Flowchart

According to LucidChart's definition,

"flowchart is a diagram" wherein it shows or describes the "process, system or computer algorithm" that is commonly used in many fields for documentation, studying, planning, improving and communicating "often complex process" that is organized and recognizable diagrams

Flowcharts uses "rectangles, ovals, diamonds and potentially numerous other shapes" that has a specific type of step for each shape that is paired with arrows to state the series. It could be simple, "hand-drawn charts" or "comprehensive computer-drawn diagrams" that shows various "steps and routes". Is commonly used technically or non-technically by people in different

Is also as "Process Flowchart, Process Map, Functional Flowchart, Business Process Mapping, Business Process Modeling and Notation (BPMN), or Process Flow Diagram (PFD)" that is "related to other popular diagrams, such as Data Flow Diagrams (DFDs) and Unified Modeling Language (UML) Activity Diagrams"

Listed below are some of the examples of the shapes used in flowcharts

Document

Data, or Input/Output

Stored Data

Flow Arrow

Comment or Annotation

Predefined process

On-page
connector/reference

Predefined process

On-page
connector/reference

Off-page
connector/reference

- LucidChart. (n.d). What is a Flowchart. Retrieve from https://www.lucidchart.com/pages/what-is-a-flowchart-tutorial

Pseudocode

According to WhatIs.com (2005),

Pseudocode is pronounced as “SOO-doh-kohd”. It indicates the description that a computer program or algorithm must perform. Also, it is “expressed in a formally-styled natural language rather than in a programming language” and is also used for more detailed step of program development in which it allows programmers to express their design in more detailed version/ template that could be used “for the next step of writing code in a specific programming language”. As it is recognizable and detailed it helps the programmers to be able to verify the programming information in terms of matching the specific designs wherein errors could be easily tracked therefore minimizing the cost and time. As it is recognized, it will be rewritten by the usage of vocabulary and “syntax of a

programming language". It can also be used "conjunction with computer-aided software engineering-based methodologies".

It is possible to write programs that will convert a given pseudocode language into a given programming language.

- WhatIs.com. (2005). What is pseudocode? - Definition from WhatIs.com. Retrieved from https://whatis.techtarget.com/definition/pseudocode
  Listed below are the examples given by Pseudocode Examples

1. If student's grade is greater than or equal to 60

   Print "passed"
else
   Print "failed"

---

2. Set total to zero

Set grade counter to one

While grade counter is less than or equal to ten

   Input the next grade
   Add the grade into the total

Set the class average to the total divided by ten

Print the class average.

---

3. Initialize total to zero

Initialize counter to zero

Input the first grade

while the user has not as yet entered the sentinel

```
        add this grade into the running total
        add one to the grade counter
        input the next grade (possibly the sentinel)

if the counter is not equal to zero

        set the average to the total divided by the counter
        print the average

else

        print 'no grades were entered'
```

---

4. Initialize passes to zero

initialize failures to zero

initialize student to one

while student counter is less than or equal to ten

```
        input the next exam result
        if the student passed
                add one to passes

        else

                add one to failures
```

add one to student counter

print the number of passes

print the number of failures

if eight or more students passed

```
        print "raise tuition"
```

“For looping and selection, The keywords that are to be used include Do While...EndDo; Do Until...Enddo; Case...EndCase; If...Endif; Call ... with (parameters); Call; Return ....; Return; When; Always use scope terminators for loops and iteration.

As verbs, use the words Generate, Compute, Process, etc. Words such as set, reset, increment, compute, calculate, add, sum, multiply, ... print, display, input, output, edit, test , etc. with careful indentation tend to foster desirable pseudocode.

Do not include data declarations in your pseudocode”.

- n.a. (n.d). Pseudocode Examples. Retrieved from https://www.unf.edu/~broggio/cop2221/2221pseu.htm