

Project Proposal

The objective is to help Expedia provide the best hotel recommendation for its users. There has been a growing demand for hotel booking services around the world. Planning a dream vacation, or even a weekend escape, can be an overwhelming affair. With hundreds, even thousands, of hotels to choose from at every destination, it's difficult to know which will suit users' personal preferences. Should you go with an old standby with those pillow mints you like, or risk a new hotel with a trendy pool bar? Expedia wants to take the proverbial rabbit hole out of hotel search by providing personalized hotel recommendations to their users. This is no small task for a site with hundreds of millions of visitors every month!

We plan to use analytical approach to study users' preferences based on their input parameters. (from/to locations, # of adults or children, date requested and etc.) All the data of input has been provided by Expedia. Our goal is to generate an algorithm to process raw dataset and translate it to a format that can facilitate business. Machine learning and data mining skills are our strongest qualifications for this project. Unlike conventional hotel sorting, our final product will focus on user-oriented search method. For example, couples who search for a hotel room would probably prefer romantic atmosphere. Our search method would make recommendations near restaurant or bars known as date night places.

Such user-friendly searching method would give Expedia competitive advantage over other competitors. Once more users are committed to Expedia, more hotels would like to develop partnership. We aim to help Expedia achieve more popularity and growth using our technology.