

Final Reflection

Theme of Game: Mindhunter –The Game (based on Netflix show sort of)

Game design

User is an FBI agent on the hunt for serial killer named Donald “the Splittsville Splitter” (known to split victim’s bodies in half.)

The goal is to catch Donald the Splittsville splitter. Time limit of 24 hours before killer leaves town.

The setting is the town of Splittsville.

Space class

- 1) Splittsville Police department. (top)
class Detective -- interact with detective on case.
create a random competence function for detective
the more competent the better the evidence collected.
1 = incompetent, 2 = somewhat incompetent 3 = competent
if 3 – best evidence collected etc.
- 2) The junk yard (where victim body found).
class interrogate junk yard manger
if junk yard manager
says he saw van with yellow stripes.
go to apartment of killer.
else go back to police station.
- 3) Apartment of killer (bottom)
if killer in house arrest him
chances of arresting him are greater if detective is competent and van with yellow stripes
parked outside.
- 4) Jail
execute class
Donald the Splittsville Splitter is electrocuted in electric chair.

Test case	Input values	Driver functions	Expected outcome	Observed outcome
Interact with detective at police station	1	mindhunter, menu	Display any evidence (items). List items. Display next space menu	Everything except next space menu option
Interrogate junk yard manager	2	mindhunter, menu	Should display location and generate manager response	As expected
Go to serial killer's apt.	3	Mindhunter menu	Display location and items (evidence) found	C++ 11 error makefile updated to compile c++11
Execute serial killer	-	Mindhunters, others	Display 'serial killer has been executed via electrocution'	As expected

Reflection -----

This project was fun albeit a bit ambitious on my part. The game play is not advanced but it gets the job done. Since, the scope of this project was cumulative of prior projects—I didn't feel to overwhelmed, more of just wanting to get it over with.

I used a lot of menus to keep track of the game play and spaces. I got some nasty errors regarding Classes/namespaces:

```

else return Items::NONE;
^
detective.cpp: In member function 'virtual Items Detective::action()':
detective.cpp:24:22: error: 'Competence' is not a class or namespace
   if (competence() >= Competence::COMPETENT)
                        ^
detective.cpp:26:10: error: 'Items' is not a class or namespace
   return Items::APARTMENT_ADDRESS;
          ^
detective.cpp:30:27: error: 'Competence' is not a class or namespace
   else if (competence() >= Competence::SOMEWHAT_INCOMPETENT)
                           ^
detective.cpp:32:10: error: 'Items' is not a class or namespace
   return Items::FINGERPRINTS;
          ^
detective.cpp:36:27: error: 'Competence' is not a class or namespace
   else if (competence() >= Competence::INCOMPETENT)
                           ^
detective.cpp:38:10: error: 'Items' is not a class or namespace
   return Items::KNIFE;
          ^
detective.cpp:43:10: error: 'Items' is not a class or namespace
   return Items::NONE;
          ^
detective.cpp: In member function 'int Detective::competence()':
detective.cpp:49:20: error: 'Competence' is not a class or namespace
   int x = (rand() % Competence::COMPETENT) + 1;
                      ^

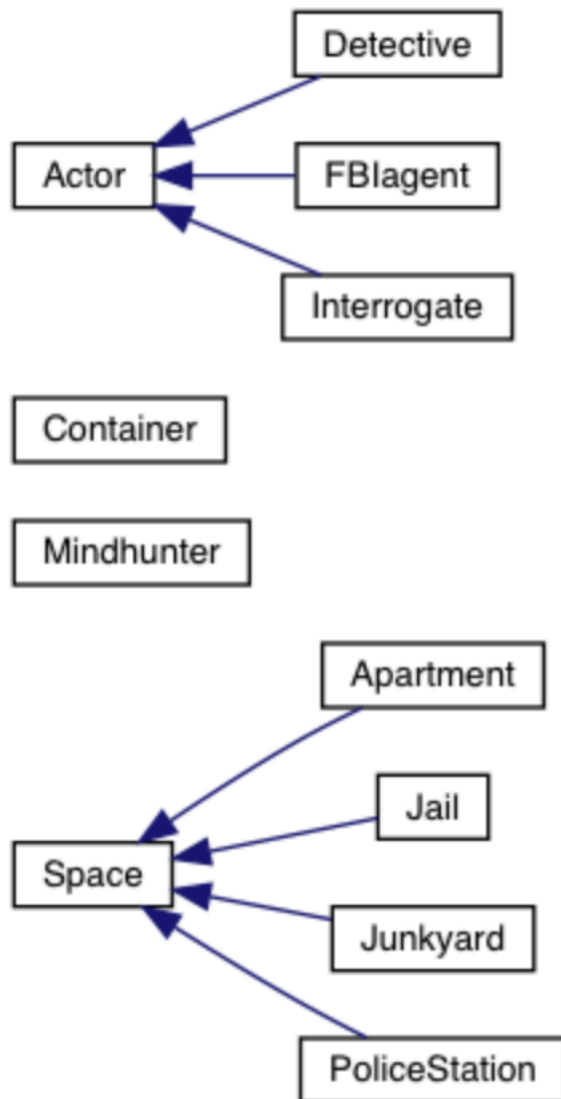
```

but updating the makefile to compile using C++11 did the trick. I am not sure if this proper try to code using enums but C++11 took it.

I learned a lot in CS 162 and I feel much better going into whatever is next.

Class Hierarchy

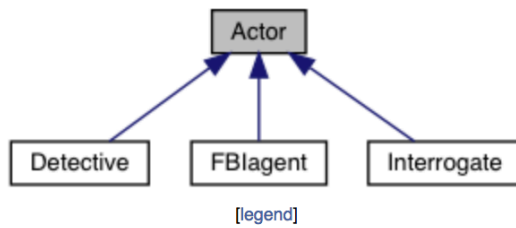
[Go to the textual class hierarchy](#)



Actor Class Reference abstract

Public Member Functions | List of all members

Inheritance diagram for Actor:



Public Member Functions

virtual Items **action** ()=0

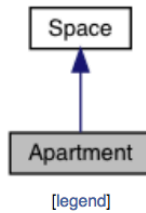
The documentation for this class was generated from the following files:

- [actor.hpp](#)
- [actor.cpp](#)

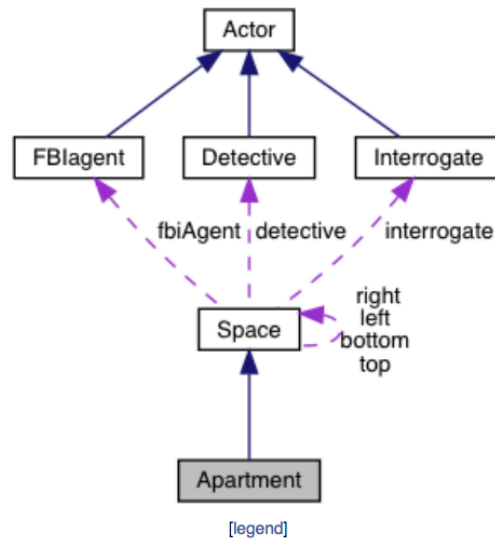
Apartment Class Reference

Public Member Functions

Inheritance diagram for Apartment:



Collaboration diagram for Apartment:



Container Class Reference

Public Member Functions | Static Public Attributes |

List of all members

Public Member Functions

bool	addItem	(Items item)
Items	getItem	(int index)
int	getNumItems	()
bool	hasItem	(Items item)

Static Public Attributes

static const int	MAX_ITEMS	= 10
------------------	------------------	------

The documentation for this class was generated from the following files:

- [container.hpp](#)
- [container.cpp](#)

Detective Class Reference

Inheritance diagram for Detective:



[legend]

Collaboration diagram for Detective:



[legend]

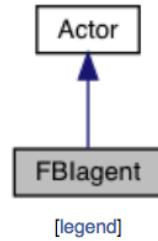
Public Member Functions

Items **action ()**

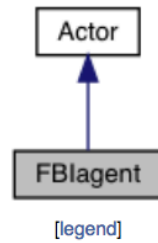
The documentation for this class was generated from the following files:

- [detective.hpp](#)
- [detective.cpp](#)

Inheritance diagram for FBlagent:



Collaboration diagram for FBlagent:



Public Member Functions

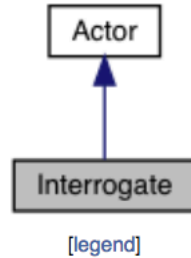
Items	action ()
void	addItem (Items item)
bool	hasItem (Items item)
void	showContainer ()

The documentation for this class was generated from the following files:

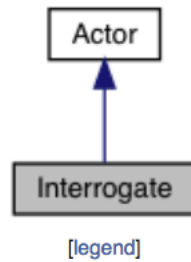
- **fbiagent.hpp**
- fbiagent.cpp

Interrogate Class Reference

Inheritance diagram for Interrogate:



Collaboration diagram for Interrogate:



Public Member Functions

Items **action ()**

The documentation for this class was generated from the following files:

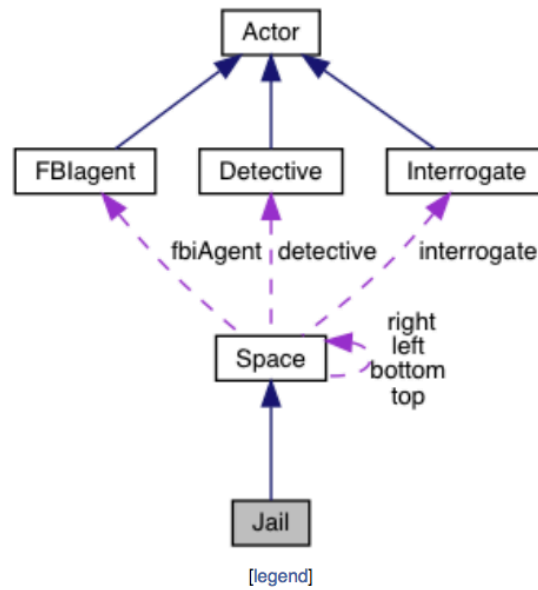
- [interrogate.hpp](#)
- [interrogate.cpp](#)

Jail Class Reference

Inheritance diagram for Jail:

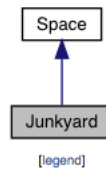


Collaboration diagram for Jail:

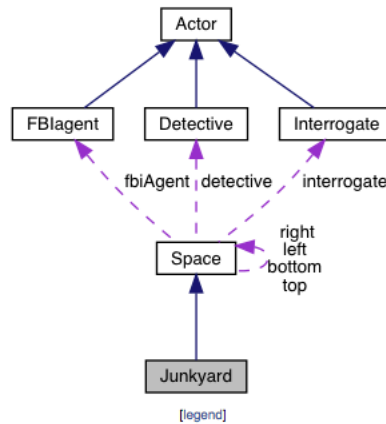


Junkyard Class Reference

Inheritance diagram for Junkyard:



Collaboration diagram for Junkyard:



Public Member Functions

```
void menu ()  
void action ()
```

► Public Member Functions inherited from **Space**

Additional Inherited Members

► Public Attributes inherited from **Space**

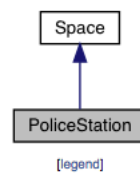
► Static Protected Attributes inherited from **Space**

The documentation for this class was generated from the following files:

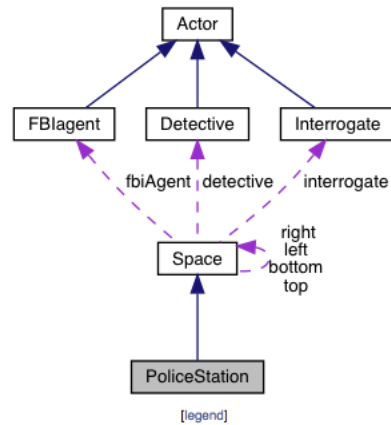
- [junkyard.hpp](#)
- [junkyard.cpp](#)

PoliceStation Class Reference

Inheritance diagram for PoliceStation:



Collaboration diagram for PoliceStation:



Public Member Functions

void **menu** ()

► **Public Member Functions Inherited from Space**

Additional Inherited Members

► **Public Attributes Inherited from Space**

► **Static Protected Attributes Inherited from Space**

The documentation for this class was generated from the following files:

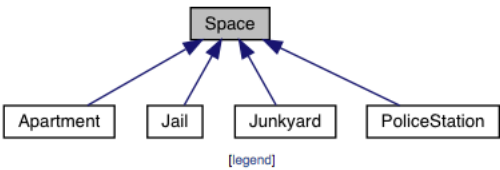
- [policestation.hpp](#)
- [policestation.cpp](#)

Space Class Reference

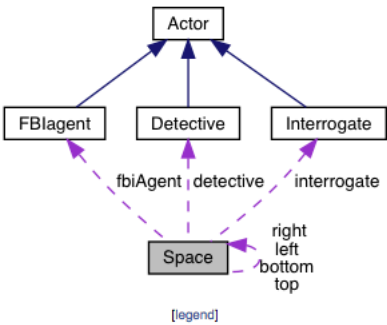
abstract

Public Member Functions | Public Attributes | Static

Inheritance diagram for Space:



Collaboration diagram for Space:



Public Member Functions

```
virtual void menu ()=0
void timeOut ()
```

Public Attributes

```
Space * top
Space * right
Space * left
Space * bottom
```

Static Protected Attributes

```
static FBIAgent fbiAgent
static Detective detective
static Interrogate interrogate
static int turn =0
static const int MAX_TURNS = 24
```

Mindhunter Class Reference

Public Member Functions

```
void start ()
```

```
void introduction ()
```

```
void menu ()
```

The documentation for this class was generated from the following files:

- [mindhunter.hpp](#)
- mindhunter.cpp