# Anjuman-I-Islam M.H. Saboo Siddik Polytechnic



# DATA STRUCTURES USING C (DSU) MICRO PROJECT COMPUTER ENGINEERING DEPARTMENT CO-31 TITLE:

YEAR: 2022-23

**Prepared by: Bank Management System** 

210454: Shaikh Azlan Ahmed

■ 210451: Abdurrahman Qureshi

■ 210459: Owais Khan

• 210481: Faisal Ansari

■ 220482: Chirag Gothankar

Under the guidance of: Mr. Mohammed Zaid



### Certificate

This is to certify that Mr. <u>Azlan Ahmed Shaikh</u> Roll no. <u>210454</u> of second semester of Diploma in <u>Computer Engineering</u> of institute <u>M.H. Saboo Siddik</u> <u>Polytechnic(code:0002)</u> has completed microproject satisfactorily in the subject: <u>CGR</u> for the academic year <u>2022-23</u> as prescribed in the curriculum.

Place: Byculla, Mumbai

Date:\_\_\_\_\_\_ Head of the department:\_\_\_\_\_

Enrollment no: 2100020093



<del>\_\_\_\_\_</del>

Subject faculty

Principal



### Certificate

This is to certify that Mr. Abdurrahman Qureshi Roll no. 210451 of second semester of Diploma in Computer

Engineering of institute M.H. Saboo Siddik

Polytechnic(code: 0002) has completed microproject satisfactorily in the subject: CGR for the academic year 2022-23 as prescribed in the curriculum.

Enrollment no: 2100020112

Place: Byculla, Mumbai

Date:	Head of the department:		
	SEAL OF INSTITUDE		
Subject faculty	Principal		



### Certificate

This is to certify that Mr. <u>Chirag Gothankar</u> Roll no. <u>220482</u> of second semester of Diploma in <u>Computer Engineering</u> of institute <u>M.H. Saboo Siddik Polytechnic(code:0002)</u> has completed microproject satisfactorily in the subject: <u>CGR</u> for the academic year <u>2022-23</u> as prescribed in the curriculum.

Enrollment no: 2200020140

Place: Byculla, Mumbai

Head of the department:

SEAL OF
INSTITUDE

Principal

Subject faculty



### **Certificate**

This is to certify that Mr. <u>Faisal Ansari</u> Roll no. <u>220481</u> of second semester of Diploma in <u>Computer Engineering</u> of institute <u>M.H. Saboo Siddik Polytechnic(code:0002)</u> has completed microproject satisfactorily in the subject: <u>CGR</u> for the academic year <u>2022-23</u> as prescribed in the curriculum.

Place: Byculla, Mumbai

Date:\_\_\_\_\_ Head of the department:\_\_\_\_\_

Enrollment no: 2200020620



Subject faculty Principal

We wish to express our profound gratitude to our guide Mr. Mohammad Ali Sir who guided us endlessly in the framing and completion of the micro project. He guided us on all the main points in that micro project. We are indebted to his/her constant encouragement, cooperation, and help. It was his/her enthusiastic support that helped us in overcoming various obstacles in the micro-project. We are also thankful to our Principal, HOD, faculty members and classmates of Computer Engineering department for extending their support and motivation in the completion of this micro-project.

# Names of Team Members with Roll Nos.

- 1. Abdurrahman Qureshi 210451
  - 2. Azlan Shaikh 210454
  - 3. Chirag Gothankar 220482
    - 4. Faisal Ansari 220481

## REPORT OF MICROPROJECT

### > Rationale:

Computer graphics are pictures and films created using computers.

Usually, the term refers to computer-generated image data created with help of specialized graphical hardware and software. Some topics in computer graphics include user interface design, sprite graphics, vector graphics, 3Dmodeling, shades, GPU design, implicit surface visualization with ray tracing, and computer vision, among others.

Computer graphics is made up of number of pixels. Pixel is the smallest graphical picture or unit represented on the computer screen.

# ➤ Aims/ Benefits of the micro-project

Computer graphics are very useful. Today almost every computer can do some graphics, and people have even come to expect to control their computer through icons and pictures rather than just by typing. Computer-generated imagery is used for moviemaking, video game and computer program development, scientific modeling, and design for catalogs and other commercial art. Some people even make computer graphics as art.

### > Course Outcomes achieved

To study computer graphics and also build them.

# > Proposed methodology

- Discussion of the given topic among group members.
  - Literature survey
  - Submission of project proposal
    - Analysis of data
  - Work divided among group members
    - Compilation of content
      - Representation
  - Editing the content as per the instructions
    - Report Preparation
    - Viva and presentation

# > Action Plan

Weeks	Details of activity	Planned start date	Planned finish date	Name of responsible team members
1 <sup>st</sup>	Discussions & finalization of topics			
2 <sup>nd</sup>	Preparation of abstract			
3 <sup>rd</sup>	Literature review			
4 <sup>th</sup> & 5 <sup>th</sup>	Collection of data			
6 <sup>th</sup> & 7 <sup>th</sup>	Discussion of outline of content			
8 <sup>th</sup> & 9 <sup>th</sup>	Formation of content			
10 <sup>th</sup>	Editing & proof reading of content			
11 <sup>th</sup>	Compilation of report & preparation			
12 <sup>th</sup>	Final submission of microproject			
13 <sup>th</sup>	Viva			

### > Actual Resources used

Sr. no.	Name of resources	Specifications	Qty	Remarks
1.	Online	Learning resources and various websites	3 sites	_
2.	Desktop	Microsoft word, Microsoft Powerpoint, Tools with internet facility.	1 for each	-
3.	Printer	Inkjet/Laser	1	-
4.	Stationary	Papers, Spiral binding, Chart papers, pictures, etc.	1 chart paper, pictures	-

# > Outputs of microproject

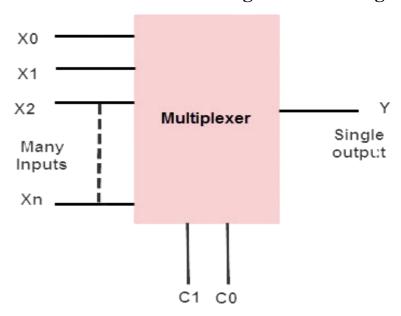
- a) Usage of computer graphics
- b) Applications of computer graphics

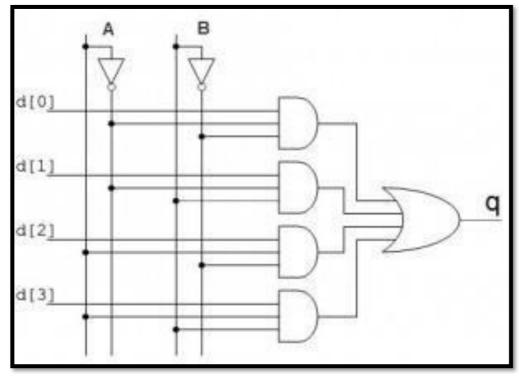
# > Skills developed/Learning outcomes:

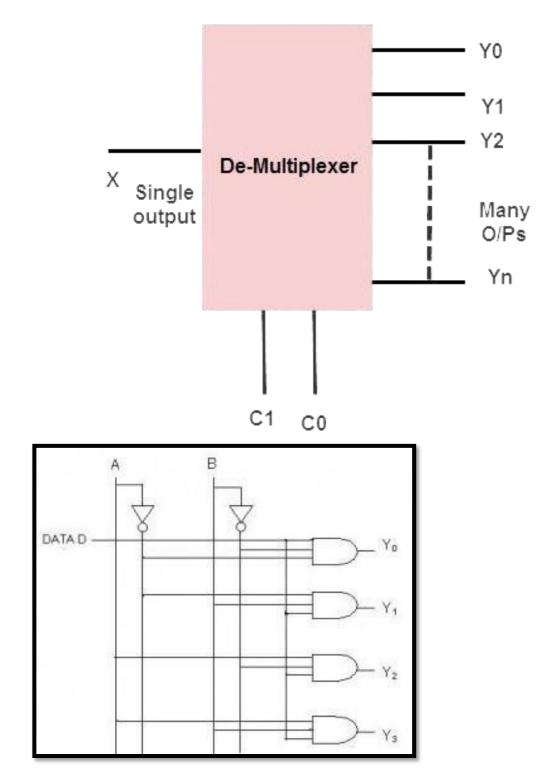
- ✓ Working in groups taking help of others and helping them too.
  - ✓ Studying **computer graphics** using it.
- ✓ Looking at **CGR** more confidently and distinguishing them and stating their applications
  - ✓ Enhanced skills in **computer graphics** subject.
  - ✓ Designing- Designing **computer graphics** programs

- ✓ Teamwork- Learning to work in team and boost individual confidence.
  - ✓ Time management- Completion of microproject as scheduled.
- ✓ Technical writing- Preparing a report of proposed plan and report.

# > Circuit diagram/Block diagram







# > Applications of this microproject:

- a) Multiplexer allow the process of transmitting different type of data such as audio, video at same time using single transmission line.
  - b) Multiplexers are used for simplification of logic design

- c) They are used to minimize the number of connections in logic circuit.
- d) Demultiplexer is used to connect a single source to multiple destinations.
- e) The efficiency of communication system is improved with help of multiplexer and demultiplexer combination.
  - f) Demultiplexer can be used as decoder in security systems.
- g) The combination of MUX and DEMUX is used for transmission of audio or video signals.
  - h) They are used in microprocessors, in control systems, etc.