

# Please limit yourself to 4 hours time!

**Place your submissions to the Submissions sub-folder with the naming convention: lastname\_firstname**

You belong to the data team at a local research hospital. You've been tasked with developing a means to help doctors diagnose breast cancer. You've been given data about biopsied breast cells; where it is benign (not harmful) or malignant (cancerous).

1. What features of a cell are the largest drivers of malignancy?
2. How would a physician use your product?
3. There is a non-zero cost in time and money to collect each feature about a given cell. How would you go about determining the most cost-effective method of detecting malignancy?

[The dataset](#) contains the following features for each cell:

Sample code number: id number

Clump Thickness: 1 - 10

Uniformity of Cell Size: 1 - 10

Uniformity of Cell Shape: 1 - 10

Marginal Adhesion: 1 - 10

Single Epithelial Cell Size: 1 - 10

Bare Nuclei: 1 - 10

Bland Chromatin: 1 - 10

Normal Nucleoli: 1 - 10

Mitoses: 1 - 10

Class: (2 for benign, 4 for malignant)