1. **Recommendation System - Recommending Businesses**
    a. Build a Recommendation System that suggests businesses to users based on the location, stars, category, reviews and business hours.
    b. Evaluating the favorability of a business by performing sentiment analysis of the reviews of the business based on the credibility of users that reviewed them, along with other review attributes. With review analysis, we will have a deep insight about the business rating in an overall prospect. This new weighted rating (favorability) of business can be recommended to users based on their interests and the location they are interested in.
    c. Might build using Apache Spark, Natural Language Processing and Recommendation system.

2. **Detecting users who are using inappropriate material in their reviews**
    a. Definition of Inappropriate Material according to Yelp
        - It contains hate speech, lewd commentary, or threatening language
        - It contains private information about employees or patrons
    b. Evaluating the content of the user's reviews to identify inappropriate content.
    c. Identifying bad users based on user rating, their reviews, friend's attributes (friend's user rating and reviews).
    d. Might build using Apache Spark, Natural Language Processing, and Outlier Detection.

3. **Reviews Recommender**
    a. Build a Recommendation System that suggests reviews of a business to users/businesses based on the content analysis of the reviews and other relevant attributes.
    b. Might build using Apache Spark, Natural Language Processing and Recommendation system.
4. **Classifying Restaurants based on Images**
    a. Identify the type of restaurant based on the available images
    b. Might build using Deep Learning and Generalized Linear Models.
    c. Reference:**https://www.linkedin.com/pulse/what-restaurant-would-your-computer-like-go-alexander-rakhlin**