

Peer-review of the initial project pitch

Group members

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In this peer-review, place yourself in the shoes of the client and consider what you, as the client, would think about the project pitch. (The project pitch hopefully describes who the client is, but if not try to identify who the client would be.) Answer the following questions.

Is the project idea clearly presented? Who is the client?

Yes. It clearly presents the decision variables, constraints, objective. And the project want to give a courses arrangement to help students maximize GPA, minimize the time to complete the program, maximize classes with greater interests to the students, and follow the program requirements and prerequisites at the same time.

The client could be every student in UW-Madison who would like to get higher GPA in less time while meet the requirements.

Does the proposed mathematical optimization model make sense? Do you think the choice of decision variables, constraints and objective function are reasonable for the problem?

Generally yes. They clearly show the decision variables, constraints and objective function. However, in the constraints , they may need to add credits constraint. In addition, this mathematical problem may better to add a Least Square model. They should assign different level preference to different task such as students preference, time, GPA. Also, in decision variable they only consider the major classes without general education requirement.

Does it seem like the necessary data (to define the problem parameters) will be available? Does the group have a plan for gathering the necessary data?

Yes. Their data is pretty detailed and clear. They have already gathered the necessary data.

Is the problem interesting? Are there any results/analysis that you would like to see from this group in their final report?

Yes. It is a really interesting projects that related to UW-Madison students. Especially, they said they would like to consider some popular major such as CS. So, the result may give many CS students good suggestion about how to choose courses.

In general, what do you like about the project? (List at least two things that are good)

- 1) Their topic is very interesting and grounded which is related to our academic life tightly.
- 2) Their data is clear, detailed and very large from 2006 to 2017.

**In general, what would make the project even better/more creative/more interesting?
(List two concrete suggestions)**

- 1) It may be better to add a Least Square model because it is a trade-off between students' preference and demand to get higher GPA at the same time.
- 2) It may be better to consider the schedule conflict and print out a real timetable.
- 3) About students' preference, they could give a more precise and quantitative equation to measure it.