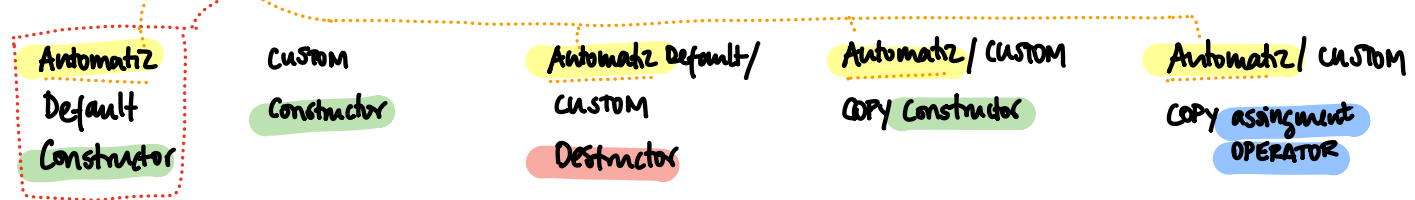


Automatiz: if not explicitly done, all these 4 are created for us

BUT: 1. We can overload them any time, in which case they are not automatiz

2. The automate default constructor is not created if we explicitly create any other constructor; so don't forget doing it if we create another constructor!



Typical form

`ClassName()`

`~ClassName()`

Examples of usage (when are they called?)

`ClassName c;`

`ClassName c;  
.....  
ClassName C(1);`

When stack destroyed

`ClassName c1;  
ClassName c2(c1);`

`ClassName c1;  
ClassName c2 = c1;`

Implementation examples (if custom)

`ClassName::ClassName()  
{ //no need to  
do anything  
.....  
ClassName::ClassName  
(int i)  
{ m_var = i; }`

`ClassName::~~ClassName()  
{ //delete if necessary  
// no return`

`ClassName::ClassName  
(const ClassName& rv)  
{ m_var = rv.m_var; }`

`ClassName&  
ClassName::operator=  
(const ClassName& rv)  
{ m_var = rv.m_var;  
return *this; }`

Notes, guidelines

Implement them always if another constructor is implemented!

Note that any time we explicitly define a constructor its implementation must be added too! At least with  $\emptyset$  initialization

We might want to implement them if some delete is required

We might want to implement it if we want control of which variables are copied & how

We might want to implement it if we want control of which variables are copied & how