We are designing a service that aims to make apartment search smarter by using data to sort rental listings by quality. As part of the service you are asked to develop a model that predicts the number of inquiries a new listing receives based on the listing’s creation date and other features. The dataset that is provided has the following fields:

## Data fields

* bathrooms: number of bathrooms
* bedrooms: number of bathrooms
* building\_id
* created
* description
* display\_address
* features: a list of features about this apartment
* latitude
* listing\_id
* longitude
* manager\_id
* photos: a list of photo links. You are welcome to download the pictures yourselves from renthop's site, but they are the same as imgs.zip.
* price: in USD
* street\_address
* interest\_level: this is the target variable. It has 3 categories: 'high', 'medium', 'low'

Under photos you can find some sample images that you can also (optionally) use. In addition, we also provide sample code that created features and fits a model to this data.

Questions:

* What we the insights we can derive from the model?
* Can we improve on the existing model? (please provide your solution as code)
* Is it possible to include the images (optional step)?
* What would you consider as additional things to try for further improvement (ideas, not code)?
* Finally, make the model you have created accessible through an API: anything like tensorflow serving, Flask, lambda functions, etc. is ok as long as we can use the API to make predictions live (speed is not a big consideration for this task).

Note: some of the questions are intentionally open ended and many correct answers are possible.