Exercise 2

In this exercise, you will create a cloud-free Sentinel-2 mosaic of an area of interest. Write the code to carry out the 6 steps below.

Step 1: Open up a new CoLab notebook and set up your notebook (i.e. install and import packages, authenticate Earth Engine).

Step 2: Define your AOI.

You will need an area of interest stored as a Feature Collection in order to spatially filter your data. You can use the asset or shapefile I provided in the demo or use your own asset, or upload your own shapefile to Google Drive.

Step 3: Write a function to cloud-mask Sentinel-2 imagery. Remember to specify the correct band for Sentinel-2 quality assessment.

Step 4: Write a function that adds your “quality band” to an image collection (e.g. calculate NDVI and add this band to each image in the collection).

Step 5: Create the cloud free mosaic. Filter a Sentinel-2 image collection based on your AOI and date range, map over each image to add the “quality bands”, and create a quality mosaic using the built in function.

Step 5: Visualize the result in true colour.