

# CONTAINERS

(SEQ)

QList<T>

QLinkedList<T>

QVector<T>

(ASS)

QMap<key, T>

QHash<Key, T>

T → ASSIGNABLE DATA TYPE

BASIC  
TYPES

PUBLIC DEF CONST  
COPY CONS  
ASSIGN. OPERATOR

QObject → NO

ASSIGNABLE DATA  
TYPE

QFile

→ QList<QFile\*>

SEC 6.9

MANAGED CONTAINER



COMPOSITE RELATIONSHIP

DELETING

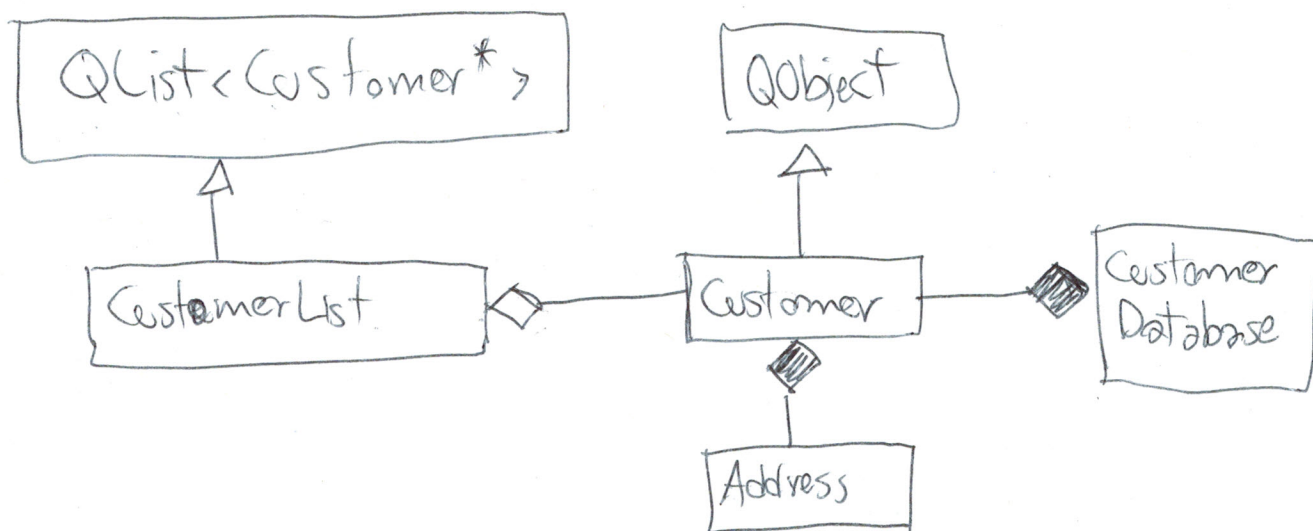
`deleteAll()`

container class

UNMANAGED CONTAINER

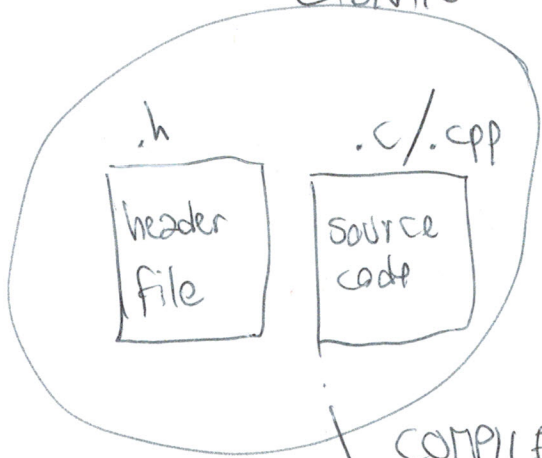


AGGREGATE RELA.



# CHAP 7

## LIBRARY



COMPILER

object  
code

~~multiple~~

①

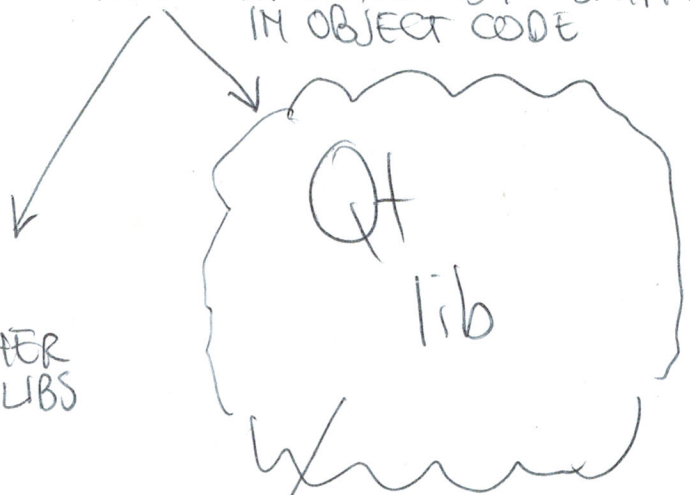
LINKER

②

③

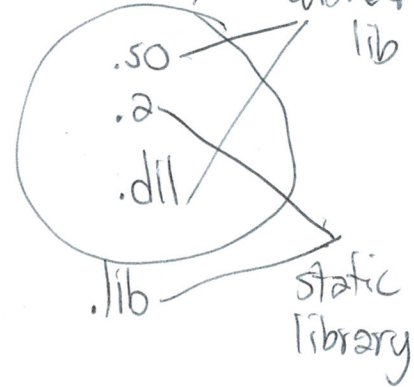
executable

THESE ARE ALREADY SHIPPED  
IN OBJECT CODE



OTHER  
LIBS

/lib/  
/usr/lib  
/lib64/



# FORWARD DECLARATION (p240)

```
#include "classb.h"
```

```
class ClassC;
```

FORWARD  
DECL.  
of ClassC

```
class ClassA : public ClassB {
```

```
public:
```

```
    ClassC* f1(something);
```

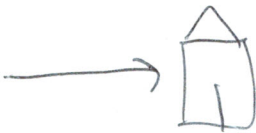
```
    ...
```

```
}
```

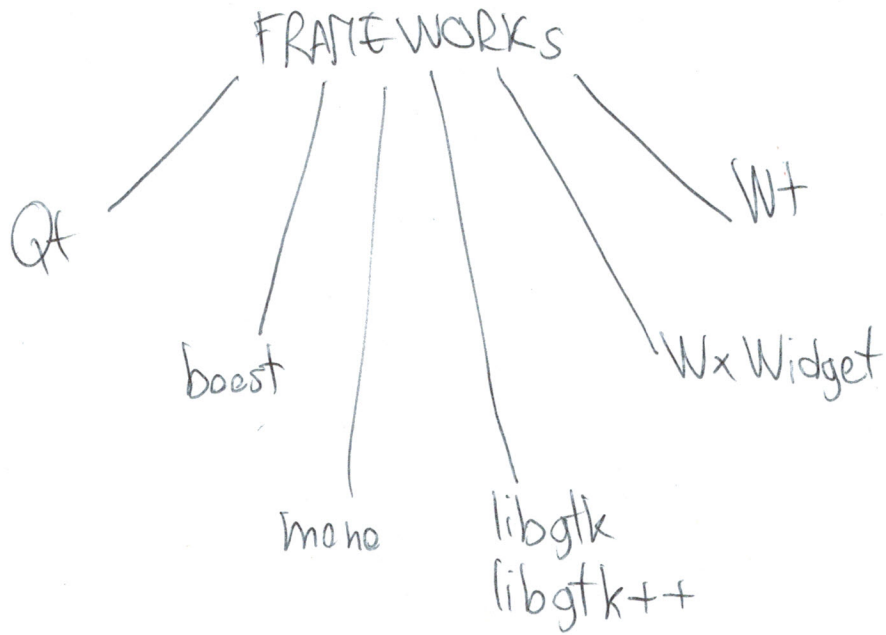
---

static

extern



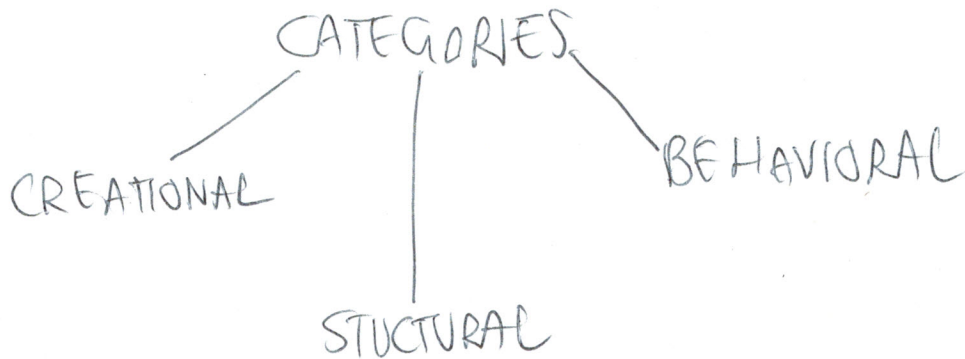
## SEC 7.3



## SEC 7.4

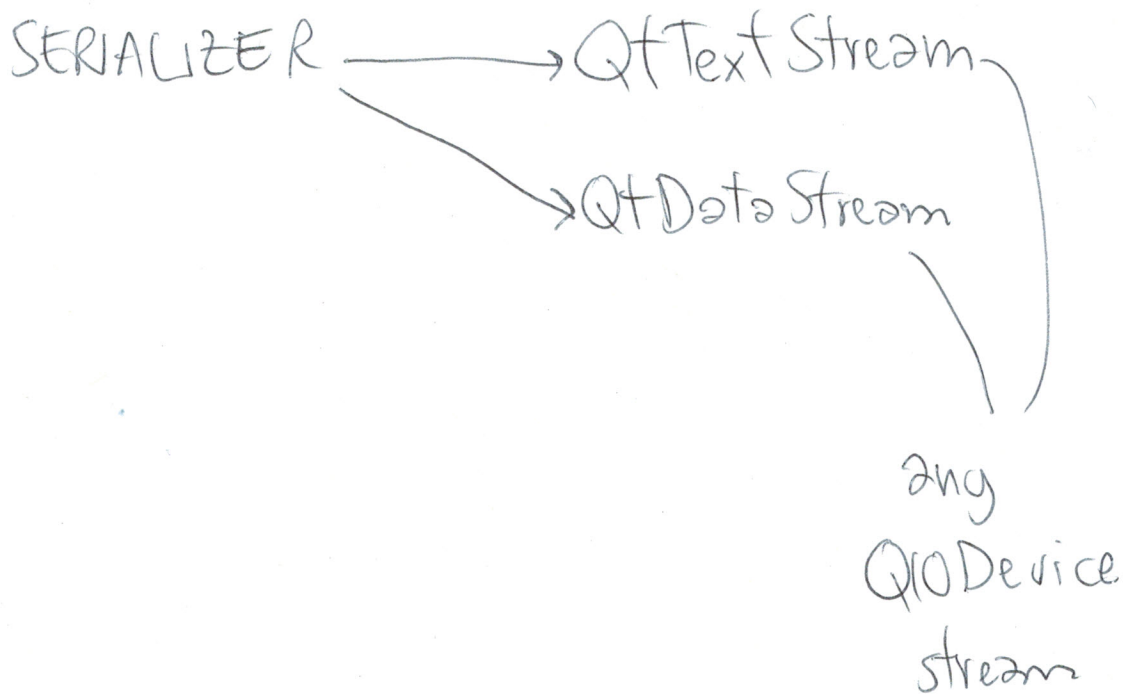
Gamma 1995

23 design pattern



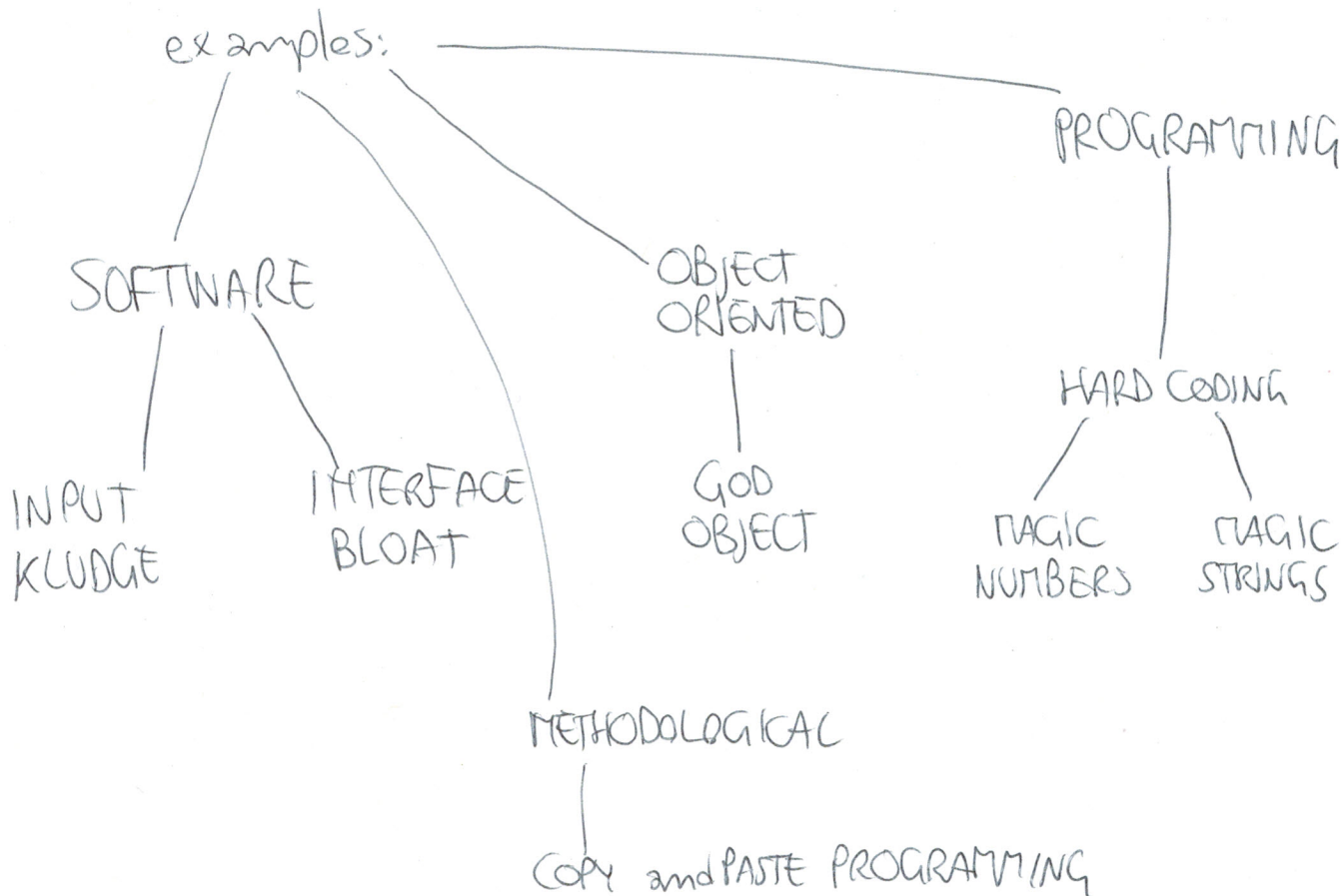
## SEC 7.4.1

SERIALIZER

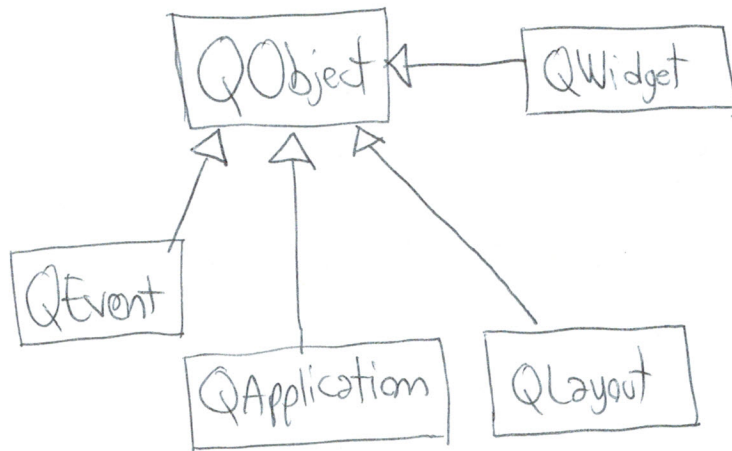


## SEC 7.4.2 ANTI PATTERN

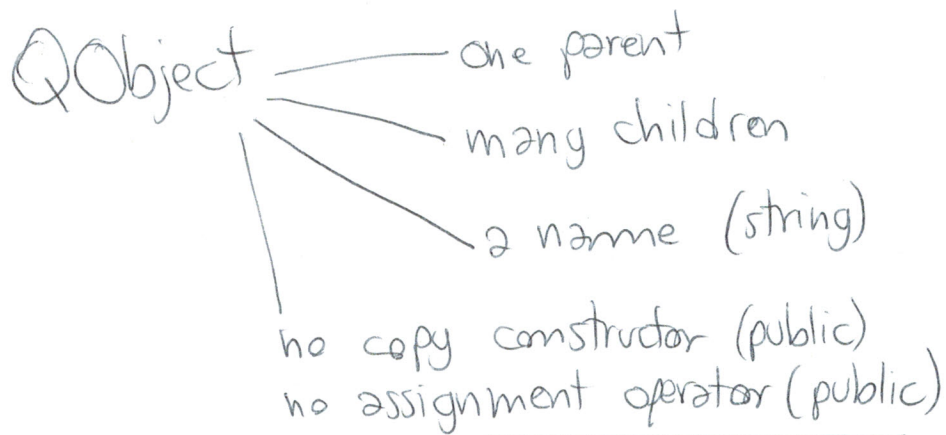
EXTENSIVE LIST on WIKIPEDIA



# CHAP 8 QObject, QApplication



qtbase/src/corelib/kernel/qobject.h ← Qt SRC CODE



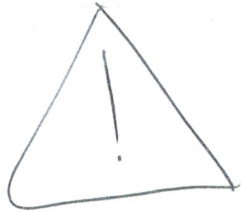
EACH QObject INSTANCE  
IS UNIQUE!

```
class QObject {  
public:  
    explicit QObject(QObject* parent=0);  
    QObject* parent() const;  
    QString objectName() const;  
    void setParent(QObject* parent);  
    const ObjectList& children() const;
```



THERE IS A RELATIONSHIP  
TREE BETWEEN OBJECTS!

|  
OBJECT INSTANCES



WHICH IS THE DIFFERENCE  
BETWEEN PARENT/CHILDREN  
and BASE CLASS/SUBCLASS  
RELATION?



NOTE on page 261

RUNTIME  
RELA

COMPILE/DESIGN  
TIME RELA