Introduction to Visual and Interactive Programming
CT803-4-0-OIVIP

Lab 3

Interactive Program with SNAP!

Recap: Week 3 Exercise

Plan a Snap! program for a pizza party

- The program will ask how many people will be attending
- The program will then ask each person on their favourite topping
- The topping with the most number of "votes" will be the topping for the pizza in the party

Write the pseudocode for solving this problem and create a flowchart

Then, start coding!

Wireframe: quick sketch of main steps (summary)

Greet, ask total participants

- Ask favourite topping
- Update votes

Show voting result (end)

Pseudocode: Pizza party!

When green flag clicked

Greet the user and explain about the party

userTotal = 0; loopCount = 1

voteChicken = 0; votePepp = 0; voteTuna = 0   # set topping as one of three types: chicken, pepperoni, tuna

userTotal = input ("How many participants?")

while loopCount <= userTotal:

    Show options to user: 1 → chicken chunks, 2 → pepperoni, 3 → tuna

    Ask participant no. loopCount and store answer in userVote

    if user keys in 1: increase voteChicken by 1   # consider a suitable message to display e.g. "Chicken!" etc.

    else if user keys in 2: increase votePepp by 1   # consider a suitable message to display as feedback

    else if user keys in 3: increase voteTuna by 1   # consider a suitable message to display as feedback

    else:

       Display "You did not key in a valid number" and decrease loopCount by 1

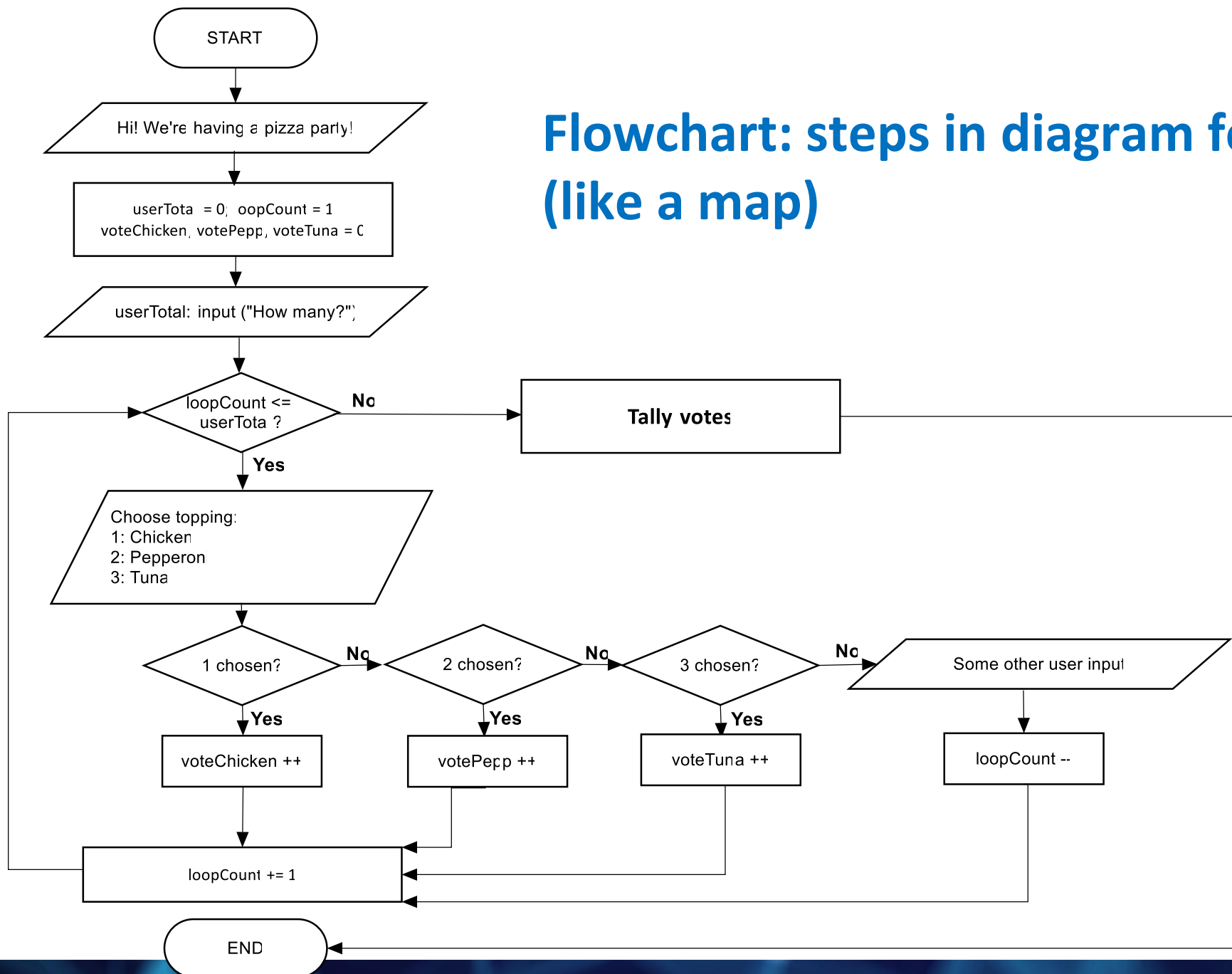   increase loopCount by 1

Tally the votes and show result

End the program

Pseudocode: Pizza party!

Tally the votes and show result

if voteChicken > votePepp

  if voteChicken > voteTuna

    Display: "Chicken pizza it is!"

if votePepp > voteChicken

  if votePepp > voteTuna

    Display: "Pepperoni pizza it is!"

if voteTuna > votePepp

  if voteTuna > voteChicken

    Display: "Tuna pizza it is!"

Flowchart: steps in diagram form (like a map)

Pseudocode: Pizza party!

Tally the votes and show result

if voteChicken > votePepp
  if voteChicken > voteTuna
    Display: "Chicken pizza it is!"
if votePepp > voteChicken
  if votePepp > voteTuna
    Display: "Pepperoni pizza it is!"
if voteTuna > votePepp
  if voteTuna > voteChicken
    Display: "Tuna pizza it is!"

Storyboard: steps in pictures (like a comic book)

Scene   Description

1   A sprite pops up and says, "Welcome! We're gonna have a pizza party!"

         The sprite then asks, "How many participants?"

         The user types a number into a text box.

2   The sprite gives options for the user.

4a   The sprite says, "Chicken pizza it is!"

4b   The sprite says, "Pepperoni pizza it is!"

4c   The sprite says, "Tuna pizza it is!"

5   The sprite says "We are going to have a (Chicken/Pepperoni/Tuna) pizza party!"

         Picture of pizza will be displayed

Exercise!

Go thru your group assignment documentation and start planning:

- What would your wireframe diagram look like?

- Start doing the pseudocode!