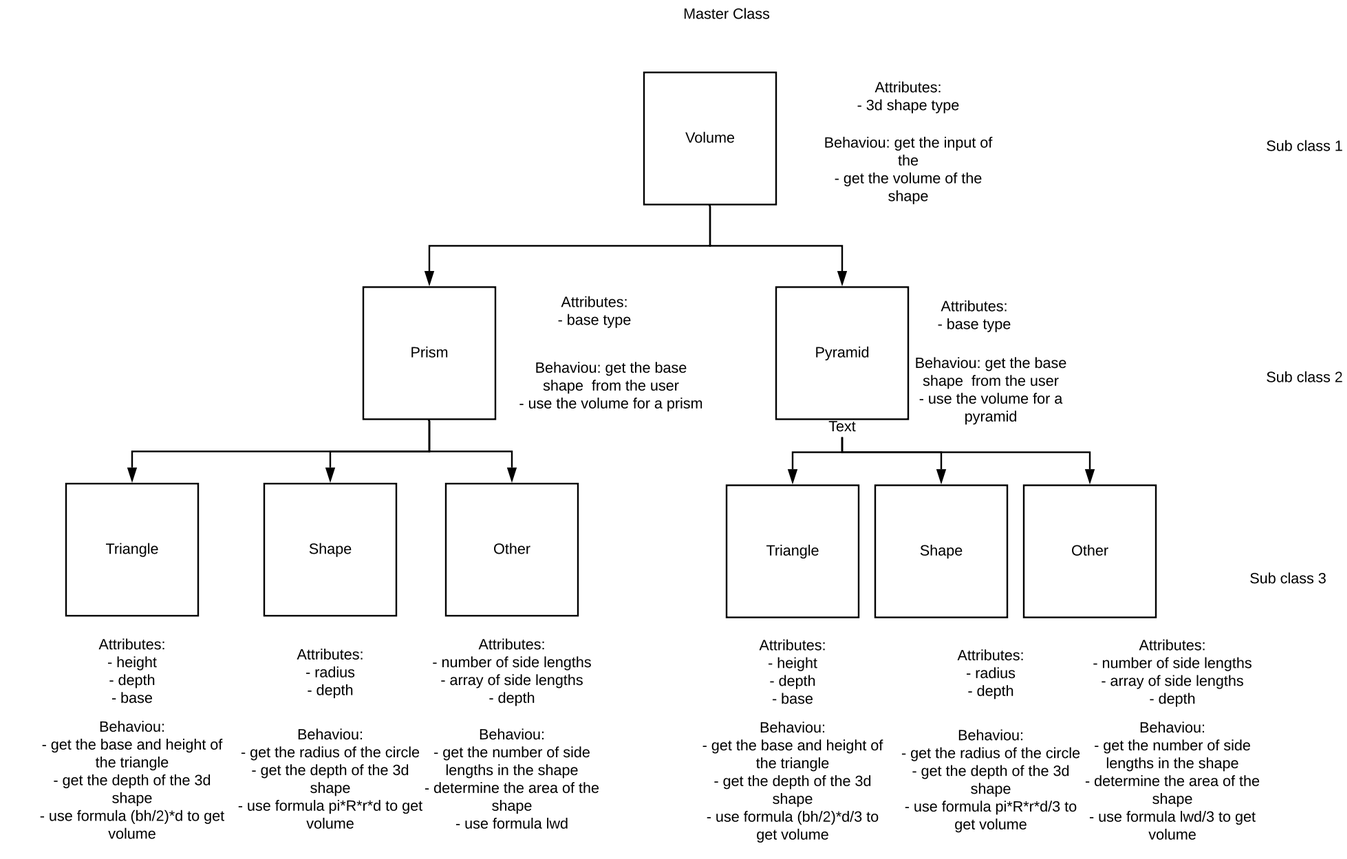
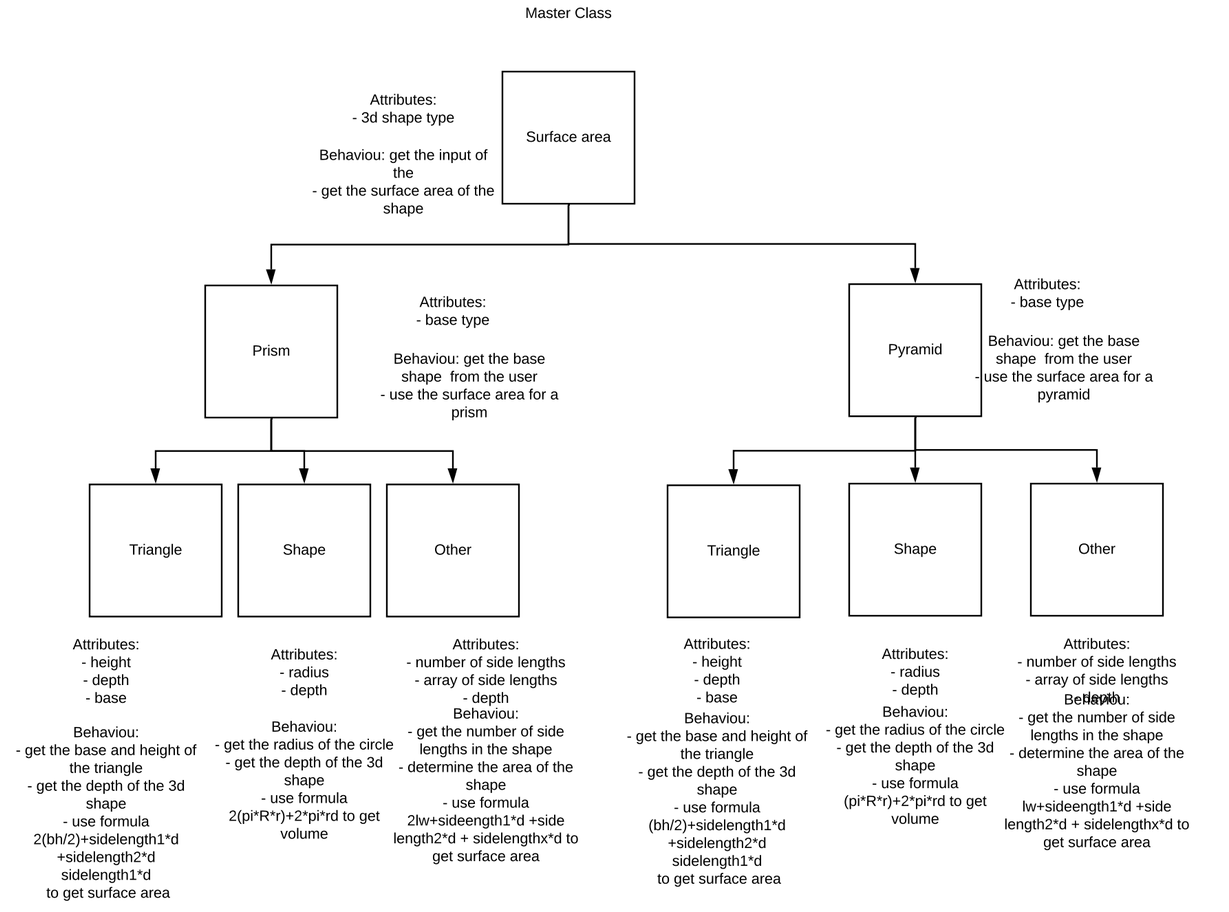

Master Class
Volume
Attributes:
- 3d shape type
Behaviou: get the input of the
- get the volume of the shape
Sub class 1
Prism
Attributes:
- base type
Behaviou: get the base shape from the user
- use the volume for a prism
Pyramid
Attributes:
- base type
Behaviou: get the base shape from the user
- use the volume for a pyramid
Sub class 2
Text
Triangle
Shape
Other
Triangle
Shape
Other
Sub class 3
Attributes:
- height
- depth
- base
Behaviou:
- get the base and height of the triangle
- get the depth of the 3d shape
- use formula (bh/2)*d to get volume
Attributes:
- radius
- depth
Behaviou:
- get the radius of the circle
- get the depth of the 3d shape
- use formula pi*R*r*d to get volume
Attributes:
- number of side lengths
- array of side lengths
- depth
Behaviou:
- get the number of side lengths in the shape
- determine the area of the shape
- use formula lwd
Attributes:
- height
- depth
- base
Behaviou:
- get the base and height of the triangle
- get the depth of the 3d shape
- use formula (bh/2)*d/3 to get volume
Attributes:
- radius
- depth
Behaviou:
- get the radius of the circle
- get the depth of the 3d shape
- use formula pi*R*r*d/3 to get volume
Attributes:
- number of side lengths
- array of side lengths
- depth
Behaviou:
- get the number of side lengths in the shape
- determine the area of the shape
- use formula lwd/3 to get volume


Master Class
Surface area
Attributes:
- 3d shape type
Behaviou: get the input of the
- get the surface area of the shape
Prism
Attributes:
- base type
Behaviou: get the base shape from the user
- use the surface area for a prism
Pyramid
Attributes:
- base type
Behaviou: get the base shape from the user
- use the surface area for a pyramid
Triangle
Shape
Other
Triangle
Shape
Other
Attributes:
- height
- depth
- base
Behaviou:
- get the base and height of the triangle
- get the depth of the 3d shape
- use formula 2(bh/2)+sidelength1*d +sidelength2*d sidelength1*d to get surface area
Attributes:
- radius
- depth
Behaviou:
- get the radius of the circle
- get the depth of the 3d shape
- use formula 2(pi*R*r)+2*pi*rd to get volume
Attributes:
- number of side lengths
- array of side lengths
- depth
Behaviou:
- get the number of side lengths in the shape
- determine the area of the shape
- use formula 2lw+sideength1*d +side length2*d + sidelengthx*d to get surface area
Attributes:
- height
- depth
- base
Behaviou:
- get the base and height of the triangle
- get the depth of the 3d shape
- use formula (bh/2)+sidelength1*d +sidelength2*d sidelength1*d to get surface area
Attributes:
- radius
- depth
Behaviou:
- get the radius of the circle
- get the depth of the 3d shape
- use formula (pi*R*r)+2*pi*rd to get volume
Attributes:
- number of side lengths
- array of side lengths
- depth
Behaviou:
- get the number of side lengths in the shape
- determine the area of the shape
- use formula lw+sideength1*d +side length2*d + sidelengthx*d to get surface area