The aim of the thesis is to research the utility of collaborative filtering based recommender systems in the area of dating services. The practical part of the thesis describes the actual implementation of several standard collaborative filtering algorithms and system, which recommends potential personal matches to users based on their preferences (e.g. ratings of other user profiles). The collaborative filtering is built upon the assumption, that users with similar rating patterns will also rate alike in the future. Second part of the work focuses on several benchmarks of the implemented system's accuracy and performance on publicly available data sets (MovieLens and Jester) and also on data sets originating from real online dating services (ChceteMe and L'b'mSeTi). All

benchmark results proved that collaborative filtering technique could be successfully used in the area of online dating services.