

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

```
public Plot setPlot (x,y,width,depth)
{
    return Plot(x,y,width,depth);
}
```

```
public void setOwner(owner)
{
    owner=owner;
}
```

```
public double getRentAmount()
{
    return rentAmount;
}
```

```
public void setCity(city)
{
    city=city;
}
```

```
public void setPropertyName(propertyName)
{
    propertyName=propertyName;
}
```

```
public String toString()
{
    print name, city,owner and rentAmount
}
```

```
public void setRentAmount(rentAmount)
{
    rentAmount=rentAmount;
}
```

```
public String getOwner()
{
    return owner;
}
```

```
public String getCity()
{
    return city;
}
```

```
public String getpropertyName()
{
    return propertyName;
}
```

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

```

public boolean overlaps(Plot)
{
    if(plot overlaps parameter)
    {
        return true;
    }
    else return false;
}

```

```

public boolean encompasses(Plot)
{
    if(plot encompasses parameter)
    {
        return true;
    }
    else return false;
}

```

```

public String toString()
{
    print ("Upper left:" + x,y + width : depth)
}

```

```

public int getX()
{
    return x;
}

```

```

public int getY()
{
    return y;
}

```

```

public void setX(int x)
{
    x=x;
}

```

```

public void setY(int y)
{
    y=y;
}

```

```

public int getWidth()
{
    return width;
}

```

```

public int detDepth()
{
    return depth;
}

```

```

public void setWidth()
{
    width=width;
}

```

```

public void setDepth()
{
    depth=depth;
}

```

ManagementCompany
- MAX_PROPERTY : int - mgmFeePer : double - name : string - properties : Property [] - taxID : String - MGMT_WIDTH : int - MGMT_DEPTH : int - 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) + ManagementCompant(otherCompany : ManagementCompany) + addProperty(property : Property) : int + addProperty(name : String, city : Spring, rent : double, owner : String) : int + addProperty(name : Spring, city : String, rent : double, owner : String, x : int y : int, width : int, depth : int)) : int + displayPropertyAtIndex(i : int) : void + getMAX_PROPERTY() : int + maxRentProp() : double - maxRentPropertyIndex(): + toString(): + totalRent() : double

```

public int addProperty(name,city,rent,owner,x,y,width,depth)
{
    int index;
    Property nproperty=new Property;
    properties[index]+=nproperty;

    if(number of properties>5)
    {
        index=-1;
    }
    else if(property=="")
    {
        index=-2;
    }
    else if(!encompasses)
    {
        index=-3;
    }
    else if(overlaps)
    {
        index=-4;
    }

    return index;
}

```

```

private int maxRentPropertyIndex()
{
    int max=0;
    for(int i,i<length.property,i++)
    {
        if(max<property[i])
        {
            max=property[i];
        }
    }
    for(int i:property)
    {
        if(max==property[i])
        {
            int index=i;
        }
        return index;
    }
}

```

```

public int addProperty(property)
{
    Property nproperty=new Property;
    properties[int index]+=nproperty;
}

```

```

public int addProperty(name,city,rent,owner)
{
    Property nproperty=new Property;
    properties[int index]+=nproperty;
}

```

```

public String displayPropertyAtIndex(int i)
{
    print(property [i]);
}

```

```

public int getMAX_PROPERTY
{
    return MAX_PROPERTY;
}

```

```

public double maxRentProp()
{
    return property[maxRentPropertyIndex()];
}

```

```

public void toString()
{
    print ("List of properties for" name,taxID)
    for(int i: property)
    {
        print("Property Name:" property[i])
    }

    print("total management fee:" totalRent());
}

```

```

public double totalRent()
{
    for(int i:properties)
    {
        double tRent+=rentAmount.property[i]
    }
    return tRent;
}

```