Cortexica technical assignment:

Please complete the following assignment within the time allocated. Send your solution, instructions on how to run it, results and a short report to andrea.mirabile@cortexica.com. Please do not post your solution publicly online. If you have any questions please contact us.

Assignment:

We would like you to **implement a Visual Inspection System for chocolate packaging**. Specifically, given a set of photographs each containing a chocolate, write a classifier to alarm a production line operator whether a chocolate packaging has been damaged during the production or not.

Please use the images provided in the chocolate folder. Your solution will be tested on similar images. External images are allowed if absolutely required, however we prefer if you only use the images provided, this will be rewarded with additional points.

You are free to use any library to perform computations on the images.

We are not looking for an approach that gives 100% accuracy, we want you to demonstrate your computer vision and machine learning skills. If your approach doesn't work, please document what you tried and explain why it didn't work.

Please **send your coded solution along with a short report** explaining your approach (overview of the approach, features chosen, extra images, which classifier and what parameters were used for training), instructions on how to run you work and interpretation of the results. We recommend you use Jupyter notebook for this.

We encourage and advise all candidates to use Python for the task. Please try to provide code that runs independently of the platform you are using (we will be testing your code on a Linux machine). We will review your work based on your approach and code quality.