**Project presentation**

Intro:

* A funny thing happened to me the other day. A friend of mine asked if I was doing some DIY decorating at home. No, I said, why do you ask? To which he replied: it looks like you have white paint in your hair and beard, mate. You’re going grey!
* Things change with time. And at the moment the climate is changing far quicker than my hair colour, relatively speaking. And so this question (among other far more important ones) came up: How will climate change impact agriculture in the UK. More specifically, how will climate change influence viticulture up north.

Modelling:

* To get an answer we used time series to predict the climate trends for Sheffield, South Yorkshire, a part of the UK not particularly well known for wine production.
* We found a general upwards trend for temperature in the coming decades. I.e, it’s getting hotter, and at some point it will be generally warm enough to cultivate vineyards around Sheffield. We calculted the GDD (Growing Degree Days) which is the metric for knowing when an area is warm enough for wine production.
* And so, the moment you’ve been waiting for: When will Sheffield become the Champagne region of South Yorkshire? Drumroll please… in about a hundred years time.
* Finn will now show us where exactly we can start investing in land.

Visualisation (Finn):

* QGIS

Descriptions/Flags:

* It turns out predicting the weather is pretty easy. Predicting the weather accurately, however, is much more difficult. Though the model predicts that wine could be produced in about a 100 years, we think that this will happen sooner. The alarming trend, as it stands now is much steeper, so we think that the weather will be good enough in 50 years.
* So, for a bit of fun, we decided to train a NLP model on wine description according to score, and plugged that into a wine description generator. To give you a taste of how British wines are currently being described, here are the keywords: {British flag}
* And here are the words we would expect people would use to describe Sheffield wines in about 50 years (when we expect the first vintages to be poor)
* Here are the descriptors for 100 years (when the wine should be better)
* And here are the descriptors for 150 years (when the wine will be excellent).

Ending:

* Before I finish I’d like to thank my team, as well as Mark and Catriona for their amazing, passionate, consistent, awesome work on this project. You are all superstars.
* In conclusion: Climate change is a very scary and heavy subject, but we have the power to change things. I can buy hair dye for my beard. I can also be mindful of the things I use, how I use them and how that impacts our earth. And if we are mindful now, we might be able to change things for the better. In the words of CS Lewis: “There are far better things ahead than any we leave behind.”