Recommender systems have the effect of guiding users in a personalized way to interesting objects in a large space of possible options.  
  
Content-based recommendation systems try to recommend items similar to those a given user has liked in the past.

Indeed, the basic process performed by a content-based recommender consists in mathing up th attributes of a user profile in which preferences and interests are stored, with the attributes of a content object (item), in order to recommend to the user new interesting items.

Recommender systems are decision support tools that proactively identify and suggest items, which re expected to be interesting for the users.

One domain, which has historically received comparatively little attention, however, especially when compared to areas relating to leisure and entertainment, is the recommendation of food items. This is surprising given the importance of food for human sustenance, the range of options available, the fact that making food choices is particularly challenging(scheibehenne2010)  
  
Currently there are many cooking websites   
(https://aelieve.com/rankings/websites/category/food-beverage/best-cooking-websites/)  
providing various forms of information (e.g., texts, dish photos, cooking videos), as well as useful functions for searching and filtering by certain criteria. Conceivably, discovering appropriate recipes from such overwhelming database can be time-consuming.

IT IS OFTEN NECESSARY TO MAKE CHOICES WITHOUT SUFFICIENT personal experience of the alternatives. In everyday life, we rely on recommendations from other people either by word of mouth, recommendation letters, movie and book reviews printed in newspapers.

Among different recommendation techniques proposed in the literature, the content-based and the collaborative filtering approaches are the most widely adopted to date

Increasing numbers of online sites have emerged over the last decade that enable users to upload and share recipes (e.g., food.com, allrecipes.com). With more users sharing more recipes from different backgrounds, geographic locations, and cultures, there is a vast availability in terms of numbers of recipes, as well as in terms of diversity of cuisines. This has resulted in an overwhelming number of recipes for a user to select from, which can make the search for a suitable recipe time consuming. Moreover, there may be many suitable recipes that the user is not able to see or connect with. To address these issues, a number of recommender system approaches have been proposed for finding recipes more easily (Mouzhi Ge, Mehdi Elahi, Ignacio Fernaández-Tobías, Francesco Ricci, and DavidMassimo. 2015)