

Simio Student Competition Judging Criteria

Introduction

Judging is based on a 10-item scoring system where each item is worth between 0.0 and 3.0 points (not necessarily integer), defined as follows: Inadequate – 0, Adequate – 1, Good – 2, Excellent – 3. The total score for the project is the sum of all points across these 10 evaluation areas, with a maximum project score of 30.

Evaluation Areas

The 10 evaluation areas are summarized below:

1. Quality/clarity of the presentation

The overall quality and clarity of the presentation, including the effective use of time and of supporting aids such as slides, animations, and/or other materials. The presentation should clearly define any expanded simulation objectives by the project team, as well as any assumptions that have been made.

2. Analysis/use of input data

The appropriate interpretation, analysis, and use of the data that is supplied with the model.

3. Modeling detail/approach

The incorporation of the appropriate level of modeling detail necessary to reach conclusions and support the project recommendations. The model should include enough detail to support the conclusions, but no unnecessary or frivolous detail.

4. Model internal documentation

The model components should include meaningful names and appropriate use of other documentation features such as description, labels, categories, and color coding. Someone unfamiliar with the project should be able to “figure out” the approach without too much trouble.

5. Verification and Validation

Demonstrate use of appropriate measures to ensure validity of the model.

6. Quality of animation

The animation should provide an effective communication of the model execution and logic and provide a useful tool for model validation.

7. Experimentation/exploration of alternatives

An appropriate set of experiments should be defined and executed to fully explore the business alternatives as described in the problem statement. Related alternatives not specifically mentioned in the problem statement may also be explored.

8. Analysis of results

The results should be analyzed using appropriate statistical methods and the results should be presented in a clear and concise way.

9. Quality of the recommendations

The project should provide a set of recommendations to the business supported by the simulation results from the project.

10. Overall quality of the project and Executive Summary

This is an overall summary measured by the general quality of the project work, soundness of the recommendations, and its potential impact on the proposed business problem and how well this is communicated in the written Executive Summary.