

## 1. CRC cards

1. Tenant	
Responsibility	Collaboration
Name	
Apt number	

2. RentRow	
Responsibility	Collaboration
Apt number	
Rent (Capacity:12)	
Return sum of all rents for 12 months	

3. Expense	
Responsibilities	Collaborations
Month	
Day	
Category	
Payee	
Amount	

4. TenantInputScreen	
Responsibility	Collaborator
Name	Tenant
Apt Number	Tenant

5. RentInputScreen	
Responsibility	Collaboration
tenant name	tenantList RentRecord
rent paid	tenantList RentRecord
month	RentRecord
apt number	tenantList RentRecord

6. ExpenseInputScreen	
Responsibilities	Collaborations
ExpenseRecord	ExpenseRecord

7. RentRecord	
Responsibilities	Collaborations
RentRows	RentRow
Ask user input for the rent record (one tenant and one month)	

8. ExpenseRecord	
Responsibilities	Collaborations
Expenses	Expense

9. TenantList	
Responsibilities	Collaborations
Tenants	Tenant
Insert tenants	Tenant
Display tenant list	Tenant

10. AnnualReport	
Responsibilities	Collaborations
RentRecord	RentRecord
ExpenseRecord	ExpenseRecord
Expenses	
Rents	

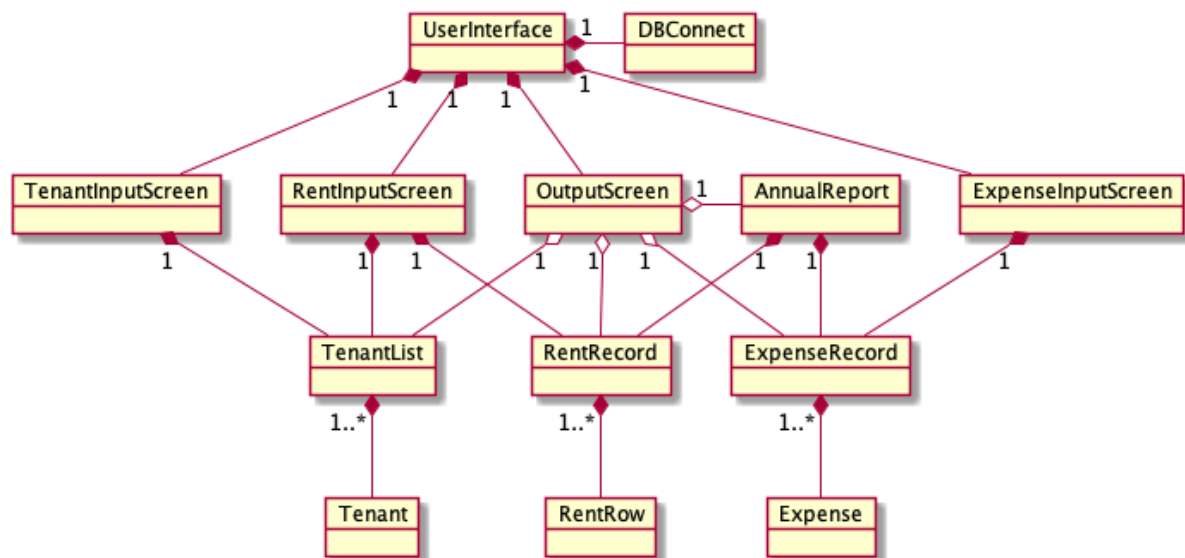
11. OutputScreen	
Responsibilities	Collaborations
RentRecord	RentRecord
ExpenseRecord	ExpenseRecord
TenantList	TenantList

12. UserInterface	
Relationship	Collaboration
tenantInputScreen	TenantList
rentInputScreen	TenanList RentRecord
expenseInputScreen	ExpenseRecord
annual report	RentRecord Expense record
ouputScreen	OutputScreen

12. DBConnect	
Relationship	Collaboration
tenantList	TenantList
rentRecord	TenanList RentRecord

2. An overall class diagram showing the relationships and multiplicity.

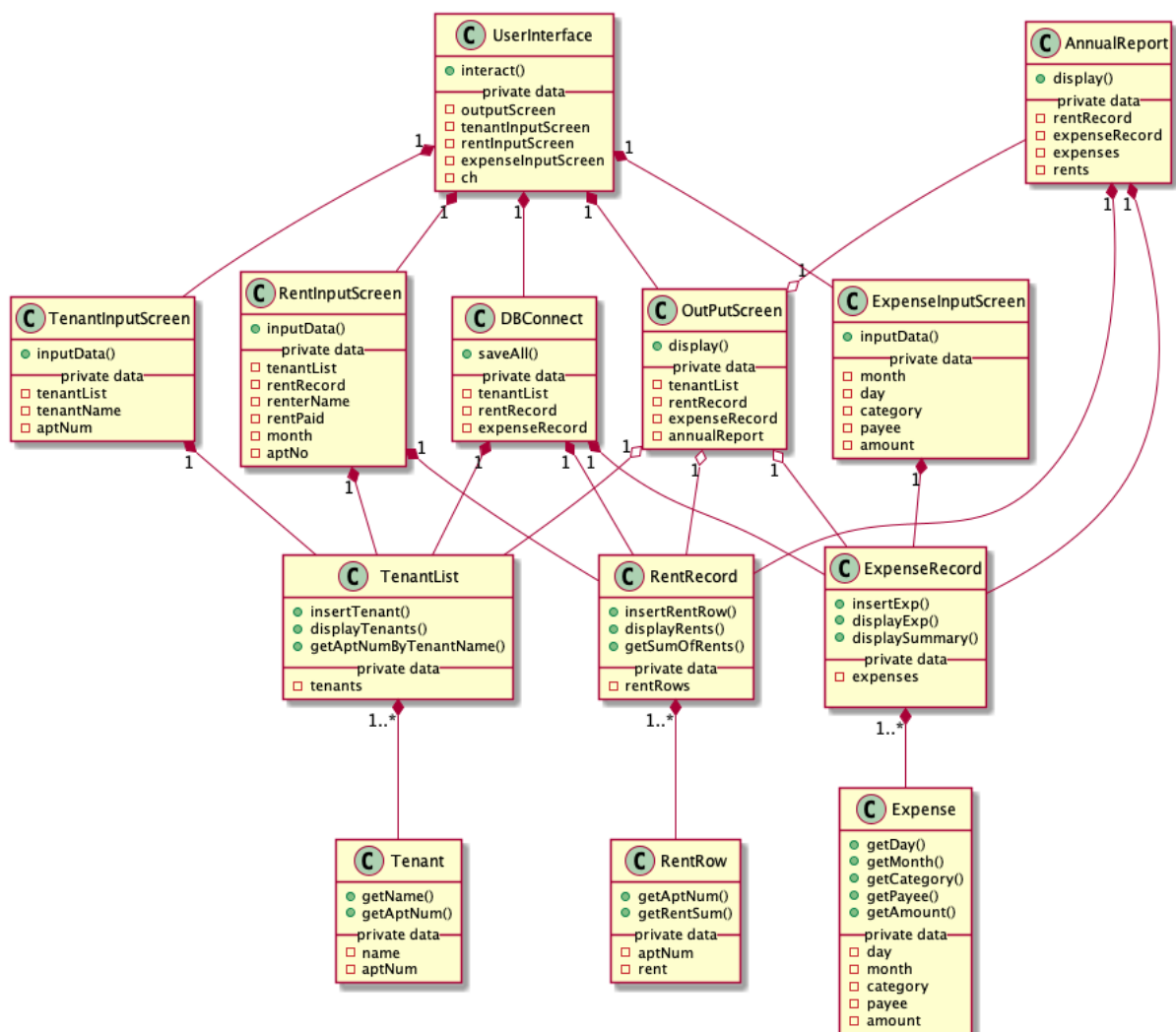
A narrative that describes the overall class diagram.



UserInterface will have TenantatInputScreen, RentInputScreen, OutputScreen, and ExpenseInputScreen as its attributes. All attributes of UserInterface class have composition relationships. It uses TenantList, RentRecord, ExpenseRecord, and AnnualReport for displaying purpose. OutputScreen is a class that deals with all display functions. It uses TenantList, RentRecord, ExpenseRecord, and AnnualReport to handle all display functionality. TennatList has one-to-many relationship with the Tenant class, RentRecord has one-to-many relationship with the Record class, and ExpenseRecord has one-to-many relationship with the Expense class,

### 3. All designed classes with attributes and methods.

A narrative that describes the attributes and methods



UserInterface has *interact()* function to start the program. It contains all input screen classes and OutputScreen as its attributes. AnnualReport has *display()* function to display the annual report. The constructor will initialize the values of *expenses* and *rents* attributes. OutputScreen will have the annual report as one of its attributes. Each TenantInputScreen, RentInputScreen, and ExpenseInputScreen has

*inputData()* function to insert data. Need to interact with DB (textfile). OutputScreen has *display()* function and *tenantList*, *rentRecord*, *expenseRecord*, and *annualReport* as its attributes. Depending on UserInterface's *ch* attribute, it will display the appropriate information.