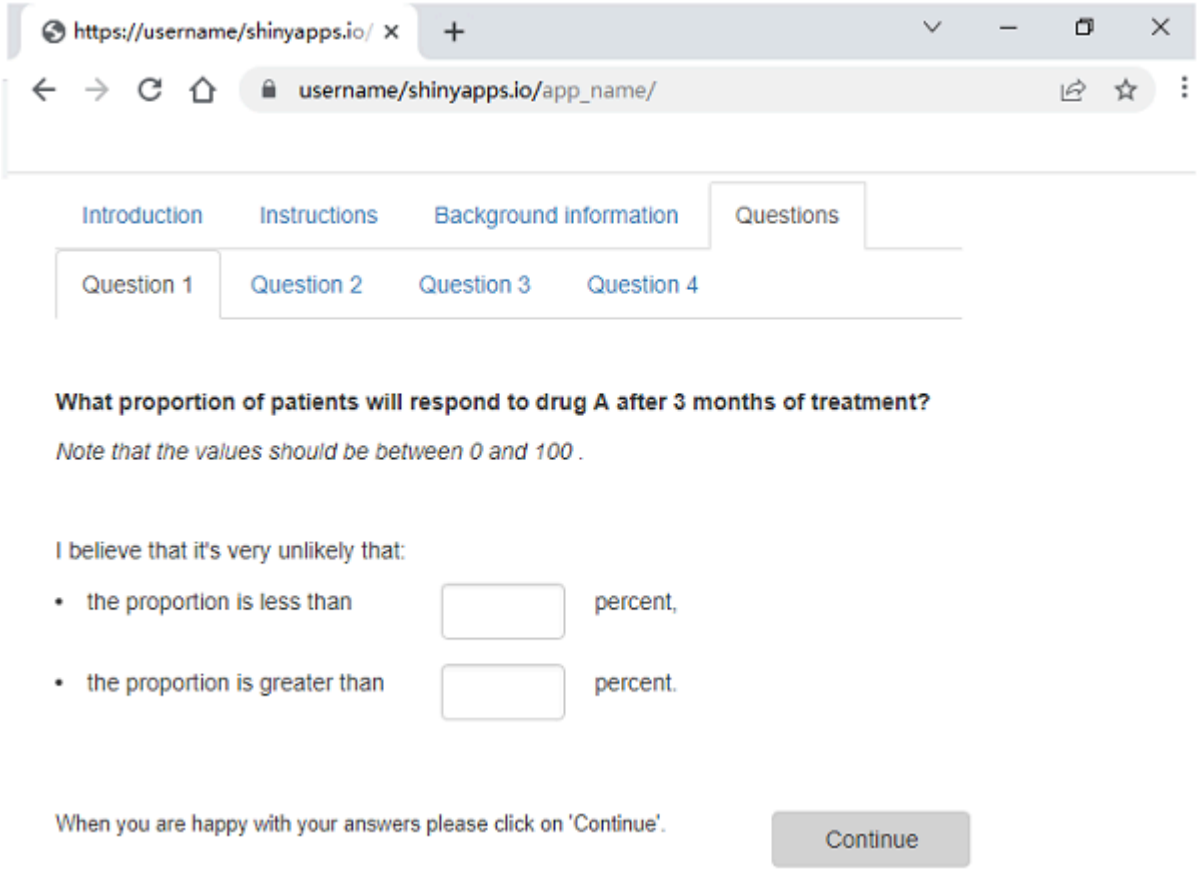
R-based tool for conducting SEE

The code produces a Shiny app for a generic elicitation exercise with four hypothetical parameters.



Why use the R-based tool to conduct SEE?

Easy to customise

The code can be customised to produce bespoke Shiny apps for conducting structured expert elicitation.The resulting apps can use Chips and Bins (also known as Roulette or Histogram method), tertiles or quartiles (also referred to as bisection) elicitation methods.

Easy to disseminate

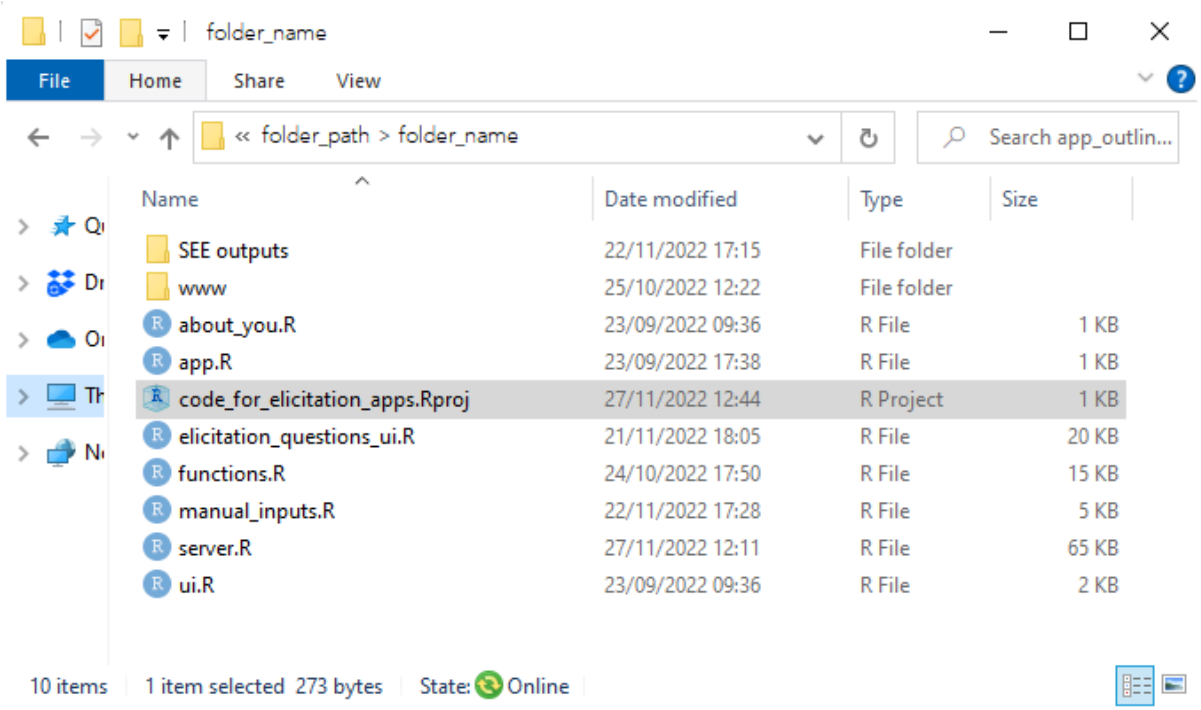
You can deploy your bespoke app to a webpage and disseminate them simply by sending the link and a unique ID to each expert. Experts' answers will be saved on their device in a single file that can be sent back to you.

Easy to analyse

The tool includes code for analysing experts' answers, including fitting and visualising parametric distributions to experts' probabilities, and aggregating responses from multiple experts.

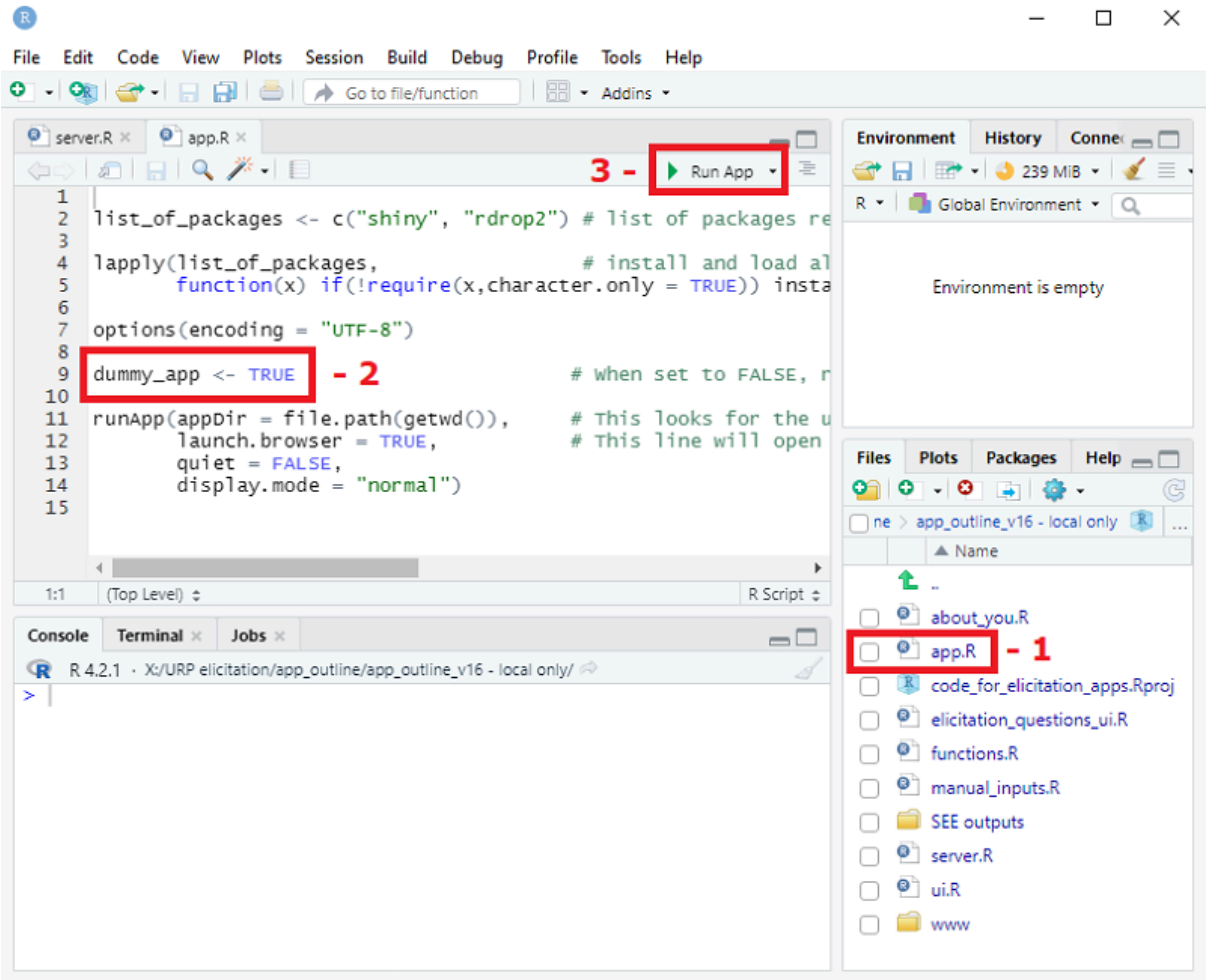
How do I get started?

1. Download the R Code from GitHub
2. Open the “code_for_elicitation_apps.Rproj” file in RStudio



1. Open the app.R file from RStudio
2. Run the dummy app to explore the app content:

    - Open the app.R file from RStudio
    - Check that the app is set to “dummy” mode (dummy_app <- TRUE) in app.R file.
    - Click on “Run App” in the top right corner of the R script



Customise the app by:

- Opening and editing the manual_inputs.R file in RStudio,
- Opening and editing the about_you.R file in RStudio,
- Editing text files from the “www” folder.

Click to download attached file Instructions for building STEER Shiny apps in R (PDF, 356kb)

6. Disseminate your bespoke app

- Check that the app is set to “live” mode (dummy_app <- FALSE) in app.R file
- Open a free account with shinyapps.io
- Click on the “Publish application” button in RStudio (icon in the top right corner of the screen) and follow the onscreen instructions.

For other methods to disseminate your app, visit the relevant shiny tutorial.

Citations

To use the materials, please cite *Jankovic D, Soares M, Bojke L, Horscroft J, Lee D. R code for building bespoke Shiny apps for conducting SEE. STEER. 2022.*

How was this code developed?

The Shiny app content and design are based on the methods in the protocol for structured expert elicitation (SEE) funded by the Medical Research Council (MRC) written by Bojke et al. (2022) and the subsequent step-by-step guide to SEE written as a collaboration between the Centre for Health Economics and Lumanity.