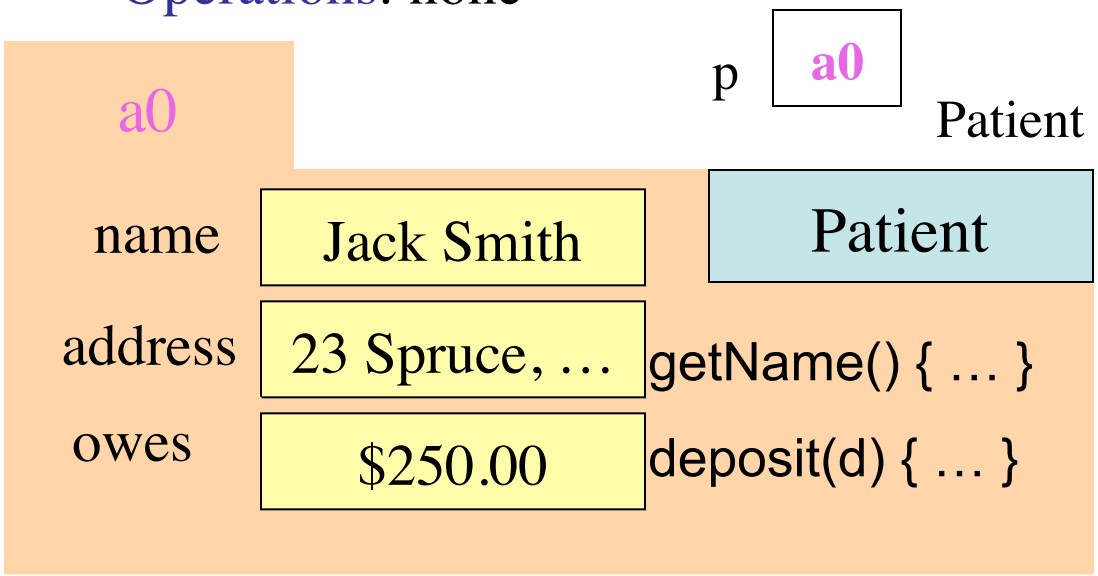
Method calls

A class is also a type

Patient: a type (as well as a class)

Values: names appearing in tabs of objects

Operations: none



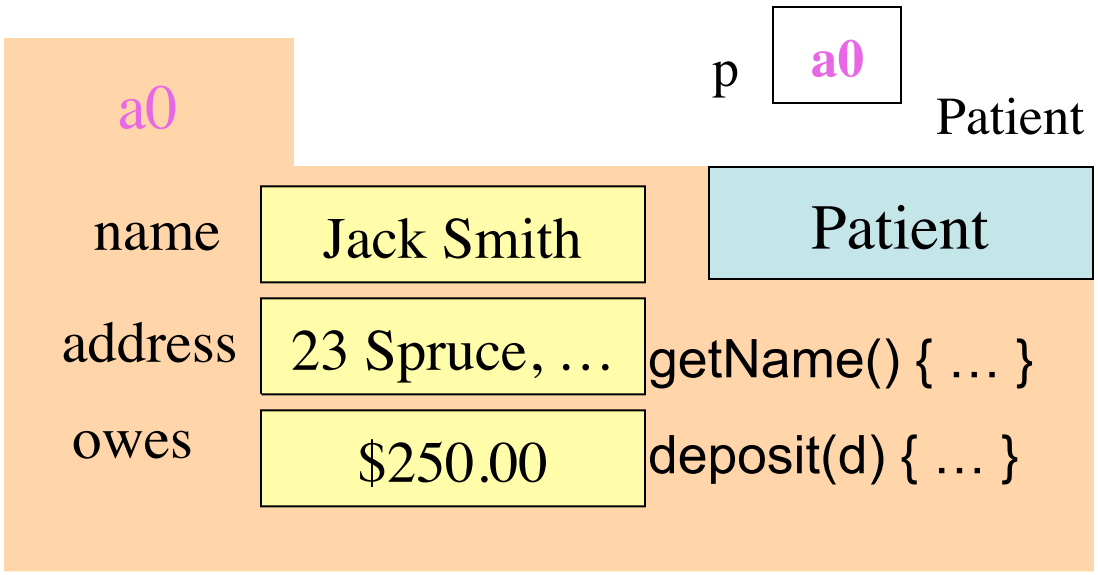
function call: p . getName()

procedure call: p . deposit(250.00) ;

General form:

<variable-name> . <method-name> (…) ;

Referencing fields



reference field name: p . name

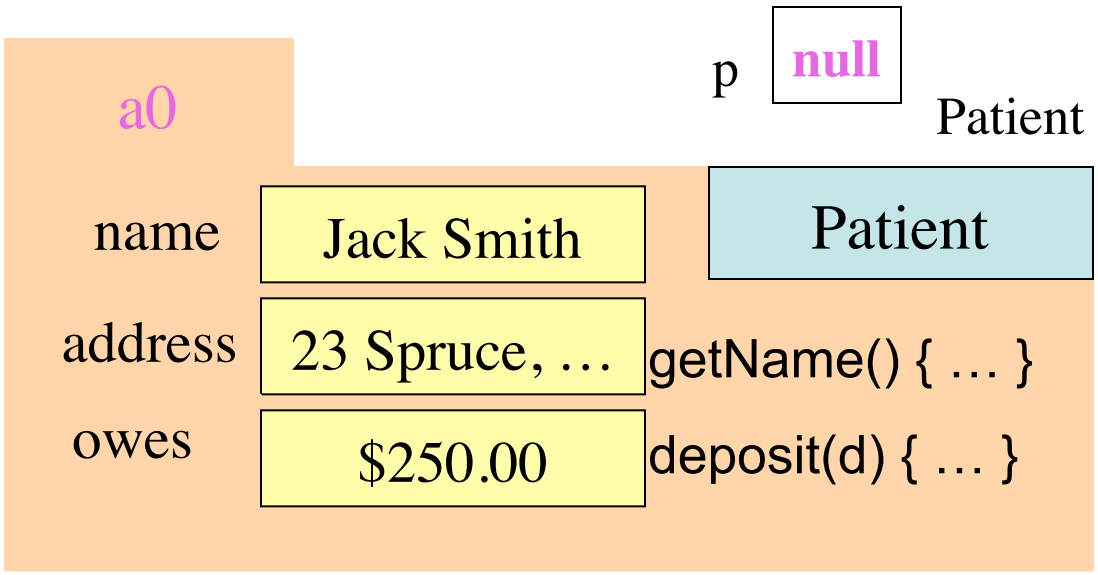
Example of use: s= p.name;

reference field name: p . owes

Example of use: p.owes= p.owes – 250;

Common practice is *not* to reference fields but to use only the methods of p. Fields can be made "private" so they cannot be accessed this way. We discuss the reasons for this later.

The value null



Patient p;

declaration of p

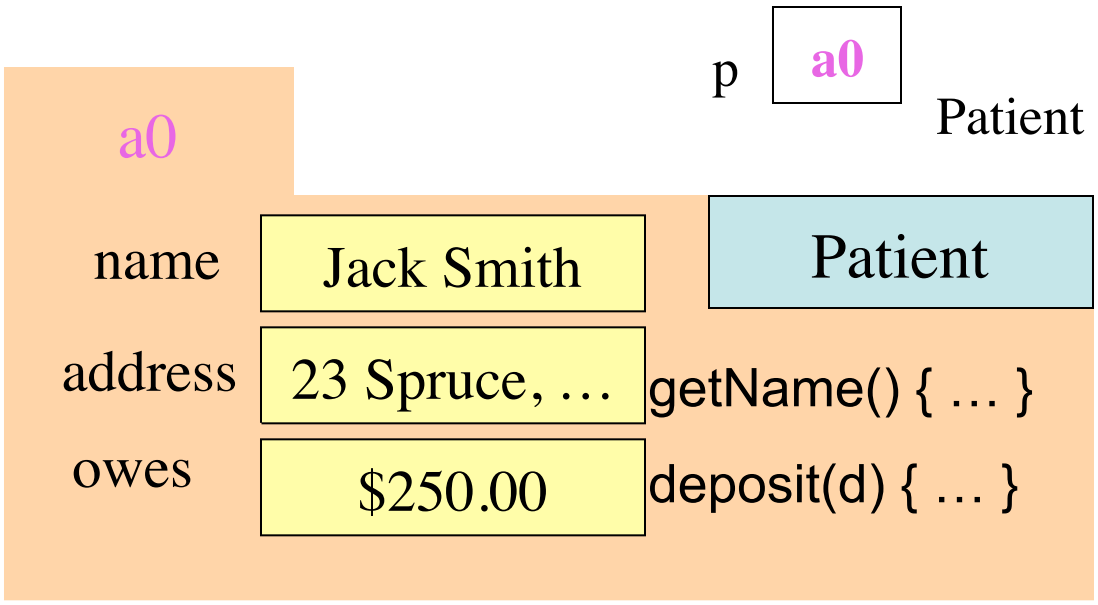
p.getName();

NullPointerException!!!!

null means the absence of an object name.

You can't reference a component (method or field) of a non-existent object.

Creating an object



Patient p;

declaration of p

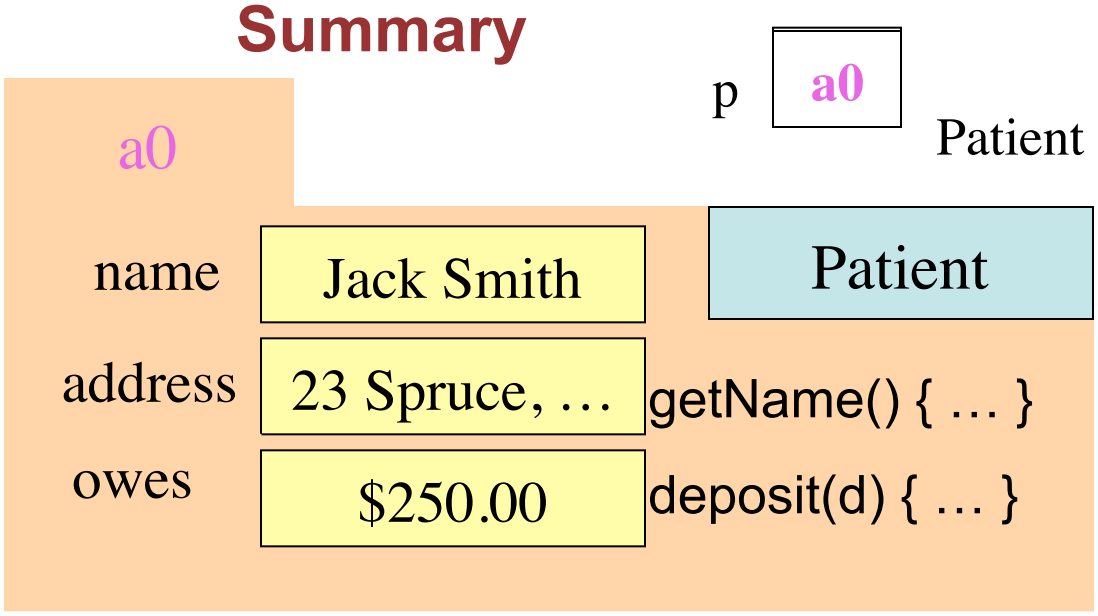
p= **new** Patient() ;

a0

Evaluation of **new** Patient():

1. Create new manila folder of class Patient
2. Yield as value the name on the tab of the new folder.

Summary



1. Referencing a component of a manila folder (object) whose name is in a variable.

```
p.getName()
p.deposit(250);
p.owes
```

2. Value **null** in a variable means the absence of the name of an object.

3. To evaluate **new** Patient()
   (a) Create (draw) a folder of class Patient;
   (b) Yield name of folder as the result.