

# Pune Vidyarthi Griha's College of Engineering and Technology and G.K.Pate(Wani) Institute of Mangement, Pune

#### **Department of Information Technology**

Final Year Project Work

Academic Year: 2024-25

Project Title	Automation of Sign and Photo Detection Using AI and OCR
Project Area	AI/ML
Internal Guide	Prof. K.S.Balbudhe

### College of Engineering and Technology and G.K.Pate(Wani) Institute of Management,Pune

#### **Department of Information Technology**

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	Undertaking

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# Pune Vidyarthi Griha's College of Engineering and Technology and G.K.Pate(Wani) Institute of Management,Pune

**Department of Information Technology** 

### **SEMESTER-I**

### College of Engineering and Technology and G.K.Pate(Wani) Institute of Management, Pune

#### **Department of Information Technology**

#### **UNDERTAKING BY STUDENTS**

We, the students of B.E.I.T. are hereby assure that we will follow all the rules and regulations of SPPU related to the project work for the academic year 2024-25. The Project entitled- **Automation of Sign and Photo Detection Using AI and OCR** will be fully designed and developed by us and no part of the project/full project will be designed and developed by any external entity or copied from some external resources. We are fully aware that copying or taking help of any external agency in the development of our project is totally unethical and illegal. The examiners have /University has full rights to initiate an action against us as per University norms if involved in unfair/illegal/unethical work.

Sr. No.	Roll No.	Name of Student	Signature
1.	3037	Mrunali Satish Raksale	
2.	3007	Sayali Subhash Kashid	
3.	3074	Sakshi Ulhas Bodake	
4.	3081	Siddhi Yogesh Jadhav	

Project Name: Automation of Sign and Photo Detection Using AI and OCR

### College of Engineering and Technology and G.K.Pate(Wani) Institute of Management, Pune

**Department of Information Technology** 

### Savitribai Phule Pune University, Pune (With effect from Academic Year 2024-25)

#### **Rules & Regulations**

- 1. All students must enter the correct information in the work book.
- 2. All the entries in the project work book must be verified by the concerned project guide.
- 3. Students must report to their respective guide on project day as per the time table.
- 4. Activities of the project work should be completed as per the project plan only.
- 5. Project group must submit soft copies of Project Abstract, Project Report and Publications in PDF format only.
- 6. Project group member submit **two** hard copies of Project Report in the format provided by department.
- 7. Project work book must be brought at the time of Project Reviews & Project Examination.
- 8. Any changes, if any, must be countersigned by the concerned project guide.
- 9. For project reviews and project examination, all students must report 15 minutes before the scheduled time.
- 10. For any query, concerned guide should be consulted.

### College of Engineering and Technology and G.K.Pate(Wani) Institute of Management,Pune

#### **Department of Information Technology**

(Academic Year 2024-25)

#### **PROJECT WORK SCHEDULE**

Sr.No.	Activity Scheduled	Date
	SEMESTER-I	
1.	Registration of Project Groups	Week 2
2.	Project Topic Revisit and Submission	Week 3
3.	Allocation of Guide	Week 4
4.	Submission of Abstract to Project Guide and Project Coordinator in the Prescribed Format	Week 4
5.	Project Review-I	Week 6
6.	Project Review-II	Week 10
7.	Verification of Project Work Book By Internal Guide (before submission of Preliminary Project Report)	Week 11
8.	Submission of Final Preliminary Project Report in Prescribed Format	Week 12
9.	External Term-work Evaluation (After Theory Examination)	As per Univ. Schedule

### College of Engineering and Technology and G.K.Pate(Wani) Institute of Management, Pune

#### **Department of Information Technology**

(Academic Year: 2024-25)

**Project Group No.: 16** 

Project Title: Automation of Sign and Photo Detection Using AI and OCR

Project Area: AI/ML Project Platform:

**GROUP DETAILS:** 

S.No.	Roll No.	Name of the Student	Mobile No.	Email id
1.	3037	Mrunali Satish Raksale	8999549640	21013037@pvgcoet.ac.in
2.	3007	Sayali Subhash Kashid	8530176927	21013007@pvgcoet.ac.in
3.	3074	Sakshi Ulhas Bodake	9689928781	21013074@pvgcoet.ac.in
4.	3081	Siddhi Yogesh Jadhav	8806092888	21003081@pvgcoet.ac.in

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Name of Internal Guide Prof. K.S.Balbudhe Mobile No.: 9420936964

Email id: ksr\_it@pvgcoet.ac.in Email id:

Name of External Guide
Dr. S.A.Mahajan
Mobile No:
Department of Information
Email id:
Technology

College of Engineering and Technology and G.K.Pate(Wani) Institute of

Management, Pune

Department of Information Technology

(Academic Year: 2024-25)

Abstract

In order to register for exams, students are typically required to upload various details, such as their name, age,

gender, passport-sized photo, and signature. However, students with limited computer literacy often face challenges

in accurately completing these tasks, leading to errors such as incorrect or misplaced uploads. This can result in the

generation of faulty admission cards or delays in processing their application.

The form includes fields where candidates must upload their photo and signature, which are essential for creating a

valid admit card. The system incorporates technologies like Optical Character Recognition (OCR) and facial

recognition to automate the detection and extraction of images and signatures from documents. An automated web

application can help by recognizing and validating both the photo and signature uploaded by the candidate, ensuring

that they are placed in the correct fields. Additionally, it verifies the user's entered details against their Aadhaar card.

This helps reduce errors and ensures that even students with limited computer knowledge can successfully complete

the registration process.

Project Name: Automation of Sign and Photo Detection Using AI and OCR

### College of Engineering and Technology and G.K.Pate(Wani) Institute of Management,Pune

#### Department of Information Technology

(Academic Year: 2024-25)

#### Semester - I

#### **Weekly Planning Sheet**

Week No.	Activity Planned	Activity Completed Status	Student Signature	Guide Signature
Week 1	Formation of Group	Complete		
Week 2	Registration of Project Groups	Complete		
Week 3	Project Topic Revisit and Submission	Complete		
Week 4	Allocation of Guide	Complete		
Week 5	Submission of Abstract to Project Guide and Project Coordinator in the Prescribed Format	Complete		
Week 6	Review-1	Complete		
Week 7				
Week 8				
Week 9				
Week 10				
Week 11				
Week 12				

**Project Coordinator** 

Internal Guide

### College of Engineering and Technology and G.K.Pate(Wani) Institute of Management,Pune

#### **Department of Information Technology**

#### PROJECT REVIEW-I

(Academic Year: 2024-25)

#### REVIEW-I CHECKLIST: FINALIZATION OF SCOPE 25 Marks

PR	DJECT STATEMENT	Υ	N	*NC	*NA
1.	Is the statement short and concise (10-20 words maximum)?				
2.	Does the statement gives clear indication about what your project will accomplish?				
RE	QUIREMENT: SCOPE AND OBJECTIVES				
	es the Scope and Objectives establish the "context" for the proposed ject by referencing to the following elements:				
a.	Area all aspects of the requirements document (i.e., Functional Spec.) addressed in the design?				
b.	Is the architecture/ block diagram well defined and understood?				
C.	The project's objective of study (what product, process, resource, etc.) is being addressed				
d.	The project's viewpoint: is the project's viewpoint is understood? (who is the project's end user)?				
e.	Is the project goal statement is in alignment with the sponsoring organization's business goals and mission?				
AN	ALYSIS				
1.	Is information domain analysis complete, consistent and accurate?				
2.	Is problem statement categorized in identified area and targeted towards specific area therein?				
3.	Does the Use Case Model properly reflects the actors and their roles and responsibilities?				
4.	Are requirements consistent with schedule, resources and budget?				•

<sup>\*</sup>NC- Not Clear \*NA – Not Applicable

Review 1 Deliverables	Υ	N
Problem Statement / Title		
Purpose, Scope, Objectives		
Abstract (System Overview)		
H/W,S/W & other requirement, Test Environment/Tools		
(System Overview- Proposed system & Proposed outcome)		
Architecture & DFD		
References		
Project Plan 1.0		

### College of Engineering and Technology and G.K.Pate(Wani) Institute of Management,Pune

**Department of Information Technology** 

### PROJECT REVIEW-I (Academic Year: 2024-25)

#### STUDENT PERFORMANCE EVALUATION

Particulars	Marks (25M)					
	Group Members					
	Name 1	Name 2	Name 3	Name 4		
1. Background and Topic (4M)						
2. Project Scope and Objectives (4M)						
3. Literature Survey (5M)						
4. Project Planning (4 M)						
5. Presentation Skills (4M)						
6. Question and Answer (4M)						
Total (25M)						
Comments (if any)				1		

<sup>#</sup> To be filled by internal guide & reviewer(s) only.

Name & Signature of evaluation committee-

Name of Reviewer 1 Name of Reviewer 2 Name of Internal Guide

Dr. S.A.Mahajan Prof. N.S.Shirsat K.S.Balbudhe

<sup>\*</sup> Whether the presentation / evaluation is as per the schedule. : YES / NO (If NO mention the reasons for the same.)

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### PROJECT REVIEW-II (Academic Year: 2024-25)

REVIEW-II CHECKLIST: DESIGN 25 Marks

DES	DESIGN		N	*NC	*NA
1.	Are requirements reflected in the system architecture?				
2.	Does the design address all the issues from the requirements?				
3.	Are structural diagrams (Class, Object, etc.) well defined and understood?				
4.	Are the classes in the class diagram clear? (What they represent in the architecture design document?) Are the multiplicities in the class diagram depicted in the Use case diagram?				
5.	Does each case have clearly defined actors and input/ output?				
6.	Area behavioral diagrams (use case, sequence, activity, etc.) will be defined and understood?				
7.	Is all concurrent processing (if used) clearly understood and reflected in the sequence diagrams? Does the sequence diagram map class diagram?				
8.	Does code completely & correctly implement the design and effective modularity achieved with functionally independent modules?				
9.	Are basic functions in the design coded?				
10.	Is code clearly & adequately documented?				
11.	Is test results highlighted?				

<sup>\*</sup>NC- Not Clear \*NA – Not Applicable

### College of Engineering and Technology and G.K.Pate(Wani) Institute of Management,Pune

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Review 2 Deliverables	Υ	N
Problem Statement / Title		
Abstract		
Introduction		
Literature Survey (comparison with existing system)		
Methodology		
Design / algorithms / techniques used		
Modules Split-up		
Proposed System		
Software Tools/Technologies to be used		
Working module		
Partial Report (Semester – I)		
Project Plan 2.0		

### College of Engineering and Technology and G.K.Pate(Wani) Institute of Management, Pune

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#### **PROJECT REVIEW-II**

### (Academic Year: 2024-25) STUDENT PERFORMANCE EVALUATION

Particulars		Marks	(25 M)		
	Group Members				
	Name 1	Name 2	Name 3	Name 4	
System Architecture & Literature Survey (Review-I)					
2. Project Design (4 M)					
3. Techniques/Methodology /Algorithms and Project Features (3 M)					
4. Project Planning (4 M)					
5. Basic details of Implementation( Working module) (4 M)					
6. Presentation Skills ( 4 M)					
7. Question and Answer (2 M)					
8. Summarization of Ultimate findings of the Project (2 M)					
9. Test Results(2 M)					
Total (25 M)					

<sup>#</sup> To be filled by internal guide & reviewer(s) only.

Name & Signature of Evaluation Committee -

Name of Reviewer 1 Name of Reviewer 2 Name of Internal Guide Dr. S.A.Mahajan Prof. N.S.Shirsat K.S.Balbudhe

<sup>\*</sup> Whether the presentation / evaluation is as per the schedule. : YES / NO (If NO mention the reasons for the same.)

### College of Engineering and Technology and G.K.Pate(Wani) Institute of Management,Pune

**Department of Information Technology** 

# Pune Vidyarthi Griha's College of Engineering and Technology and G.K.Pate(Wani) Institute of Management,Pune

#### **Department of Information Technology**

#### **Participation in Project Competition/Event**

(Academic Year: 2024-25)

#### **Paper Publication/ Presentation**

Sr.No.	Name of the Organizing Society	Date	Certificate/ Prizes won (if any)

* Photocopy of the certificate must be attached to this b	oooklet.
Project Coordinator	Internal Guide

### College of Engineering and Technology and G.K.Pate(Wani) Institute of Management, Pune

Department of Information Technology

## Savitribai Phule Pune University Faculty of Information Technology

#### **Examination Evaluation Guidelines**

Along with Internal Examiner, the External Examiner should see their Partial or Final project reports, project log book and the presentation of each group along with live project demonstration (applicable in second semester).

There is a possibility that the marks obtained in B.E. Projects by various groups across the university may not be uniform because of the involvement of many examiners. It is expected that the examiners should evaluate the students rigorously. Both the examiners are supposed to evaluate each student / group based on some or all of the following points. Also the evaluation of the examiners must be fair enough so that the student gets appropriate credit/ marks for his/her efforts. Marks breakup is enclosed in the attached excel sheet

The following are the guidelines for the presentation and should be shared with the students.

- 1) Purpose or Significance or Motivation of Study / topic identified
- 2) Objectives of Problem Statement
- 3) Technical relevance and originality of problem
- 4) Literature reviewed followed by sufficient requirements analysis
- 5) Design and coding effort along with best practices followed
- 6) Analysis, interpretation, implementation and validity of results
- 7) Extent of technical knowledge and coding skill gained
- 8) Use of project management techniques and maintaining project log Book.
- 9) Use of modern CASE tools and techniques in development (if required for the problem)
- 10) Team-work and collaboration
- 11) Use of professional ethics and social relevance
- 12) Presentation Skills
- 13) Answers to questions analysis, depth of understanding of problem/ conclusions/inference
- 14) Project Report / Thesis Contents Quality

#### NOTE:

- 1. The project groups obtaining more than 90% of marks in the project exam may be moderated by the committee appointed by the University of Pune.
- 2. The evaluation sheet enclosed should be duly filled according to project group and sent along with the chairman copy of the mark list
- 3. The project guide should initiate the presentation in the project examination (Sem-I to create a context and to understand the motivation of the project topic.

### College of Engineering and Technology and G.K.Pate(Wani) Institute of Management,Pune

**Department of Information Technology** 

#### **Savitribai Phule Pune University**

#### **Faculty of Information Technology**

#### **SEMESTER - I**

#### **External Examination Evaluation Sheet**

#### Programme of Term-work Examination BEIT- Nov. / Dec. (2024-25)

Sr. No	Exam Seat No.	Originality of Problem Statement Attainment of Objectives	Analysi s & Design	Presentatio n Skills	Answers to questions- analysis, depth of understanding the problem/ conclusions/ inference	Content Quality of Partial Project Report	Total (out of 50)
	Marks →	5	20	5	10	10	TW
1.							
2.							
3.							
4.							

Signature Signature

Internal Examiner External Examiner