STAT361 Laboratory for Advanced R for Data Science

Lab 1

Sidi Wu January 19/20, 2023

Department of Statistics and Actuarial Science Simon Fraser University

Basic Info

- Weekly lab starting this week
- Canvas page for STAT361
- · Lab materials are available at GitHub
- · Lab components: intro + exercise (+ quiz)

Lab Quizzes

There will be 5 lab quizzes, and the best 4 out of 5 will be selected for final evaluation.

Quizzes will be given on:

- 1. Jan 27th by 5 pm
 - commit mars.R script to Sandbox directory of "Stat360Projects" private repository
- 2. February 9/10
- 3. March 2/3
- 4. March 16/17
- 5. March 30/31

Except for the 1st quiz, the remaining quizzes will be distributed and finished during the labs.

Lab 1 Exercise

Part I: GitHub Account

Send the following info to sidi_wu@sfu.ca:

- Email subject line: "Stat 360 GitHub user"
- Your full name (as shown in Canvas)
- SFU ID number
- · GitHub username
- GitHub email address (the one you used to create the GitHub account)

Personal Access Token

- You may need to generate personal access token to interact with "Stat360Projects" repository
- · To generate the personal access token, go to
 - Your GitHub Account \to Settings \to Developer Settings \to Personal Access Tokens \to Generate New Token \to Check Repo \to Generate
- (Important!) Save the token somewhere, e.g., in a .txt file, etc.
- This token will be required for all GitHub operations with "SFUStat360Projects" repository

Part II: Skeleton of MARS Algorithm

- Lab1 Exercise (Lab1.html) is available at the **Lab** folder in the GitHub repository "STAT360"
- Following R packages can be used as a guide for this implementation:
 - rpart
 - · earth

Grading Scheme for Lab Quiz 1

Points will be given for:

- · GitHub credentials sent via email
- Commit and push your R code "mars_SFU_ID.R" to Sandbox folder in "STAT360Projects" repository by 5pm on Jan. 27
- · The structure of the R code:
 - · Creating functions
 - Adding arguments
 - Returning values