

# Just random notes

b0th

August 2, 2021

## Runtime

Runtime describes software/instructions that are executed while your program is running, especially those instructions that you did not write explicitly, but are necessary for the proper execution of your code.

## KISS *Keep It simple, stupid*

The KISS principle states that most systems work best if they are kept simple rather than made complicated.

## Container

Group of namespaces and control groups applied to a process.

## Linux kernel namespace

Limit what the process sees, here some namespaces

- item
- pid
- net
- mnt
- uts
- ipc
- user

C functions to manage them

- clone()
- unshare()

## Linux kernel cgroup *Control group*

Limit what the process can use, here some cgroups

- memomry
- CPU
- network
- devices
- pids

## C++ inheritance class

Single inheritance

```
class Rectangle: public Shape {
public:
    int getArea() { return (width * height); }
};
```

Multiple inheritance

```
class Rectangle: public Shape1, Shape2, Shape3 {
public:
    int getArea() { return (width * height); }
};
```

## C++ namespace

Namespaces allow to group entities like classes, objects and functions under a name. Example of declaration

```
namespace myNamespace
{
    int a = 0;
}
```

Usage

```
cout << myNamespace::a << endl
```

**C++ cout** *character out*

**C++ endl** *end line*