Modern C++

## @klmr

Don't use f*cking pointers.

No, seriously.

```
int* pi = new int;
```
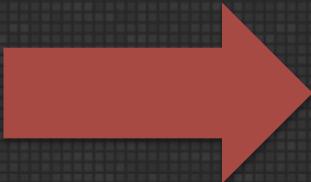


```
int i;
```

```
int* arr = new int[1024];
```

```
std::array<int, 1024> arr;
```

```cpp
int* arr = new int[n];
```
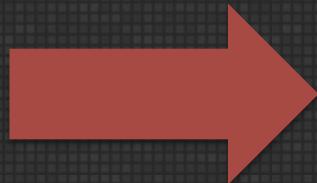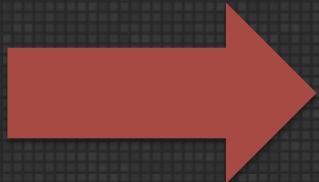
```cpp
std::vector<int> arr(n);
```

```
char* str = new char[1024];
```
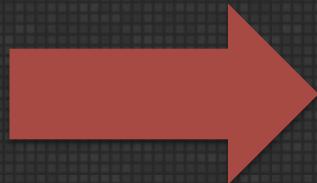
```
std::string str;
```

```
void draw_shape(Shape const* shape);
draw_shape(new Rectangle);
```
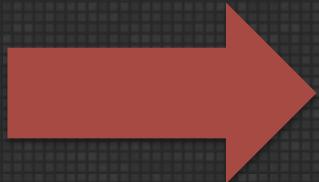


```
void draw_shape(Shape const& shape);
draw_shape(Rectangle());
```

```
huge_object* build_new_object() {
   huge_object* ret = new huge_object;

   …
   return ret;
}
```
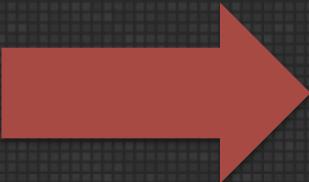
```
huge_object build_new_object() {
   huge_object ret;

   …
   return ret;
}
```

```
struct owner {
  resource* pr;
  owner() : pr(new resource) { }
  ~owner() { delete pr; }
};
```
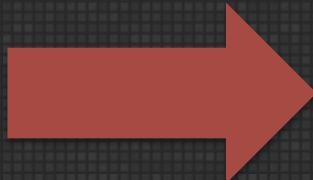


```
struct owner {
  std::unique_ptr<resource> r;

  owner() : r(new resource) { }
};
```

```cpp
struct owner {
  resource* pr;
  owner() : pr(new resource) { }
  ~owner() { delete pr; }
};
```
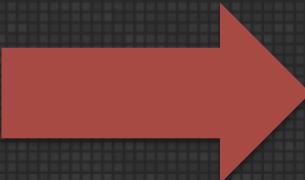


```cpp
struct owner {
  std::shared_ptr<resource> r;

  owner() : r(make_shared<resource>()) {}
};
```

Pointers

must. **not**. own.

resources.

That's it.