STA6704 Final project (SAS Shootout 2017)

Target Date:

1. Task #1 (February 20 2017): Team planning and overall modeling approach
2. Task #2 (March 6 2017): Model Findings on wildfire conditions
3. Task #3 (March 20 2017): Model Findings on wildfire causes
4. Task #4 (April 3 2017): Model findings on wildfire impacts
5. Task #5 (April 24, 2017): How to use your previously developed models to create a new "risk model" and then how to use your risk model to find the highest potential of acres burned?
6. Slides for first round Presentation due Date: March 20 2017 4:00 PM
7. First-round Presentation (50 points): The first round presentation should be about 15 pages covering the first three tasks above with (1) Executive Summary, (2) Data Analysis (3) Models and Findings, and (4) conclusions

   March 20 2017 4:30PM to 5:45PM
   a. Team #F1: 4:30 to 4:45
   b. Team #F2: 4:45 to 5:00
   c. Team #F3: 5:00 to 5:15
   d. Team #F4: 5:15 to 5:30

   March 22 2017 4:30PM to 5:45PM
   a. Team #F5: 4:30 to 4:45
   b. Team #F6: 4:45 to 5:00
   c. Team #F7: 5:00 to 5:15
   d. Team #F8: 5:15 to 5:30
8. Final Report and Slides for Final Presentation due Date: April 30 2017 11:00 PM
9. Final Presentation(50 points): May 1 2017 4:00PM to 6:50PM
   The second presentation should be about 25 pages covering the entire project with focus on three sections of your final report (1) Executive Summary, (2) new risk model , (3) Applications, and (3) results and conclusions.
   a. Team #F1: 4:00 to 4:20
   b. Team #F2: 4:20 to 4:40
   c. Team #F3: 4:40 to 5:00
   d. Team #F4: 5:00 to 5:20
   e. Team #F5: 5:20 to 5:40
   f. Team #F6: 5:40 to 6:00
   g. Team #F7: 6:00 to 6:20
   h. Team #F8: 6:20 to 6:40
   i. Conclusion: 6:40 to 6:50

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GENERAL REQUIREMENTS:

- Submissions must be the original work of the submitter and/or his/her team; must be suitable for publication; and must not infringe third- party rights.
- All submissions must use R/Python/SAS code. **The submission with SAS code will get extra points up to 50 points**.
- Participants may only use the variables provided in the original data or transformed variables as a result of their work.
- Teams must include their team number (#F1, #F2, …, #F8) in the header or footer of all materials submitted (or in comments of the R/Python/SAS code.)
- The required cover page should be the only place where it is possible to identify the University, Department(s), and/or the individuals involved in the submission.

REQUIRED ELEMENTS:

1. A separate cover page that references the University, team members, supporting faculty member, primary contact, team number (#F1, #F2, …, #F8) and date submitted.
2. Project report that includes the following sections: executive summary (at most two pages), table of contents, introduction section, data analysis, modeling approaches for on wildfire conditions, wildfire causes, and wildfire impacts; new "risk model", results and conclusions (at most two pages, see grading criteria in the next section).
3. Include all R/Python/SAS code and/or flows (Enterprise Miner EM, Enterprise Guide EG, and Base SAS) to be examined. Put most Figures, Tables and SAS code and/or flows in Appendix.
4. Provide instructions for running your code and/or flows, including estimated running time with brief description of hardware environment, neatly organized code and/or flow running order, and clear labels for the order of execution.

R/Python/SAS CODE REQUIRMENTS:

1. Specify the version of your R/Python/SAS Enterprise Miner, EG, and/or Base SAS used.
2. Your code should use only the original data provided in the 2017 SAS Shootout Data Package.
3. Only use a single SAS library at the beginning of the code and/or flow to define the original 2017 Shootout Data Package location if you are using SAS
4. Only final datasets should be included in the submission (no intermediate data sets).

REPORT FORMAT:

All submissions should follow this format:

1. Margins: 1" from all sides
2. Typeface: Times New Roman size 12
3. Spacing: 1.5
4. Paragraph style: Block style
5. Captions: Captions to be placed under tables or figures, numbered sequentially across the document
6. Document size: maximum 30,000 words
7. Page numbering: Page number to be placed at the bottom of each page (e.g., Page 1 of x)

Grading:
All submissions will be graded based on the following criteria:

- 80% of the total points will be awarded based on the content in the Project Report. Major sections should include:
  o Executive Summary: – 5%
  o Data Analysis: exploratory data analysis and mapping to the problem – 20%
  o Modeling Approach: rationale for modeling approach, selection, and evaluation process – 40%
  o Results and Conclusions: interpretation and implications – 15%
- 20% of the points will be awarded based on the ability for the grader to replicate the analysis using the team's code, Enterprise Miner flow and instructions

Grading will be based on the application of the data, the quality of the predictive model, the method(s) used to reach a viable solution and a solid explanation of that solution. Submissions must be the original work of the entrant; must be suitable for publication; and must not infringe third-party rights.