Project A – Practice

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| |  | | --- | | **Agent** | | - name: String | | + Agent(int id, String name)  + String toString() | | |  | | --- | | **Record** | | # id : int | | + Record(int id)  + boolean matches(int id)  + void show()  + String toString() | | |  | | --- | | **<<abstract>> Property** | | # agent: Agent  # owner: String  # price : double // rental or sales price  # status : Status  # propertyType: PropertyType; | | + Property(int id, Agent agent, String owner, double price, PropertyType type)  + double income()  # abstract double getIncome();  + boolean isRentalProperty();  + boolean isSalesProperty()  + boolean isVacant()  +String toString() | |
| |  | | --- | | **<<enum>> Status** | | VACANT, RENTED, SOLD | |  |  |  | | --- | | **<<enum>> PropertyType** | | SALES, RENTAL | |  | | |  | | --- | | **RentalProperty** | | - tenant : String | | + RentalProperty(int id, Agent agent, String owner, double price, String tenant, Status status)  + RentalProperty(int id, Agent agent, String owner, double price)  + void rent(String tenant, Agent agent)  + double getIncome(); // override  + String toString() | | |  | | --- | | **SaleProperty** | | - buyer: String  - actualSalePrice : double | | + SaleProperty(int id, Agent agent, String owner, double price, String buyer, Status status)  + SaleProperty(int id, Agent agent, String owner, double price)  + void sell (String buyer, Agent agent, double actualSalePrice)  + double getActualSalePrice()  + double getIncome();// override  + String toString() | |
|  | |  | | --- | | **Records** | | # id : int = 0;  # LinkedList<Record> records = new LinkedList<Record>(); | | # Record find(int id)  # void add(Record record)  + int size()  + void show()  + String toString() | | |  | | --- | | **Agency** | | - NAME: String = “Rainbow Real Estate”;  - agents: Agents  - properties: Properties  - char YES = 'Y' | | + Agency() //starting point of the app  - void menu()  - chat readAction();  - void addProperty(PropertyType type)  - void addAgent ()  - void rent()  - void sell()  - void report()  - void show();  - void exit();  - boolean confirm(); - void help();  - void error(); - Agent findAgentById();  +String toString() | |
| |  | | --- | | **Agents** | |  | | + Agent find(int id)  + void add()  + String toString() | | |  | | --- | | **Properties** | |  | | + Property find(int id)  + void addProperty(Agent agent, String owner, double price, PropertyType type)  + double calcIncome();  + String toString() | |
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