

Philip Pesic

Week 6

September 25 2022

Week 6 Prog 2

Convert problems 3,5,6,7 in to template classes, of week 5.

Test each with Implicit int, float, double, long int.

```
//
```

```
// main.cpp
```

```
// Week 6 Prog 2
```

```
//
```

```
// Created by Pippo Pesic on 9/25/22.
```

```
//
```

```
//
```

```
#include <iostream>
```

```
using namespace std;
```

```
template <class T>
```

```
class Rectangle {
```

```
    T width, height;
```

```
public:
```

```
    void set_values (T x,T y) {
```

```
        width = x;
```

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```
        height = y;

    };

    T area() {

        T answer = width * height;

        // complete this function so the code works

        return answer;

    }

};
```

```
int main () { // Use this driver program

    // Use set_values function to set values

    Rectangle<float> rect1;

    rect1.set_values (5,6);

    cout << "area: " << rect1.area() << endl;

    // Use set_values function to set values

    Rectangle<double> rect2;

    rect2.set_values (3,4);

    cout << "area: " << rect2.area() << endl;

    cout << "Philip pesic 9/25/22" << endl;
```

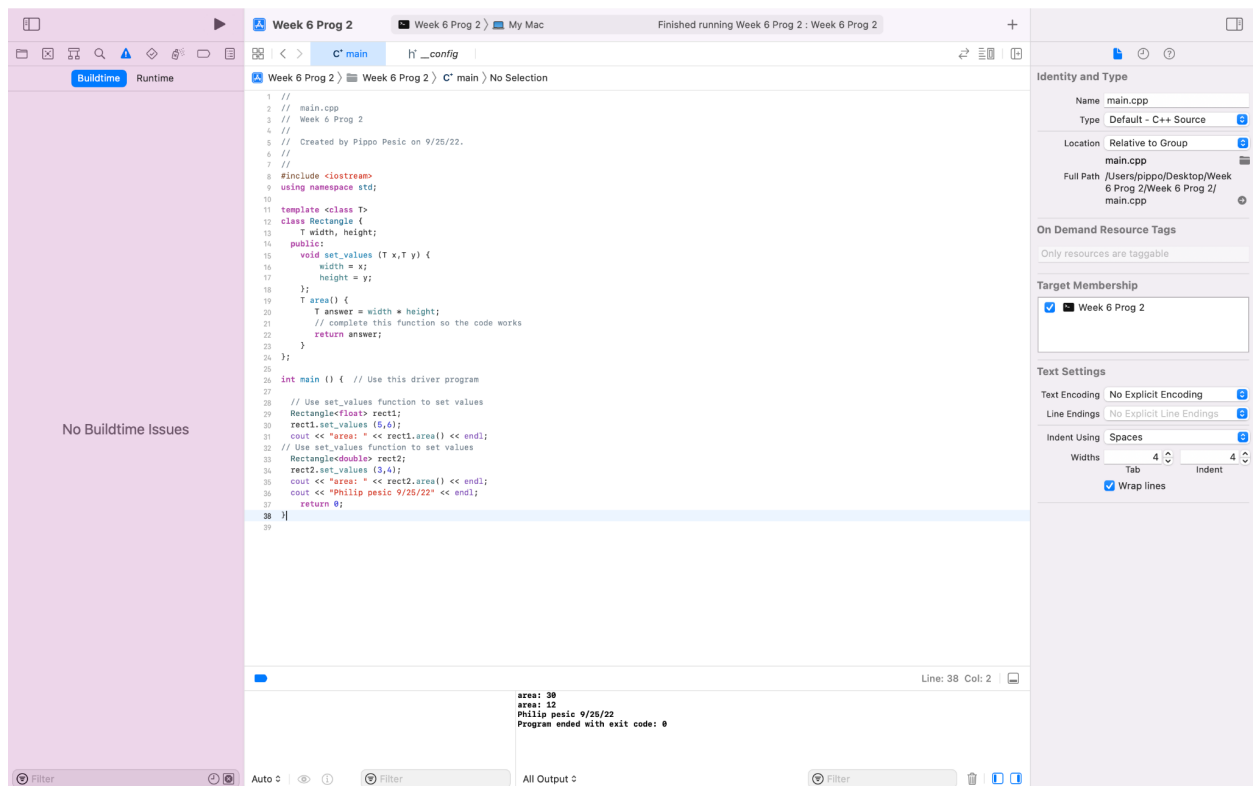
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```
    return 0;
}
```



I learned: how to write templates and template classes

| |
|----------------------------------|
| rectangle |
| -x, y: T -area: T |
| +setValues (x, y: T) return x, y |

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```
+calcArea (x, y: T) return x*y
```