Structs versus Classes
Similarities

- Both can have public and private sections
Similarities

- Both can have public and private sections
- Both can hold member variables
Similarities

- Both can have public and private sections
- Both can hold member variables
- Both can hold member functions
Differences

- Struct members default to public
Differences

- Struct members default to public
- Class members default to private
Equivalent Examples

```cpp
struct boot
{
    float m_size;
    float m_heelheight;
};

struct boot
{
    public:
    float m_size;
    float m_heelheight;
};

class boot
{
    public:
    float m_size;
    float m_heelheight;
};
```
Equivalent Examples

class table
{
    private:
        int m_numLegs;
        float m_topArea;
    public:
        void fold();
};

class table
{
    
        int m_numLegs;
        float m_topArea;
    public:
        void fold();
};

struct table
{
    
        void fold();
    private:
        int m_numLegs;
        float m_topArea;
};
Traditionally

- Classes are used when you need an object that has functionality
- Structs are used when you need an object that is composed entirely of public variables
- This is a hold-over from the C programming language when there were no classes and structs could not provide functionality
End of Session