

Project R code submission requirement:

Grading projects takes a very long time. Often in the past it took me more than a half of a day to grade just one project. To be able to finish all grading on time I need your help. I would appreciate if you followed the submission requirements given below.

- Bottom line: I should be able to **reproduce** your results by running your code from the first line to the last line, one line at a time, in an efficient manner.
- Include all your programs in a single R file. **Do not submit multiple R files.**
- You must submit a *.R* file. **Do not submit a *.RMD* file.**
- Your code must begin with reading *project_data.csv* file.
- Your code must include all preprocessing you performed.
- You are required to build at least 36 models with combinations of 2 balancing methods, 3 feature selection methods, and 6 classification algorithms. **Do not build and test all 36 models in a loop.** Write one code segment for each model so that I can try to reproduce your results for each model separately. Suppose, for example, that b1 and b2 are 2 balancing methods, f1, f2, and f3 are 3 feature selection methods and c1, c2, c3, c4, c5, and c6 are 6 classification methods. You **should not** write your code in the following way:

```
for b in (b1, b2)
  for f in (f1, f2, f3)
    for c in (c1, c2, c3, c4, c5, c6)
      build and test a model with (b, f, c)
```

Instead, you must write your code in the following way:

```
for (b1, f1, c1):
  build and test a model

for (b1, f1, c2):
  build and test a model

. . .

for (b1, f2, c1):
  build and test a model
for (b1, f2, c2):
  build and test a model

...
and so on
```

In other words, you need to build and test models one at a time.