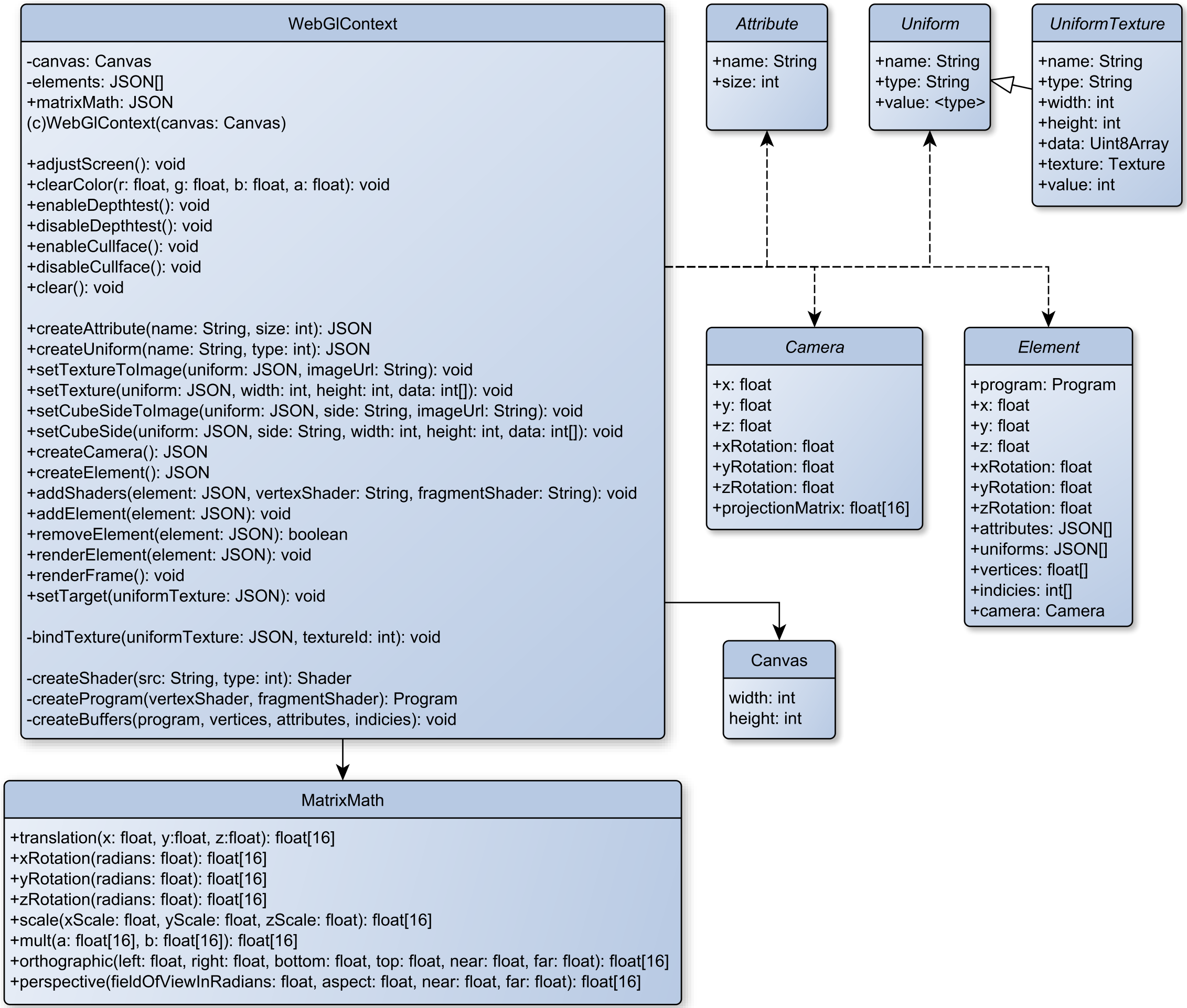
WebGlContext
-canvas: Canvas
-elements: JSON[]
+matrixMath: JSON
(c)WebGlContext(canvas: Canvas)
+adjustScreen(): void
+clearColor(r: float, g: float, b: float, a: float): void
+enableDepthtest(): void
+disableDepthtest(): void
+enableCullface(): void
+disableCullface(): void
+clear(): void
+createAttribute(name: String, size: int): JSON
+createUniform(name: String, type: int): JSON
+setTextureToImage(uniform: JSON, imageUrl: String): void
+setTexture(uniform: JSON, width: int, height: int, data: int[]): void
+setCubeSideToImage(uniform: JSON, side: String, imageUrl: String): void
+setCubeSide(uniform: JSON, side: String, width: int, height: int, data: int[]): void
+createCamera(): JSON
+createElement(): JSON
+addShaders(element: JSON, vertexShader: String, fragmentShader: String): void
+addElement(element: JSON): void
+removeElement(element: JSON): boolean
+renderElement(element: JSON): void
+renderFrame(): void
+setTarget(uniformTexture: JSON): void
-bindTexture(uniformTexture: JSON, textureId: int): void
-createShader(src: String, type: int): Shader
-createProgram(vertexShader, fragmentShader): Program
-createBuffers(program, vertices, attributes, indicies): void
Attribute
+name: String
+size: int
Uniform
+name: String
+type: String
+value: <type>
UniformTexture
+name: String
+type: String
+width: int
+height: int
+data: Uint8Array
+texture: Texture
+value: int
Camera
+x: float
+y: float
+z: float
+xRotation: float
+yRotation: float
+zRotation: float
+projectionMatrix: float[16]
Element
+program: Program
+x: float
+y: float
+z: float
+xRotation: float
+yRotation: float
+zRotation: float
+attributes: JSON[]
+uniforms: JSON[]
+vertices: float[]
+indicies: int[]
+camera: Camera
Canvas
width: int
height: int
MatrixMath
+translation(x: float, y:float, z:float): float[16]
+xRotation(radians: float): float[16]
+yRotation(radians: float): float[16]
+zRotation(radians: float): float[16]
+scale(xScale: float, yScale: float, zScale: float): float[16]
+mult(a: float[16], b: float[16]): float[16]
+orthographic(left: float, right: float, bottom: float, top: float, near: float, far: float): float[16]
+perspective(fieldOfViewInRadians: float, aspect: float, near: float, far: float): float[16]