

(x, y, u, v) \longrightarrow x, u

RoundRect (c) 2008 - 2012 by BenjaminHampe

C/C++ Implementation: hampe_scene_createRoundRect.h

Parameter (mit Beispiel)

$x = 50\text{px}$

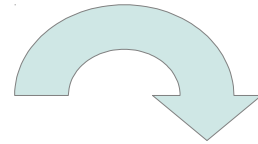
$y = 50\text{px}$

$w = 300\text{px}$

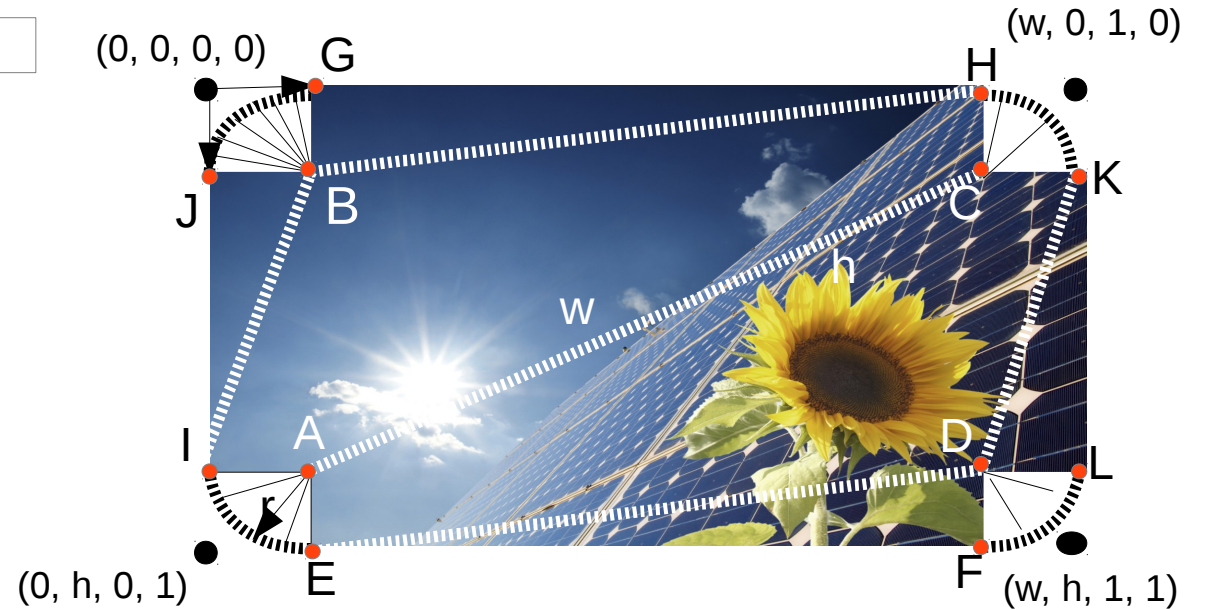
$h = 200\text{px}$

$r = 20\text{px}$

$s = 7$ segmente



LHOrtho2D
projection



▲ ABC, ACD

▲ BGH, BHC

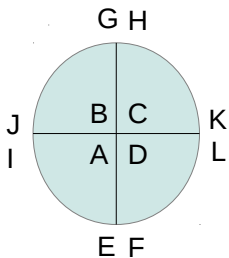
▲ EAD, EDF

▲ IJB, IBA

▲ DCK, DKL



sin, cos
in math
direction
ccw



$V = \{ x, y, z, nx, ny, nz, color, u, v \} + \text{absPos}$

$A = \{ r, h-r, 0, 0, 0, -1, colorA, r/w, (h-r)/h \} + \{ x, y, 0 \}$

$B = \{ r, r, 0, 0, 0, -1, colorB, r/w, r/h \} + \{ x, y, 0 \}$

$C = \{ w-r, r, 0, 0, 0, -1, colorC, (w-r)/w, r/h \} + \{ x, y, 0 \}$

$D = \{ w-r, h-r, 0, 0, 0, -1, colorD, (w-r)/w, (h-r)/h \} + \{ x, y, 0 \}$

$E = \{ r, h, 0, 0, 0, -1, colorE, r/w, 1 \} + \{ x, y, 0 \}$

$F = \{ w-r, h, 0, 0, 0, -1, colorF, (w-r)/w, 1 \} + \{ x, y, 0 \}$

$G = \{ r, 0, 0, 0, 0, -1, colorG, r/w, 0 \} + \{ x, y, 0 \}$

$H = \{ w-r, 0, 0, 0, 0, -1, colorH, (w-r)/w, 0 \} + \{ x, y, 0 \}$

$I = \{ 0, h-r, 0, 0, 0, -1, colorI, 0, (h-r)/h \} + \{ x, y, 0 \}$

$J = \{ 0, r, 0, 0, 0, -1, colorJ, 0, r/h \} + \{ x, y, 0 \}$

$K = \{ w, r, 0, 0, 0, -1, colorK, 1, r/h \} + \{ x, y, 0 \}$

$L = \{ w, h-r, 0, 0, 0, -1, colorL, 1, (h-r)/h \} + \{ x, y, 0 \}$

y, v