**3.6 Functional Requirements**

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| # | Title | Priority |
| FR1 | Should get preferences from user | Essential |
| The application should get the factors the customers look for in an apartment. The application then saves the requirements of the user and give personalized recommendation. | |
| FR 2 | Should get the most valued preference | Desirable |
| The most valued factor like neighboring supermarket or school or gym should be gathered to give more personalized recommendation. | |
| FR 3 | Should calculate similarity between users | Essential |
| The application should calculate the  similarities between the users of the application and provide more recommendation for the persons with common interest | |
| FR 4 | Should provide a user friendly GUI | Luxury |
| Providing an interface to collect all the preferences and details from user | |
| FR 5 | Should allow the user to search an apartment  by keywords | Desirable |
|  | Allowing the user to list out apartments by names, locations, cost, other preferences | |
| FR 6 | Should search for the surrounding places of an apartment | Essential |
|  | The application should gather data available from maps using nearby function | |
| FR 7 | Should compare the score of the preferred apartment and the apartments in dataset. | Essential |
|  | The application must compare and order the apartments according to the functional equation used to recommend | |
| FR 8 | Should return  the best apartment | Essential |
|  | Recommending an apartment with high recommendation score as well as one that fits his needs | |
| FR 9 | Should be able to delete a certain apartments from showing | Desirable |
|  | When a user prefers not to see any more recommendation of a certain apartment he could choose to make sure it never recommends it again | |
| FR 10 | Should be able to edit the preferences | Essential |
|  | As users’ needs changes he must be able to change his preferences as he wishes | |
| FR 11 | Should recommend apartments until the user is satisfied | Essential |
|  | Our core function of recommending must run till the user gets an apartment of his wishes | |
| FR 12 | Should provide users with function to rate on apartments | Essential |
|  | This rating function would provide for further perfect recommendation. | |
| FR 13 | Should provide information on apartment | Essential |
|  | User will be given entire set of information available on apartments | |
| FR 14 | Should provide details in a graphical interface | Luxury |
|  | Details produced by the system must be shown in a user friendly graphical interface |  |
| FR 15 | Should provide an API service for third party users |  |
|  | An API service through which any third party would obtain a report on neighborhood stats. |  |