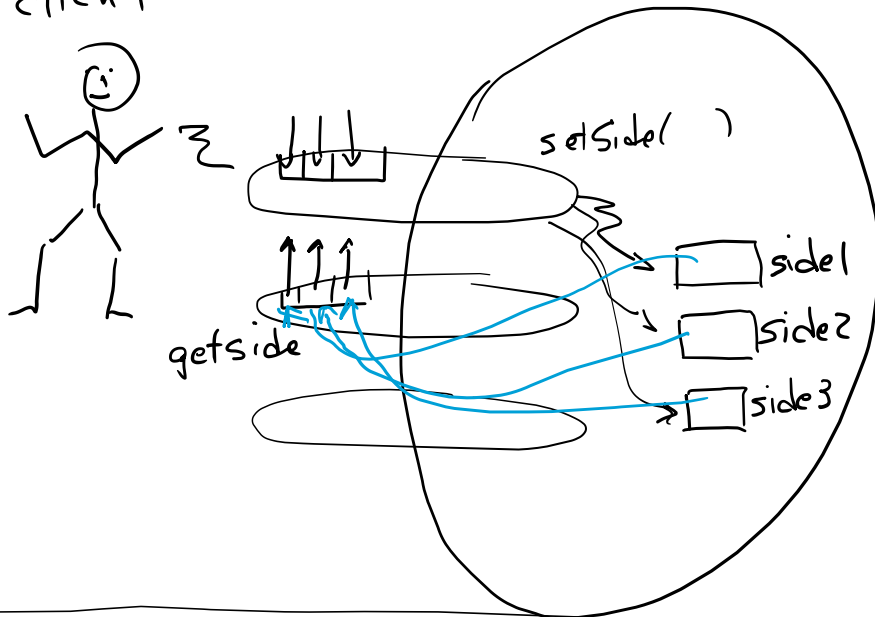
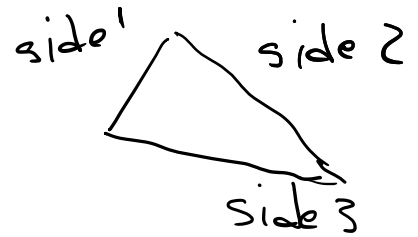


C++ class \rightarrow define a data type \leftarrow Domain (values)
Operations

client

triangle-type



public:

- void setSides(s1, s2, s3)
- void getSides(&s1, &s2, &s3)
- double getPerimeter()
- double getArea()
- string triType()
- triangle()

private:

double side1
double side2
double side3

- $Perimeter = side1 + side2 + side3$
- $SP = Perimeter / 2$
- $Area = \sqrt{SP(SP - side1)(SP - side2)(SP - side3)}$
- $if ((side1 + side2 > side3) \&\& (side2 + side3 > side1) \&\& (side3 + side1 > side2))$
 - $if (side1 == side2 \&\& side2 == side3)$
 - $type = "Equilateral"$
 - $else\ if (side1 == side2 \parallel side1 == side3 \parallel side2 == side3)$
 - $type = "Isosceles"$
 - $else$
 - $type = "Scalene"$

else type = "Not a triangle"