



Viva College of Diploma Engineering & Technology

Approved By A.I.C.T.E.(New Delhi)& D.T.E. Maharashtra State Affiliated to MSBTE, Mumbai
At Bolinj, Virar(W), Taluka Vasai, District: Thane, Pin: 401303

**A
Micro Project
on
Walking Man
In The Rain**

Submitted in partial fulfillment of the requirement for the award of

Diploma of Engineering

in

Computer Engineering

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23.Amisha Patil
24.Swarupa Golatkar
25.Riya Dhapse

under the guidance of

POONAM JADHAV

Department of Computer Engineering

2022-2023

CERTIFICATE



VIVA COLLEGE OF DIPLOMA ENGINEERING & TECHNOLOGY

VIRAR (W)

2021-22

This is to certify that the micro project entitled "**Walking Man In The Rain**" has been submitted by under the guidance of Poonam Jadhav inpartial fulfillment of the requirement for the award of Diploma of Engineering in Computer Engineering from Maharashtra State Board of Technical Education.

“Walking Man In The Rain”

GROUP MEMBERS

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Project Guide
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PART-A PLAN

1.0 Brief Introduction

In Turbo C graphics the graphics.h functions are used to draw different shapes(like a circle, rectangle, etc), and display text(any message) in different formats (different fonts and colors). By using graphics.h programs, animations, and also games can be designed.

This program demonstrates how a man walks in the rain with an umbrella, and when a key is pressed, the rain ceases, and a rainbow appears in the sky.

2.0 AIM of Micro-Project

1. To develop program of Walking Men in the Rain by using computer graphics.

3.0 Action Plan

| Sr. No | Details of Activity | Planned start Date | Planned Finish Date | Name of Responsible Team Members |
|--------|----------------------------------|--------------------|---------------------|--|
| 1 | Project Selection | 25/08/2022 | 30/08/2022 | Swarupa Golatkar, Amisha Patil, Priti Pawar, Riya Dhaple, Tanay Shinde |
| 2 | Identifying Project Outcomes | 06/09/2022 | 15/09/2022 | Swarupa Golatkar, Amisha Patil, Priti Pawar, Riya Dhaple, Tanay Shinde |
| 3 | Identifying Resources required | 11/09/2022 | 23/09/2022 | Swarupa Golatkar, Amisha Patil, Priti Pawar, Riya Dhaple, Tanay Shinde |
| 4 | Algorithm & implementation | 26/09/2022 | 28/10/2022 | Swarupa Golatkar, Amisha Patil, Priti Pawar, Riya Dhaple, Tanay Shinde |
| 5 | Final Outcome | 1/11/2022 | 15/11/2022 | Swarupa Golatkar, Amisha Patil, Priti Pawar, Riya Dhaple, Tanay Shinde |
| 6 | Documentation | 16/11/2022 | 30/11/2022 | Swarupa Golatkar, Amisha Patil, Priti Pawar, Riya Dhaple, Tanay Shinde |
| 7 | Seminar and viva-vose | 01/12/2022 | 13/12/2022 | Swarupa Golatkar, Amisha Patil, Priti Pawar, Riya Dhaple, Tanay Shinde |
| 8 | Final submission of Microproject | 14/12/2022 | 14/12/2022 | Swarupa Golatkar, Amisha Patil, Priti Pawar, Riya Dhaple, Tanay Shinde |

4.0 Resources Required

| Sr. No | Name of Resource | Specification | Remarks |
|--------|------------------|---|---------|
| 1 | Computer system | 11th Gen Intel(R) Core(TM) i5-1135G7 @ 2.40GHz 2.42 GHz RAM :8.00GB | |
| 2 | Software Package | Turbo C++ | |

PART-B OUTCOME

1.0 Brief Description

Here is program of Walking Men in the Rain Using Computer Graphics in C programming language. In Turbo C graphics the graphics.h functions are used to draw different shapes(like a circle, rectangle, etc), and display text(any message) in different formats (different fonts and colors). By using graphics.h programs, animations, and also games can be designed.

This program demonstrates how a man walks in the rain with an umbrella, and when a key is pressed, the rain ceases, and a rainbow appears in the sky.

The following tags are used as follows:

1.#include:-The #include directive tells the C preprocessor to include the contents of the file specified in the input stream to the compiler and then continue with the rest of the original file.

2.<stdio.h>:- The stdio.h header file defines three variable types, several macros, and various functions for performing input and output.

3.<conio.h>:- It is a header file used in C and Cpp and it includes inbuilt functions like getch() and clrscr(). It stands for console input output i.e. it takes input from keyboard and displays it on screen.

4.void:- In computer programming, when void is used as a function return type, it indicates that the function does not return a type.

5.void main():- The void main() indicates that the main() function will not return any value. When our program is simple, and it is not going to terminate before reaching the last line of the code, or the code is error free, then we can use the void main().

6.int:- The type in C is a signed integer, which means it can represent both negative and positive number. This is constraint to an unsigned integer (which can be used by declaring a variable unsigned int), which can only represent positive number.

7. initgraph():- It initializes the graphics system by loading the passed graphics driver then changing the system into graphics mode.

8. line():- The line() function draws a line from a point (x1,y1) to a point (x2,y2), i.e. (x1,y1) and (x2,y2) are the endpoints of the line.

9.circle():- The graphics. h header file contains the function circle() that draws a circle with a center at (x, y) and a given radius.

10.pieslice():- This function draws and fills a pie slice with a given radius r and a center at (x, y). The slice starts from and ends at s_angle and e_angle, respectively.

11.cleardevice():- It clear the screen, and sets current position to (0,0).

12.delay():- The delay function suspends the execution of a program for a specified period of time.

13.getch():- The getch() function holds the output of the program.

2.0 AIM of Micro-Project

1. To develop program of Walking Men in the Rain by using computer graphics.

3.0 Course Outcomes (CO)

- A. Manipulate visual and geometric information of images.
- B. Implement standard algorithms to draw various graphics objects using the C program.
- C. Use projections to visualize objects on the view plane.

4.0 Actual Procedure Followed

Algorithm:

Step 1: Start

Step 2: Initialize graphics driver and graphics mode.

Step 3: Find next pixel on line $j=1$.

Step 4: Call built in function line (x_1, x_2, y_1, y_2) to draw line.

Step 5: Call built in function circle (x, y, r) to draw a circle.

Step 6: Call built in function line (x_1, x_2, y_1, y_2) to draw line.

Step 7: Call built in function line (x_1, x_2, y_1, y_2) to draw line.

Step 8: If($j \% 2 == 0$) then

 Call built in function line (x_1, x_2, y_1, y_2) to draw line.

 Call built in function line (x_1, x_2, y_1, y_2) to draw line.

Else

 Call built in function line (x_1, x_2, y_1, y_2) to draw line.

Step 9: Call built in function line (x_1, x_2, y_1, y_2) to draw line.

Step 10: for($i=0; i<300; i++$) If condition is true then go to step 11 otherwise go to step 12

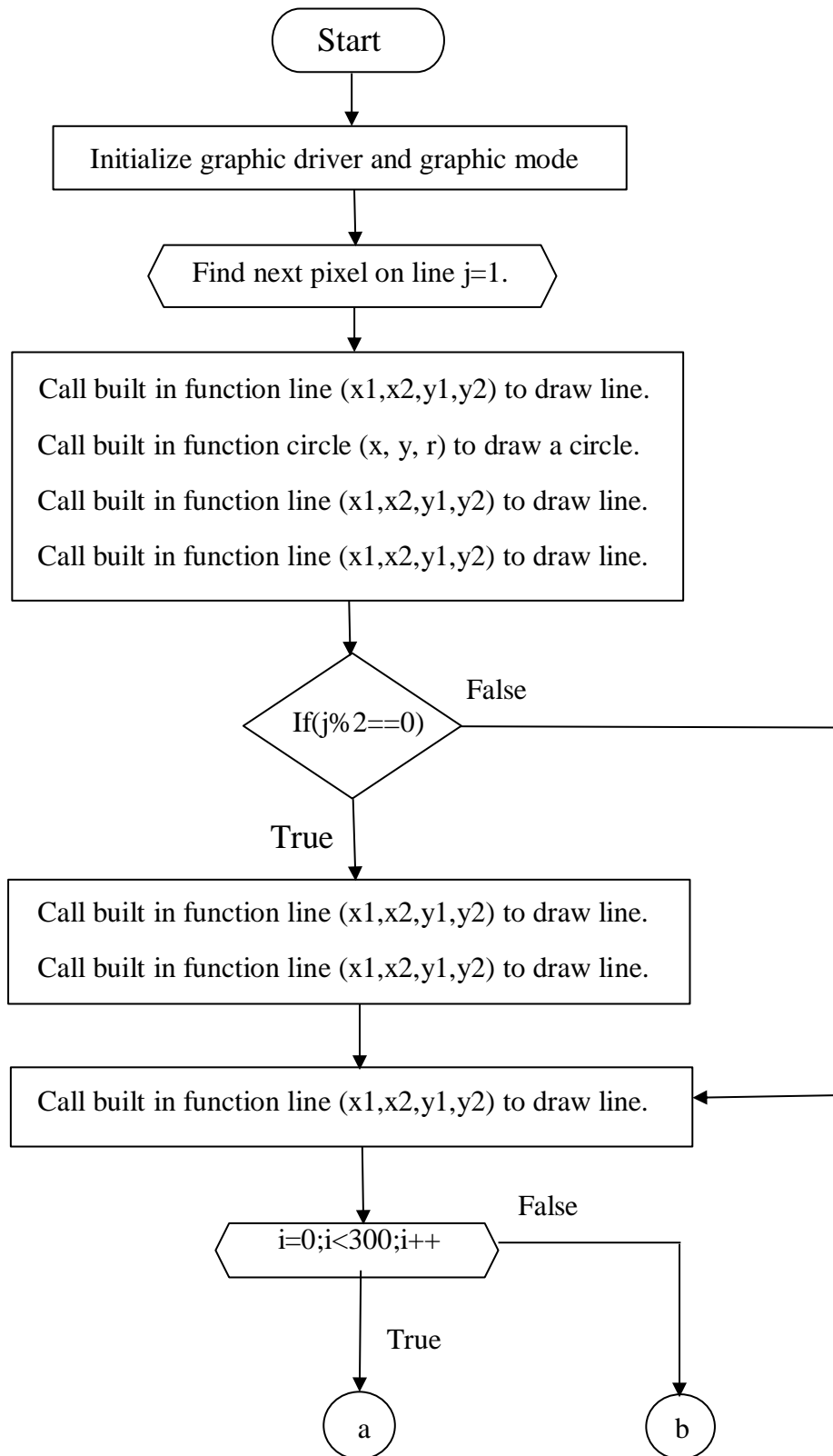
Step 11: $x = \text{random}$

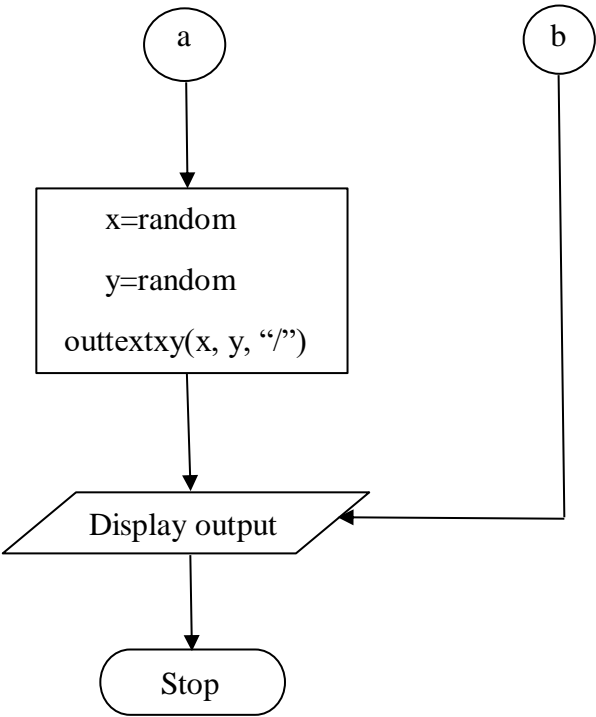
$y = \text{random}$

 outtextxy($x, y, "/"$)

Step 12: Display output.

Step 13: Stop.

Flowchart:



Code:-

```
#include<stdio.h>
#include<conio.h>
#include<graphics.h>
#include<stdlib.h>
void main(){
int gr=DETECT,gm;
int i,x,y,j;
initgraph(&gr,&gm,"C:\\TURBOC3\\BGI");

// man
for(j=1;j<600;j=j+5)
{
line(0,400,800,400);
circle(30+j,280,20); //head
line(30+j,300,30+j,350); //body
line(30+j,330,70+j,330); //hand
if(j%2==0){
line(30+j,350,25+j,400); //left leg
line(30+j,350,10+j,400); // right
}
else{
line(30+j,350,35+j,400); //transition
delay(20);
}
//umbrela
line(70+j,250,70+j,330);
pieslice(70+j,250,180,0,80);
// rain
for(i=0;i<300;i++)
{
x=random(800);
y=random(800);
outtextxy(x,y,"/");
}
delay(170);
cleardevice();
}
getch();
closegraph();
}
```

5.0 Resources Used

| Sr. No | Name of Resource | Specification | Remarks |
|--------|------------------|---|---------|
| 1 | Computer system | 11th Gen Intel(R) Core(TM) i5-1135G7 @ 2.40GHz 2.42 GHz 8.00 GB (7.70 GB usable) | |
| 2 | Software Package | Turbo C++ | |

6.0 Outputs of Micro-Projects



7.0 Skill Developed

Thus, we have studied how to create a Walking man in the rain.