Project 4 Design Document

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| Management Company |
| -name : string  -taxID : int  -mgmFeePer : double  -MAX\_PROPERTY : int  -properties: Property[]  - MGMT\_WIDTH: int 10  -MGMT\_DEPTH : int 10  -plot: Plot |
| +ManagementCompany()  +ManagementCompany(name: String, taxID: String, mgmFee: double)  +ManagementCompany(name: String, taxID:  String, mgmFee: double, x: int, y: int, width: int, depth: int)  +ManagementCompany(otherCompany : ManagementCompany)  +addProperty(property: Property): int  +addProperty ( name: String, city: String,  rent: Double, owner: String): int  +addProperty(name: String, city: String, rent: double, owner: String, x: int, y: int, width : int, depth : int) : int  +displayPropertyIndex(i: int): String  +getMax\_Property() : int  +maxRentProp() : double  +maxRentPropertyIndex() : int  +toString() : String  +totalRent() : double |

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| Plot |
| -x: int  -y: int  -width: int  - depth: int |
| +Plot ()  +Plot (p : Plot)  +Plot (x: int, y: int, width: int, depth: int)  +overlaps(plot: Plot) : boolean  +encompasses(plot: Plot) : boolean  +sexX(x: int) : void  +getX() : int  +setY (y: int) : void  +getY (y: int) : int  +setWidth(width: int) : void  +getWidth() : int  + setWidth(depth: int) : void  +getDepth() : int  +toString() : String |

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| Property |
| -city : String  -owner: String  -propertyName: String  -rentAmount: double  -plot : Plot |
| +Property ()  +Property (p: Property)  +Property (propertyName: String, city: String, rentAmount: double, owner: String)  +Property(propertyName : String, city: String, rentAmount: double, owner: String, x: int, y: int, width: int, depth: int)  +getCity() : String  +getOwner() : String  +getPropertyName() : String  +getRentAmount() : double  +setPlot(x: int, y: int, width: int, depth: int) : plot  +setCity(city : String) : void  +setOwner(owner : String) : void  +setPropertyName (propertyName : String) : void  +setRentAmount ( rentAmount : double) :void  +toString() : String |