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Synopsis:

I have chosen the shop window of La Stans, a chocolatery at Markstraat 5 in Enschede. Elements from the shopwindow that come back in my program are two types of autumn leaves, butterflies, the outside of the shopwindow and pinecones. More detailed pictures are on page two.

Usage and Interactions:

Press 1 - Make squirrels smaller
Press 2 - Make squirrels bigger
Press 3 - Flip squirrels
Press 4 - Change color of squirrels
Press 5 - Colors squirrels to original colors
Press 6 - Change position of pinecones
Press 7 - Make it night
Press 8 - Make it day
Hold 9 - Display a shop window
Press Enter - remove all leaves
You can make the butterflies fly faster when you drag the mouse or replace a squirrel.
You can replace a squirrel by dragging it.
You can click your mouse and then leaves will where you click and a branch with leaves will display at a random place.

Architecture:

1. Finalproject (main)
    a. Setup()
    b. Draw() - display background, squirrels, pinecones and butterflies. Access ArrayList
    c. mouseDragged() - bounce butterflies and move squirrels when selected
    d. mousePressed() - add data to the ArrayLists and check if squirrel is selected
    e. mouseReleased() - if squirrel was selected it is no longer selected
    f. keyPressed() - perform actions with 1 through 9 and Enter
2. Butterfly
    a. Display() - method for displaying butterflies
    b. Bounce() - method for changing speed and direction of the butterflies
3. Pinecone
    a. Display() - method for displaying pinecones
4. Squirrel
    a. Display() - method for displaying squirrels
    b. Select() - method to check if squirrel is selected
    c. Release() - method to check if squirrel is released and change boolean isSelected
    d. Move() - method for changing position of squirrel
    e. resizeSquirrel() - method for resizing squirrel using a factor
    f. flipSquirrel() - method for flipping the squirrel
    g. changeColorSquirrel() - method for changing the color of the squirrel
    h. normalColorSquirrel() - method for setting color of the squirrel to default

Structure of program in a diagram:
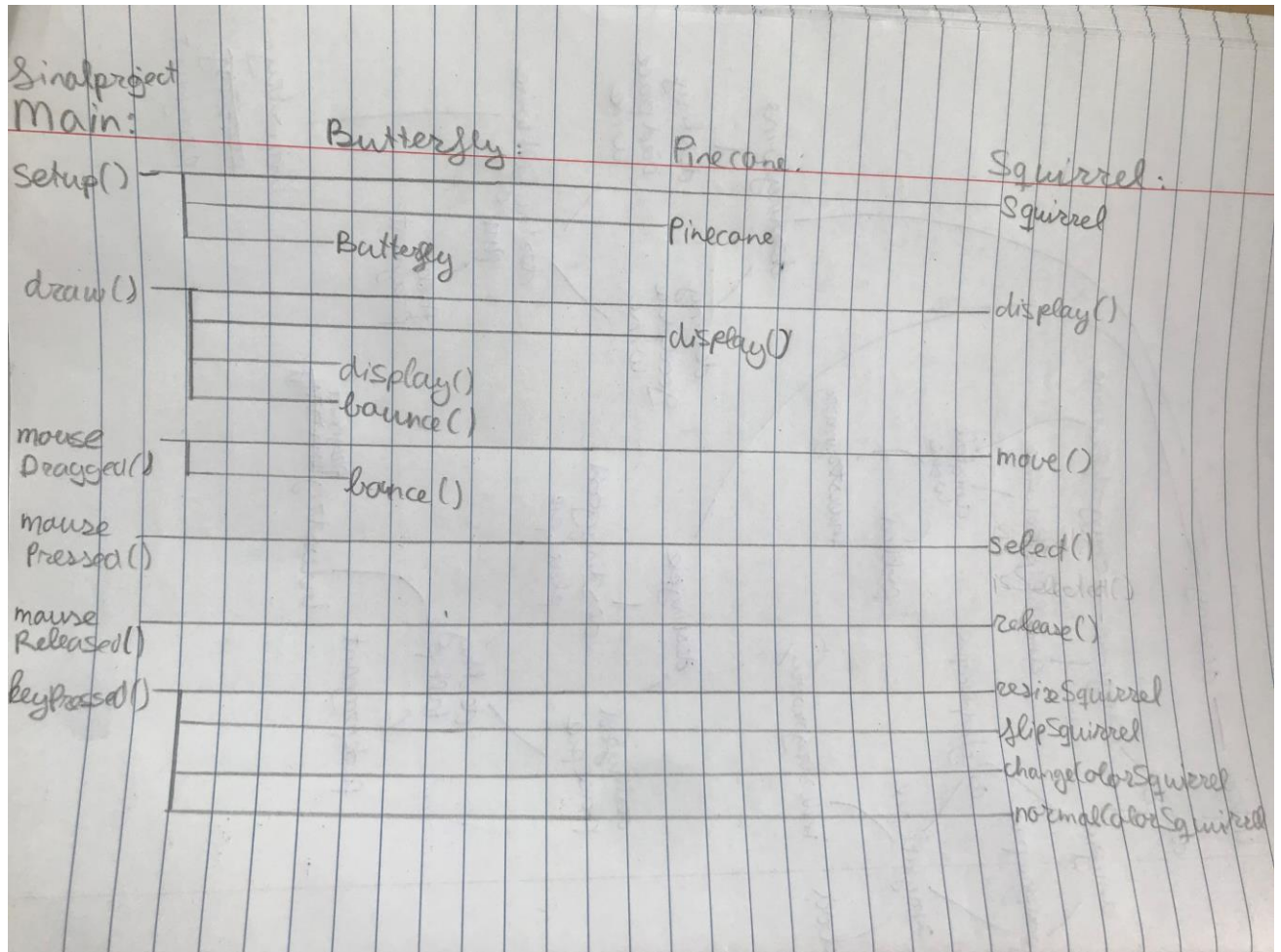
Close up pictures of specific elements I used from window shop in my program: