

Cow.hpp and Barn.hpp

Last time, we had a (relatively) simple `Barn` class:

```
class Barn {  
  
    public:  
        Barn();  
        Barn(const Barn& otherBarn);  
        ~Barn();  
  
        void visit()const;  
        void addCow(const string& cowName);  
        bool hasCow(const string& cowName)const;  
  
private:  
size_t N;  
private:  
        Cow* cows_;  
}
```

along with the definition of a `Cow` class:

```
class Cow {  
public:  
  
    Cow() = default;  
    ~Cow() = default;  
    Cow(const std::string& cowName);  
  
private:  
    std::string name_;  
};
```

Looping Through a Barn

How can we print all of the `Cow`s in the `Barn`?

```
int main()  
{  
    Barn b;  
    b.addCow("bessie");  
    b.addCow("mabel");  
  
    for (                ) {  
        cout <<          << endl;  
    }  
  
    return 0;  
}
```

Interface, Encoding, and Implementation

Interface should not "leak"
encoding information!

Iterators

– An Iterator is....

← a class
handle moving through a data structure

– We need to change the Barn class by...

We also need to be sure to...

Class Exercise: Implementation