# Final Project Byron Wider and Door Kolkman: Montblanc Shopping Window

Synopsis

The storefront we choose is the Montblanc shopping window in Hamburg*. The elements we took from the images and implemented into our program were the big "portal" in the middle, as well as the Montblanc symbol to each side of the window including the star background and the coloured half-ring. If we are precise, we are also using the walkway in front of the store.
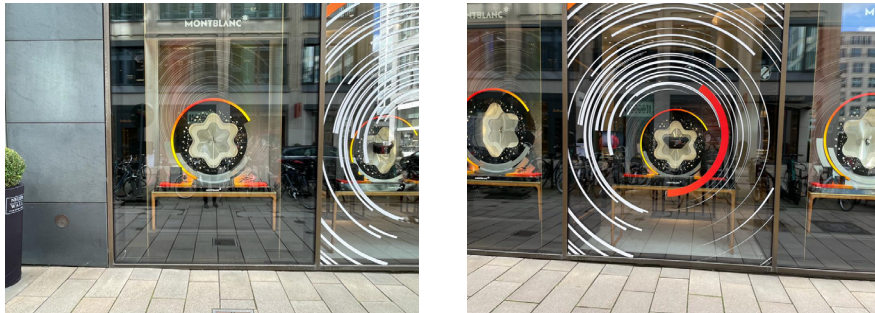
Usage and Interaction

Item	Result
Left Symbol	Depending which point of the star is clicked, you can draw on the canvas, change colour values of the circle, spawn a swarm of angels, turn day to night, or if everything gets too much, reset the scene again.
Right Symbol	Increases and decreases the speed of the portal when clicked anywhere inside the symbol.

Architecture

Classes	Description	Important Methods
LeftSymbol	Left Montblanc Symbol. This symbol has 6 buttons that can be pressed. Button 0 opens a pen tool which lets you draw on the canvas. Button 1 lets the stars shine brigther. Button 2 changes the colour of the circle around the symbol. Button 3 lets you change the time from day to night. Button 4 spawns angels and lets them emerge from the portal. Button 5 lets you reset the everything you did on the screen.	display(), update(), clicked(), activatePen()
RightSymbol	Right Montblanc Symbol. Slows down the portal on click.	display(), update(), clicked()
Storefront	Draws the storefront, with moving portal.	display(), update(), activateAngels(), resetAngels(), portalSpeed(), poralReset()
Surroundings	Draws the background of the scene, with a changing colour scheme based on time.	display(), update(), resetDay()
Button	Used to calculate if a point of the montblanc star was pressed and returns true or false.	isPressed()
Star	Shape of the star in the middle of the symbol.	display()
Circle	Draws the moving ring of the circle around the middle stars and has a star background.	display(), update(), changeColour(), resetColour()
Drawing	Creates the array filled with dots used for drawing on the screen.	display(), activated()
PortalParts	Used by Storefront to create the portal.	display(), update(), setNewSpeed()
Angel	Used by storefront to release a swarm of angels.	display(), update(), startTracking()
Eye	Eyes of the angel	display(), blink()
Wing	Wings of the angel	display()

Button
float buttonX, buttinY, buttinSize

Button
display
isPressed

Star
float starX, starY, size, angle
color fillC

Star
display

Circle
float beginCircle, endCircle , circleX, circleY, size, circleR, circle G, circle B
int startTimer

Circle
display
update
changeColour
resetColour

Drawing
int[] xPos, yPos
boolean pressed

Drawing
display
activated

PortalParts
float beginPortal, endPortal, distanceLines, speedPortal, strokeWeightPortal, portalX, portalY

PortalParts
display
update
setNewSpeed

Eye
int eyeX, eyeY, sizeX
float angle

Eye
display
blink

Wing
int wingX, wingY, side
float angle

Wing
display

LeftSymbol
float symbolX, symbolY, starRotation
int lastPressedButton
boolean buttonIsPressed, activePen
Surroundings sur
Drawing pen
Circle circle
Star[] stars
Button[] button

LeftSymbol
display
update
clicked
activatePen

RightSymbol
float symbolX, symbolY, starRotation
Button button
boolean buttinIsPressed
Storefront store
Circle circle
Star[] stars

RightSymbol
display
update
clicked

main
Star star
LeftSymbol leftSym
RightSymbol rightSym
StoreFront sceneStore
Surroundings sceneBackground

setup
draw
mousePressed

Storefront
float storeX, storeY
PortalParts[] portalPart
Anegel[] angels
boolean spawnAngels
int angelTimer

Storefront
display
update
activateAngels
resetAngels
portalSpeed
portalReset

Surroundings
float xSurroundings, ySurroundings, skyR, skyG, skyB, starA, moonPos
float[] starPosX, starPosY, cloudX, cloudY
int clockHour, clockSecond

Surroundings
display
update
resetDay

Angel
float angelX, angelY, trackX, trackY, angelSize
boolean trackingChecker
int timer, picker
Eye[] eyeArray
Wing[] wingArray

Angel
display
update
startTracking