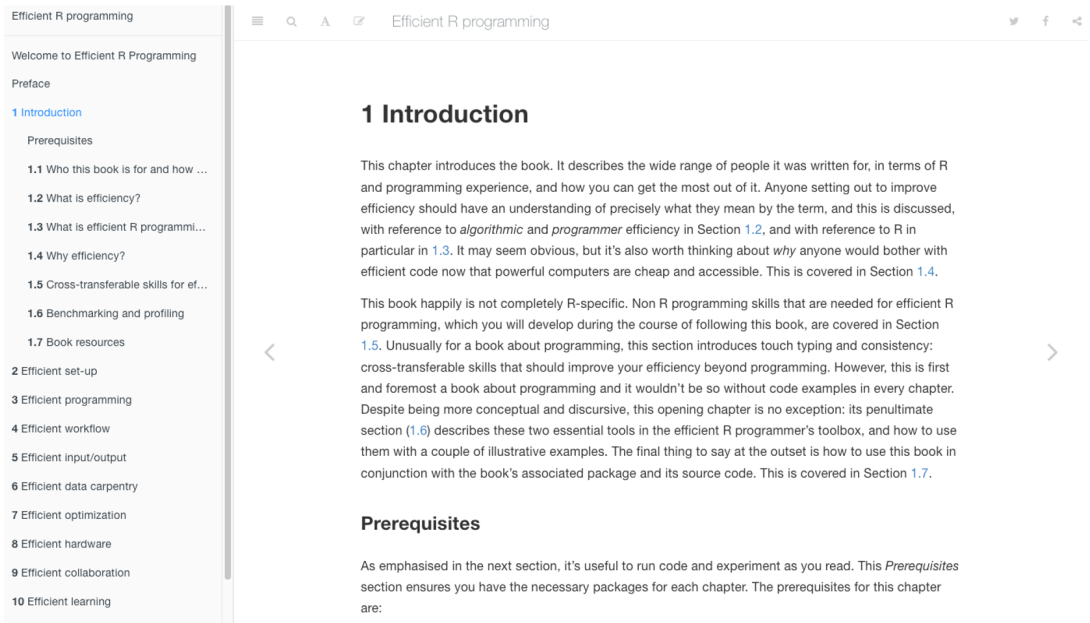


Reports

- Documents which automatically include results from analysis
- We will create these in the labs

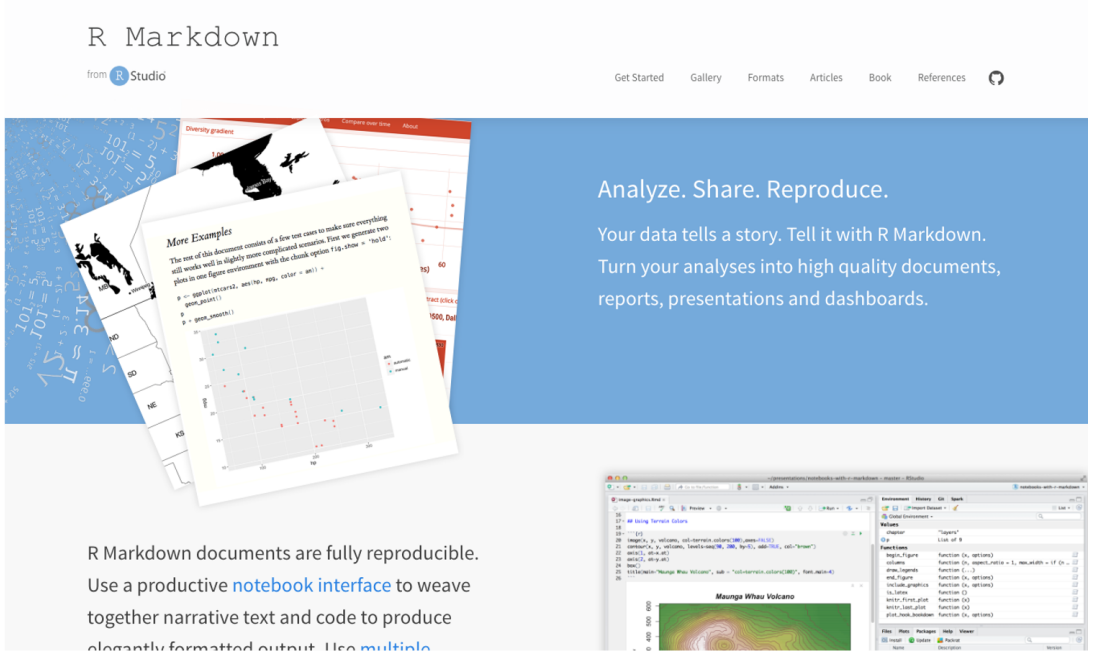
Books

For example: https://bookdown.org/csgillespie/efficientR/



Websites

For example: https://rmarkdown.rstudio.com/



Presentations

Like the one you are looking at.

Expectations

The course is delivered in person, and **you are expected to attend lectures and labs.**

- **Two lectures each week**
  - The first is on Mondays, the second is on Tuesdays.
- **Lecture activities or readings**
  - Each week you may be assigned activities or readings, and you are expected to complete those.
- **Labs with tutors**
  - Group-based practical sessions
  - Goal is preparing you to analyse real data and write up reports
  - They involve a set of structured tasks to be solved with the help of R
  - 1 hr per week
  - Will require you to produce and submit formative assessments as a group

Help and Support

- **Labs** (see your timetable for the time)
  - Ask tutors for help on R, lab materials, concepts from the lectures
- **Discussion forum** (see LEARN for link)
  - Write your questions to get answers from instructors and other students
- **Office hours** (see LEARN for details)
  - 1:1 support sessions with an instructor
- **Personal tutor**
  - For 1:1 support about the wider degree and the university in general, you should also meet with your personal tutor (PT)

Important

- The course requires you to work steadily and consistently across the year.
- Each week's content builds on the previous weeks, so it is cumulative.
- It requires regular studying and keeping up to date. It is not designed for leaving everything to last minute all-night studying before assessments.
- To help you build study skills, the course has a specific assessment structure which integrates multiple formative assessments.
    - This creates an interative improvement path.

Assessment

The final grade is divided into different components:

- 40% from coursework (weekly quizzes and report)
- 60% from the final exam

Assessment: Coursework

- **Weekly quizzes** (10%)
  - 14 quizzes in total
  - Quizzes 1 and 2 are practice quizzes
  - The remaining are used towards your grade
  - Mark is the average of your best 10/14 scores
- **Report** (30%)
  - In semester 2
  - Format: each group will be given data and a set of tasks, and you will be required to write up your analysis
  - Multiple opportunities to practice during the labs

Assessment: Final exam

- **In-person exam** (60%)
  - After semester 2
  - Different formats of questions
  - Details to be announced closer to the new year

Materials

- Each week's material will be within a weekly folder on LEARN containing:
    - Weekly quiz
    - Slide decks
    - Lecture activities or readings
    - Lab exercises
    - Discussion forum
- You must still go to the lectures and labs in person!
- The weekly folders will become available incrementally, and the top one is always the one for the current week.

What you can expect from us

1. We will work hard to help you learn.
2. We will be open and communicate with you.
3. We will be polite, respectful and treat you like adults.

What we expect of you

1. You work regularly throughout the year and keep up to date with the materials.
2. You interact and communicate with the teaching team.
3. You are polite and respect the teaching team and your classmates.
4. If you email, include the course name **DAPR1** in the subject.

A brief word on engagement

- We are very keen to make sure everyone succeeds.
- To do that, we need to know when people are struggling.
- We will keep an eye on this in a number of ways:
    - Attendance during office hours
    - Engagement (discussion boards, labs)
    - Weekly quiz performance

Welcome to the course!