EXAMPLE: RESTAURANT REVIEW SYSTEM

Consider this description of a software system that you are developing to facilitate restaurant reviews

Each restaurant corresponds to a certain price range, neighbourhood, and cuisines it serves. Restaurants that serve alcohol must have a license, which they need to renew every year. The system should also report how long, on average, customers wait for take out in restaurants that offer take-out service.

When reviewers leave a review for a restaurant, they must specify a recommendation (Thumbs Up or Thumbs Down) and can also leave a comment. An owner of a restaurant can respond to a review with a comment. All users of the system log in with their username. Users can choose to be contacted by email ...

RECALL OUR KEY STEPS

A key part of developing the model involves careful analysis of the problem specification. We must:

Identify important nouns.
- Underline nouns that may make sensible classes or that describe information a class could be responsible for storing.

Choose potential classes.
- From the nouns identified, write down the ones that are potential classes.

Identify verbs that describe responsibilities.
- In the problem description, circle verbs that describe tasks that a class may be responsible for doing.

IDENTIFYING IMPORTANT NOUNS

Each <u>restaurant</u> corresponds to a certain <u>price range</u>, <u>neighbourhood</u>, and <u>cuisines</u> it serves. Restaurants that serve <u>alcohol</u> must have a <u>license</u>, which they need to renew every year. The system should also report how long, on average, <u>customers</u> wait for take out in restaurants that offer <u>take-out service</u>.

When <u>reviewers</u> leave a <u>review</u> for a restaurant, they must specify a <u>recommendation</u> (Thumbs Up or Thumbs Down) and can also leave a <u>comment</u>. An <u>owner</u> of a restaurant can respond to a review with a comment. All <u>users</u> of the system log in with their <u>username</u>. Users can choose to be contacted by <u>email</u> ...

CHOOSE POTENTIAL CLASSES

Let's try to narrow down to the most important nouns and start with those as potential classes to make cards for to get started.

*Each **restaurant** corresponds to a certain <u>price range</u>, <u>neighbourhood</u>, and <u>cuisines</u> it serves. Restaurants that serve <u>alcohol</u> must have a <u>license</u>, which they need to renew every year. The system should also report how long, on average, <u>customers</u> wait for take out in restaurants that offer <u>take-out service</u>.*

*When **reviewers** leave a <u>review</u> for a restaurant, they must specify a <u>recommendation</u> (Thumbs Up or Thumbs Down) and can also leave a <u>comment</u>. An **owner** of a restaurant can respond to a review with a comment. All **users** of the system log in with their <u>username</u>. Users can choose to be contacted by <u>email</u> ...*

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