

# MINIPROJECT LOGBOOK

(CSM501: Mini Project 1 B)

## GROUP MEMBERS

Mrs. Saiqa Khan



## Department of Computer Engineering

M. H. Saboo Siddik College of Engineering,

MHSS Polytechnic Road, Mumbai,

Mumbai-400008

University of Mumbai (AY 2021-22)

1. Agarwal Gunjan Hemant - 312002
2. Ishan Ahmed - 312018
3. Tamim Ahmad - 312055
4. Tarmale Sudarshan Sanjay -312056

## **INSTITUTE VISION & MISSION**

### **VISION:**

To bring out the whole Muslim Community from the quagmire of poverty and educational backwardness and encourage, enlighten, and prepare all its members to be useful citizens who will contribute to make a prosperous, healthy, and strong nation and to promote national integration by giving equal opportunity to all communities for their promotion and progress.

### **MISSION:**

To impart quality higher technical education to the students of Muslim Community in particular, and to students of all other communities to be competent, dedicated, and responsible citizens who shall also be the harbingers of secularism and national integration to the complete satisfaction of all stake holders.

## **COMPUTER ENGINEERING DEPARTMENT**

### **VISION:**

Endeavor to be a Centre for Educational excellence in Computer Engineering to nurture technology leaders of tomorrow for the gradual progress of society.

### **MISSION:**

- To teach Computer Engineering as a multifaceted, humanistic discipline of critical thinking and cutting-edge research problem solving.
- To build a competitive academic environment for training and placements, higher studies, and proactive innovative leadership.
- Encourage entrepreneurship towards self-employment for the economic well-being of individuals and the nation.
- Facilitate academia-industry collaborations and societal outreach programmers.

## PROGRAM EDUCATIONAL OBJECTIVES (PEO's)

I	To provide students with a solid foundation in their core concepts of mathematical, scientific and computer engineering fundamentals required to comprehend, analyze and design solutions for real life problems.
II	To inculcate in students, a balanced outlook with professional and ethical attitude, develop effective communication skills, teamwork and leadership qualities with multidisciplinary approach.
III	To prepare students to excel in postgraduate programs through an excellent academic environment and make them ready for productive employment in the public or private sectors and provide lifelong learning experience.
IV	To provide broad educational and research experience through interdisciplinary and industry centric programs.

## PROGRAM OUTCOMES (POs)

Program Outcome Code	Program Outcome Description
PO1	Basic Engineering knowledge: An ability to apply the fundamental knowledge in mathematics, science and engineering to solve problems in Computer engineering.
PO2	Problem Analysis: Identify, formulate, research literature and analyze computer engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and computer engineering and sciences
PO3	Design/ Development of Solutions: Design solutions for complex computer engineering problems and design system components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.
PO4	Conduct investigations of complex engineering problems using research-based knowledge and research methods including design of experiments, analysis and interpretation of data

	and synthesis of information to provide valid conclusions.
PO5	Modern Tool Usage: Create, select and apply appropriate techniques, resources and modern computer engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO6	The Engineer and Society: Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to computer engineering practice.
PO7	Environment and Sustainability: Understand the impact of professional computer engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.
PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of computer engineering practice.
PO9	Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams and in multidisciplinary settings.
PO10	Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations and give and receive clear instructions.
PO11	Project Management and Finance: Demonstrate knowledge and understanding of computer engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	Life-long Learning: Recognize the need for and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

## PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1	<b>Professional Skills</b> - The ability to develop programs for computer based systems of varying complexity and domains using standard practices.
PSO2	<b>Successful Career</b> - The ability to adopt skills, languages, environment and platforms for creating innovative career paths, being successful entrepreneurs or for pursuing higher studies.

## STUDENT INFORMATION

### Project Title: Sign language recognition using ML technologies

	Student 1	Student 2	Student 3	Student 4
<b>PRN</b>	312002	312018	312055	312056
<b>Name</b>	Agarwal Gunjan Hemant	Ishan Ahmed	Tamim Ahmad	Tarmale Sudarshan Sanjay
<b>Class with Division</b>	SE-Comps	SE-Comps	SE-Comps	SE-Comps
<b>Contact No.</b>	9967395175	8760767786	9369966943	7448211088
<b>E-mail</b>	gunjan.312002.co@mhs sce.ac.in	ahmed.312018.co@ mhssce.ac.in	tamim.312055.co@m hssce.ac.in	sudarshan.312056.c o@mhssce.ac.in
<b>Address</b>	301'B Nene Building	Arsalan Park,	B-503,Asmita Elegance	07,Vandana-Eknath Sadan
	3rd floor,r.n.54	Near teen Bangla,	Naya Nagar	Near Bhatsa Colony
	R.R.M.Roy Rd.,Girgaon	Ganga Nagar,	Mira Road	Ghodvinde Nagar
	Mumbai-400004	Akola-444002	Thane-401107	Vasind(W)-421601

## INSTRUCTIONS TO STUDENTS:

1. The logbook must be submitted to the Guide or Co-Guide for verification and evaluation of project activities at least once in a week.
2. Logbook duly signed by the guide must be submitted with a project report for evaluation at the end of semester to the department.

## DECLARATION

I declare that this project represents my ideas in my own words and wherever others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my project work. I promise to maintain minimum 75% attendance, as per the University of Mumbai norms. I understand that any violation of the above will be cause for disciplinary action by the Institute.

Yours Faithfully

**Agarwal Gunjan Hemant**

**Ishan Ahmed**

**Tamim Ahmad**

**Tarmale Sudarshan Sanjay**

(Signature of Students)

## Letter of Acceptance

I undersigned Prof. **Saiqa Khan** working in the Computer Engineering department, willing to guide the project titled **Sign language recognition using ML technologies** for the Mini Project 1 A Semester III respectively for the *Academic Year 2021-22*. The names of the students are:

1. **Agarwal Gunajn Hemant**
2. **Ishan Ahmed**
3. **Tamim Ahmad**
4. **Tarmale Sudarshan Sanjay**

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(Project Guide)

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(Mini Project Coordinator)

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(HOD Computer)

## COURSE OUTCOMES

CO No.	COURSE OUTCOME	POs covered	PSOs covered
CO1	Identify problems based on societal /research needs.	PO1, PO2,PO4	PSO1,PSO2
CO2	Apply Knowledge and skill to solve societal problems in a group.	PO1,PO2,PO4, PO5,PO6,PO8	PSO1,PSO2
CO3	Develop interpersonal skills to work as a member of a group or leader.	PO1,PO2,PO4, PO9,PO11	PSO1,POS2
CO4	Draw the proper inferences from available results through theoretical/experimental/simulations.	PO1,PO2,PO4, PO5,PO6,PO12	PSO1,POS2
CO5	Analyze the impact of solutions in societal and environmental context for sustainable development.	PO2,PO3,PO4, PO7,PO12	PSO1,POS2
CO6	Use standard norms of engineering practices	PO1,PO2,PO4, PO12	PSO1
CO7	Excel in written and oral communication.	PO1,PO4,PO8, PO9,PO10,PO12	PSO1
CO8	Demonstrate capabilities of self-learning in a group, which leads to lifelong learning.	PO1,PO2,PO4, PO12	PSO1
CO9	Demonstrate project management principles during project work.	PO1,PO2,PO4, PO11,PO12	PSO1,POS2

## CO-PO-PSO MAPPING

[illegible]



## PROGRESS/ATTENDANCE REPORT

Title of the Project: <b>Sign language recognition using ML technologies</b>	
Group No.	<b>AGARWAL GUNJAN HEMANT - 312002</b> <b>ISHAN AHMED - 312018</b> <b>TAMIM AHMAD - 312055</b> <b>TARMAKE SUDARSHAN SANJAY - 312056</b>
Name of the Supervisor: <b>Prof. Saiqa Khan</b>	

Sr. No	Date	Attendance				Progress/Suggestion	Mapping		
		1	2	3	4		CO	PO	PSO
01	18/01/2022	P	P	P	P	Started the basic course of GitHub and Python			
02	25/01/2022	P	P	P	P	Completed GitHub basics course and created a repository for project			
03	04/02/2022	P	P	P	P	Completed the Python basics course			
04	09/02/2022	P	P	P	P	Started implementing our project			
05	16/02/2022	P	P	P	P	Created custom dataset for A-Z alphabets and labeled them			
06	23/02/2022	P	P	P	P	Created a label map and imported pretrained model			
07	02/03/2022	P	P	P	P	Resolving the errors			
08	09/03/2022	P	P	P	P	Resolving the errors			
09	16/03/2022	P	P	P	P	Generated tf records for test and train data			
10	23/03/2022	P	P	P	P	Resolving the errors			
11	06/04/2022	P	P	P	P	Prepared presentation for project review meeting			

Sign of the Supervisor

## EXAMINER'S FEEDBACK FORM

Name of External examiner: \_\_\_\_\_

College of External examiner: \_\_\_\_\_

Name of Internal examiner: \_\_\_\_\_

Date of Examination: \_\_\_\_/\_\_\_\_/\_\_\_\_

No. of students in project team: \_\_\_\_\_

Availability of separate lab for the project: Yes / No

### Student Performance Analysis (Put Tick as per your Observation)

	Excellent (3)	Very Good (2)	Good (1)		
Sr. No.	Observation			(3)	(2)
1	Quality of problem and Clarity				
2	Innovativeness in solutions				
3	Cost effectiveness and Societal impact				
4	Full functioning of working model as per stated requirements				
5	Effective use of skill sets				
6	Effective use of standard engineering norms				
7	Contribution of an individual's as member or leader				
8	Clarity in written and oral communication				
9	Overall performance				

o Can the same mini project extend to next semester by adding new objectives/ideas? ( Yes/ No)

o If yes, suggest new Innovative Technique/Idea/ objectives related to this project.

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Signature of External Examiner

Signature of Internal Examiner