STAT361 Laboratory for Advanced R for Data Science

Lab 1

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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 "SFUStat360Projects" repository

- To generate the personal access token, go to
  - Your GitHub Account → Settings → Developer Settings → Personal Access Tokens → Generate New Token → Check Repo → 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 "STAT360" repository by 5pm on Jan. 27

- The structure of the R code:
  - Creating functions
  - Adding arguments
  - Returning values