Modelling support for a COVID-19 exit strategy

Brief: Provide a technical report for government that outlines a potential exit strategy for COVID-19 under a scenario of your choice.

Your report should include:

* An executive summary
* An introduction that outlines your chosen scenario and appropriate background
* A non-technical model description
* Results, including one key graph that could be distributed to a wider audience
* Discussion and conclusion
* A technical appendix that gives model details and makes the work reproducible

Possible scenarios could be

* No vaccine becomes available but we reopen the borders
* Only an ineffective vaccine is available
* A good vaccine is available but distribution is very slow
* A good vaccine is available but it only provides immunity for a short period

Points to remember:

* A good report will likely concentrate on one small aspect in detail rather than trying to do everything badly!
* The total report should be less than 6 pages plus a cover sheet if needed.
* A very good assignment will have content beyond that covered in the lectures and use methods not given in the example code.

**Example Marking Scheme**

**Exec summary: 3 marks** Does it cover all the key points of the report? Is it understandable to a lay person?

**Introduction: 3 marks** Does it cover all the background material and describe the chosen scenario? Are appropriate references included?

**Methods: 4 marks** Can someone with a general scientific background (but minimal maths) understand the model. Have all the key assumptions been stated.

**Results: 4 marks** Are the results easy to read, well-presented and in a logical order? Are all figures well-explained and described.

**Discussion/Conclusions: 2 marks** Have the key results been re-iterated and put into context?

**Technical appendix: 5 marks** Is the work reproducible from this section? Is it easy to follow?

**Additional content: 4 marks** Has the report included something beyond the lecture material?