Problem Statement

Write OOPS code for a Property Management Business where you can expose features like register a user, list a property and search properties based on your requirements etc.

Feature Requirements

1. Register a User: One time registration of the User.
2. List a property: Users can list the properties they want to sell.
3. View listed properties: Users can view properties listed by them.
4. Shortlist a property: Users can short list properties they are interested in.
5. View shortlisted properties: Users can list properties they have shortlisted (including sold but with the status should be “SOLD”)
6. Search properties: Users can search for listed properties (only available properties should appear in results). They can use a combination of:
   1. Location (case insensitive exact match would suffice for search).
   2. Price range.
   3. ListingType: Sell/Rent
   4. Size range.
   5. The number of rooms: 1BHK, 2BHK, 3BHK.
   6. Sort by: It could be price or size (only ascending order is required).
   7. Users can choose any set of parameters above for search.
7. Mark Sold: Users can mark a property as SOLD which was listed by them.