**Please limit yourself to 4 hours time!**

**Place your Jupyter Notebook and Demo slides in the GD folder naming convention: Firstname\_Lastname\_Happy\_Hotel**

## **The Goal**

You've just joined the data team at a large hotelling chain. Your specific team is embedded in the CX (customer experience) division. Each day you receive hundreds of reviews of your 10 hotels from your customers. Each review consists of a free-form text review and a report of "happy" or "not happy". A product manager on your team wants to understand each hotel's performance at a more granular level; they want to build a product to identify topics within reviews. All of your reviews are unlabeled, and it's infeasible to label them by hand.

Design and execute a method to identify topics within the reviews. For each topic, find a robust means of assigning a score to each hotel in that topic. For each of the ten hotels, what recommendations would you make to their general managers?