



Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00

DOI: 02/01/2023
Version: 3B.0



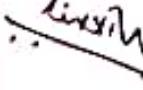
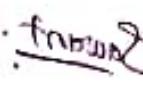
Project Diary

Project Group Information

Sr. No.	Photo	Name	Personal Details	Sign.
1.		Kawade Pavan	Roll No: 3463 Exam Seat No: B191104227 Mobile No: 9579890690 Email ID: pavonkawade5555@gmail.com	
2.		Magar Swapnil	Roll No: 3462 Exam Seat No: B191104236 Mobile No: 7498956468 Email ID: swapnilmagar2001@gmail.com	
3.		Patil Nikhil	Roll No: 3465 Exam Seat No: B191104251 Mobile No: 7388803597 Email ID: officialnikhilpatil@gmail.com	
4.		Sawant Shivaji	Roll No: 3464 Exam Seat No: B191104262 Mobile No: 9623150702 Email ID: shirajjsawant6@gmail.com	

	Yanamalai Panar College of Engineering & Technology Affiliated by Anna University, Approved by AICTE	Record No.: VCAD 0033 Date: 05/01/2017 Revision: 00 Version: 3.0	
Project Details			

Project Group Information

Sl.no	Photo	Name	Personal Details	Signature
1		Ranganade Panan	Roll No: 3463 Exam Seat No: 0131104555 Mobile No: 9843183063 Email ID: ranganadepanan@yanamalai.com	
2		Sivagnanam	Roll No: 3465 Exam Seat No: B181104536 Mobile No: 9748682569 Email ID: sivagnanam@yanamalai.com	
3		Parthipan	Roll No: 3462 Exam Seat No: B181104521 Mobile No: 9388980383 Email ID: parthipan@yanamalai.com	
4		Sankar	Roll No: 3464 Exam Seat No: B181104565 Mobile No: 9833150505 Email ID: sankar@yanamalai.com	



Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00

DOI: 02/01/2023
Version: 3B.0



Project Diary

UNDERTAKING BY STUDENTS

We, the students of B.E. Computer Department Students are here by assured that we will follow all the rules and regulations of Savitribai Phule Pune University related to the project work for the academic year 2023-2024.

The Project entitled-

Controlling Robot By Using Google Assistant, Bluetooth And Voice Command

will be designed and developed by us and no part of the project will be designed/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 unethical and illegal. The Examiners /University can initiate an action against us as per Savitribai Phule Pune University norms if found violation of rules and regulations.

Sr. No.	Roll No.	Name of Student	Signature
1	3463	Pavan Hanumant Kawade	
2	3462	Magar Swapnil Dhanaji	
3	3465	Nikhil Sudhalcar Patil	
4	3464	shiraji Balasaheb sawant	

	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
Record No.: ACA/D/003B Revision: 00	DoI: 02/01/2023 Version: 3B.0		

Project Diary

Project Plan

Sr. No.	Project Activity	Description	Date Of Completion	Sign of Guide
1.	Topic Discussion	Group confirmed discussion with project guide over 3-4 topic started search for research paper for more information	15/07/23	
2.	Topic Finalization	From suggested 3,4 topics / topic is finalized by discussing with project guide	22/07/23	
3.	Synopsis preparation	Discussion & preparation of synopsis, Aim, objective, scope.	12/08/23	
4.	Review one presentation	presentation including tentative title, problem statement, Aim, objective, scope, Feasibility study & literature survey,	26/08/23	



Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00

DoI: 02/01/2023
Version: 3B.0



Project Diary

Sr. No.	Project Activity	Description	Date Of Completion	Sign of Guide
5.	Project Evaluation	improvement in problem statement, objective & title according to inst. victim received in review.	09/09/23	
6.	System Architecture Discussion over the design	basic system architecture.	16/09/23	
7.	Basic system Architecture design.	Discussion over system architecture & improvement in SRS as per Architecture.	23/09/23	
8.	Initial phase of Design.	Discussion for preparation of basic DFD & UML diagram with guide.	07/10/23	
9.	Project plan 1.0	prepare project plan to and divide tasks according to project plan 1.0	14/10/23	
10.	Review two	Discuss on literature survey,	14/10/23	



Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00

DoI: 02/01/2023
Version: 3B.0



Project Diary

Library Visit Record

Sr. No.	Date	Resources Used	Sign of Librarian
1	12/08/23	Designing the internet of things in voice controlled Robot for Home - A. Simth	Sach
2	12/08/23	Bluetooth Based control system for Autonomous Robots - B. Johnson, C. Lee	Sach
3	26/08/23	Human-Robot interaction: - X. Wang and Y. Chen	Sach
4	09/09/23	Challenges in implementing voice command system - M. Garcia, J. Kim	Sach
5	09/09/23	Integrating voice Assistant - R. Patel et al	Sach
6	30/09/23	Enhancing user experience in voice controlled - L. Chen et al.	Sach
7			
8			
9			
10			
11			
12			
13			
14			
15			

	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
Record No.: ACA/D/003B Revision: 00	DoI: 02/01/2023	Version: 3B.0	
Project Diary			

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan Hanumant kawade	
2.	3462	Magar swapnil Dhanaji	
3.	3465	Nithil Sudhakar patil	
4.	3464	Shivaji Balasaheb sawant	

Project Progress:
 we discuss three project topics: The first is gas detection system , second ev charging system and third is controlling robot by using google assistant, Bluetooth and voice command . The controlling robot by using google assistant ,Bluetooth and voice command was finalized by faculty .

Comments by Guide:
 This three topics were presented by students and we finalized controlling robot by using Google assistant ,Bluetooth and voice command .

Date: 15/07/2023

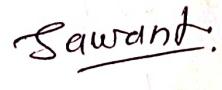
Guide

Project Coordinator

Head of the Department

	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
Record No.: ACA/D/003B Revision: 00	DOI: 02/01/2023 Version: 3B.0		
Project Diary			

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan Hanumant kawade	
2.	3462	major swapnil dhandaji	
3.	3465	Nikhil sudhakar patil	
4.	3464	Shivaji Balasaheb sawant	

Project Progress: So, we proceed for literature survey on controlling robot by using google assistant, Bluetooth and voice command which is required for our project. This survey can help us to understand the best technology which will be suitable for our project.

Comments by Guide: Student study more deeply on selected topic before proceeding ahead | And come up with new idea.

Date: 22/07/2023

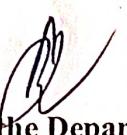
Guide



Project Coordinator



Head of the Department





Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00

DoI: 02/01/2023
Version: 3B.0



Project Diary

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan Hanumont Kawade	
2.	3462	Magar Swapnil Dhanaji	
3.	3465	Nilchil Sudhakar Patel	
4.	3464	Shivaji Balasaheb Sawant	

Project Progress:

existing Application Research:

Survey of existing applications was taken where different type desktop application having similar functionalities were searched & (and) drawbacks and limitations were analysed,

Comments by Guide:

I checked all the functionalities drawbacks and limitations and suggest they to add new functionalities according to their drawbacks.

Date: 05/08/2023

Guide



Project Coordinator



Head of the Department





Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00

DOI: 02/01/2023
Version: 3B.0



Project Diary

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavun Hanumant kavade	
2.	3462	Majgor swapnil Dhanaji	
3.	3465	Nilchit Sudhalaxmi Patil	
4.	3464	Shivaji Balasaheb Sawant	

Project Progress: we discussed research papers.

- 1) voice - controlled Robot for smart home applications.
- 2) Bluetooth- Based control system for Autonomous Robots .
- 3) Human Robot interaction - A review of Recent Advances .
- 4) challenges in implementing voice commands .

Comments by Guide:

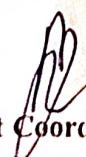
All the research papers are presented by students and finalized by me.

Date: 12/08/2023

Guide



Project Coordinator



Head of the Department



	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
Record No.: ACA/D/003B Revision: 00	DoI: 02/01/2023 Version: 3B.0		
Project Diary			

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan Hanumant kawade	(PK)
2.	3462	Magar Swapnil Dhanaji	Magar
3.	3465	Nikhil Sudhakar Patil	<u>Nikhil</u>
4.	3464	Shivaji Balasaheb Sawant	<u>Sawant</u>

Project Progress: We discussed research papers.

- 1) Integrating google Assistant with Robotics - A case study.
- 2) Efficient voice Recognition techniques for Robot control.

Comments by Guide:

All the research paper presented by students and finalized by me.

Date: 19/02/2023

Guide



Project Coordinator



Head of the Department





Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00

DOI: 02/01/2023
Version: 3B.0



Project Diary

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan Hanuman f kawade	(PK)
2.	3462	Magar swapnil Dhomaji	Magar
3.	3465	Nilesh Sudhalcor Patil	<u>Nilesh</u>
4.	3464	Shivaji Balasaheb Sawant	<u>Sawant</u> :

Project Progress:

We discussed research paper.

- ↳ Bluetooth connectivity in Robotics :
- ↳ Enhancing user experience in voice controlled robots.

Comments by Guide:

- All the research papers are presented by students and finalized by me.

Date: 26/01/2023

Guide



Project Coordinator



Head of the Department





Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00

DoI: 02/01/2023
Version: 3B.0



Project Diary

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan Hanumant Kawade	<u>Phk</u>
2.	3462	Magar Swapnil Dhanaji	<u>Magar</u>
3.	3465	Nicel Sudhakar Patre	<u>Nicel</u>
4.	3464	Shivaji Balasaheb Sawant	<u>Sawant</u>

Project Progress:

- We discussed research papers.
1) challenges in implementing voice command systems in Industrial Robotics.
2) proceedings of the international conference on robotics and automation in marathwada and himachal pradesh.

Comments by Guide:

All the research papers are presented by students and finalized by me.

Date: 09/09/2023

Guide



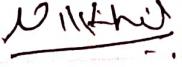
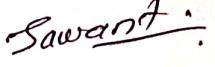
Project Coordinator

Head of the Department



	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
Record No.: ACA/D/003B Revision: 00	DoI: 02/01/2023	Version: 3B.0	
Project Diary			

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan Hanumant kawade	
2.	3462	Mugor Swapnil Dhanaji Mugor	
3.	3465	Nikhil Sudhalocar Patil	
4.	3464	Shivaji Balasaheb sawant	

Project Progress:

This survey can help us to understand the best technology which will be suitable for our project.

Comments by Guide: students give us technologies which are used for cms and we suggest them best technologies for their project.

Date: 09/09/2023

Guide



Project Coordinator



Head of the Department





Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B

Revision: 00

DOI: 02/01/2023

Version: 3B.0



Project Diary

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan Hanumant Kawade	
2.	3462	Majur Swapnil Dhanaji	
3.	3465	Nilchit Sudhalcoor Patel	
4.	3464	Shivaji Balurshet Sawant.	

Project Progress:

Research on new technologies in the field of controlling robot by using google assistant, Bluetooth and voice command we studied controlling robot using IOT (internet of things), find the user classes and characteristics, assumption and dependencies.

Comments by Guide:

Controlling robot by using various commands, user classes, characteristics, assumptions and dependencies are finalized by guide.

Date: 16/09/2023

Guide



Project Coordinator

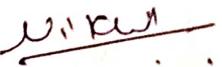
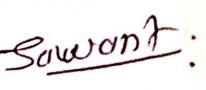


Head of the Department



	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
	Record No.: ACA/D/003B Revision: 00	DOI: 02/01/2023 Version: 3B.0	
Project Diary			

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan Hanumant Kawade	
2.	3462	Magor Swapnil Dhanaji	
3.	3465	Vilas Sudhalca Patil	
4.	3464	Shivaji Balurabeh Sawant	

Project Progress:

The system architecture of the project i.e. google assistant, Bluetooth, hand gesture, this are drawn for the project. The system architecture is trained,

Comments by Guide:

The architecture of the project and its component are checked by guide.

Date: 23/09/2023

Guide



Project Coordinator



Head of the Department



	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
Record No.: ACA/D/003B Revision: 00	DoI: 02/01/2023	Version: 3B.0	
Project Diary			

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan Hanumant Kawade	
2.	3462	Majgor Swapnil Dhangaji	
3.	3465	Nichil Sudhakar Patil	
4.	3464	Shivaji Balasaheb Sawant	

Project Progress:

The Dependence on internet connectivity, voice command recognition Accuracy, limited range of control, complexity in integration, security vulnerabilities, dependency on google assistant service and hardware etc. we checked out all the importance of this things.

Comments by Guide:

Cross checked the Accuracy, limited range, complexity, security and important feedback which were necessary.

Date: 30/09/2023

Guide



Project Coordinator



Head of the Department





Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00

DoI: 02/01/2023
Version: 3B.0



Project Diary

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Parun Hanumont kawade	<u>Pk</u>
2.	3462	Majgor Swapnil Dhanaji	<u>Majgor</u>
3.	3465	Nichal Sudhaikar Patel	<u>Nichal</u>
4.	3464	Shivaji Balasaheb Sawant	<u>Sawant</u>

Project Progress:

controlling the commands or handling the commands which are using the Google Assistant, Bluetooth and voice command are suitable for the Robot.

Comments by Guide:

The google assistant, Bluetooth and voice command which are best for project decided by guide.

Date: 07/10/2023

Guide



Project Coordinator

Head of the Department





Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B

Revision: 00

DoI: 02/01/2023

Version: 3B.0



Project Diary

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan Hanumant kawade	<u>P.K</u>
2.	3462	magar swapnil Dhanaji	<u>Magar</u>
3.	3465	Nirav Sudhaloo Patel	<u>Nirav</u>
4.	3467	Shivaji Balasaheb sawant	<u>Sawant</u>

Project Progress:

Research paper making and documentation of the project.

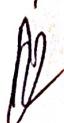
Comments by Guide:

Research paper and documentation are crosschecked by guide.

Date:

14/10/2023

Guide



Project Coordinator

Head of the Department



	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
Record No.: ACA/D/003B Revision: 00	DOI: 02/01/2023	Version: 3B.0	
Project Diary			

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan hanumant tewade	
2.	3462	maffer swapnil shanaji	
3.	3465	Nikhil sudhakar patil	
4.	3464	shivaji Balasaheb sawant.	

Project Progress:

summazation of synopsis , project report and research paper .

Comments by Guide:

Question asked to students about their project stage I where they completed 30-40% implementation.

Date: 01/10/2023

Guide



Project Coordinator



Head of the Department



	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
Record No.: ACA/D/003B Revision: 00	DOI: 02/01/2023 Version: 3B.0		
Project Diary			

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	pavan hanuman trawade	
2.	3462	magar swapnil shanaji	
3.	3465	Nikhil sudhakar patil	
4.	3464	shivaji Balasaheb sawant	

Project Progress:

30-40 % implementation of the project was done, report finalization was done, synopsis paper and ppt finalization was done.

Comments by Guide:

Completion of project review I was completed by project team member.

Date: 04/11/2023

Guide



Project Coordinator



Head of the Department



	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
Record No.: ACA/D/003B Revision: 00	DoI: 02/01/2023 Version: 3B.0		
Project Diary			

Project Review Approval sheet by Guide

Review Number	Date of Review	Comment	Approval for Project Review (y/N)	Sign of Guide
1	22/7/23	improvement in scope, dim, title as per literature	yes	
2				
3				
4		Survey		
5	16/9/23	improvement in PFD & uml diagram	yes	
6				
7		and system		
8		Architecture		
9	30/9/23	Test cases improvement suggestions for more effective implementation.	yes	
10				
11	14/10/23	pointed out project		
12				
13		Security to keep up testing with		
14		Development.		
15	4/11/23	30-40% implementation	yes	



Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00

DOI: 02/01/2023
Version: 3B.0



Project Diary

Project Reviews

Sr. No.	Date of Review	Name of Reviewer	Sign of Reviewer	Comments
1	22/07/23	Prof. Anil Lohar		Discussed topic with your group members and finalize project.
		prof. shweta joshi		
2	05/08/23	prof. Anil Lohar		changes to do in Architecture DFD Design project plan 1.0
		prof. Chetana Upasani		
3	12/08/23	Prof. Anil Lohar		change to do in system design and module,
		prof. shweta joshi		
4	09/09/23	prof. Anil Lohar		changes to do in structure of ppt research paper related to present

Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00

DOI: 02/01/2023
Version: 3B.0



Project Diary

Sr. No.	Date of Review	Name of Reviewer	Sign of Reviewer	Comments
5	30/09/23	Prof. Anil Lohar		change to be done in review paper
		Prof. Chetan Upasani		
6	14/10/23	prof. Shweta Joshi.		changes to be done in testing like unit testing and integration testing.
		prof. Anil Lohar		
7	21/10/23	prof. Chetan Upasani		changes to be done in project diary, report, ppt and improved by project team member
		prof. Anil Lohar		
8				



Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00

DoI: 02/01/2023
Version: 3B.0



Project Diary

Action Plan After Review by Guide

Review No.	Date of Review	Remark by Guide	Guide Signature
1	22/07/23	Topic selection, group members finalization and guide Allotment done.	
2	05/08/23	changes done in architecture of design proper project plan 1.0	
3	12/08/23	changes done in system design algorithm should be explained well.	
4	09/09/23	Do changes in structure of ppt for research paper related to project with latest publication.	
5	16/09/23	finalization of Advanced features and adding new technology.	
6	30/09/23	changes to be done in revised paper.	

	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
Record No.: ACA/D/003B Revision: 00	DoI: 02/01/2023 Version: 3B.0		
Project Diary			

Review No.	Date of Review	Remark by Guide	Guide Signature
7	14/10/23	changes to be done in testing like unit testing, integration testing are improved by team member.	
8	21/10/23	change to be done in project report, ppt, diary and synopsis are also done.	
9			
10			
11			
12			



Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00

DoI: 02/01/2023
Version: 3B.0



Project Diary

Cost Estimation

Sr. No.	Particular	Amount in Rupees
1	Σ 31 IR module	132/-
2	hook male	150
3	hook female	180
4	Σ 225 298 module	110
5	RCT- 255 m/f	110
6	Σ 798 IR. wire	175
7	4 wheel car ₹ 800	500
8	RCY 254	122
9	RCY 255	122
10	RCY 256	122
11	BT 14 .	150
12	567 GU ₹ 191	100
13	L 293P ₹ 179	130
14	3R sensor ₹ 31	132
15	MC 05 ₹ 26	250
16	10 mm Red - 21	112
17	IPS L Red	125
18	MFR 11mm	260
		3082

	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
Record No.: ACA/D/003B Revision: 00		DoI: 02/01/2023 Version: 3B.0	
Project Diary			

External Examiner Feedback (Term-I)

Item	Excellent	Good	Satisfactory
Q1. Are the students able to apply their knowledge of mathematics and engineering to identify, formulate, and solve complex problems through project work?		✓	
Q2. How will you rate student's ability to design a system, analyze and interpret data to meet desired needs within realistic constraints through project work?	✓		
Q3. To what extent do you think the students are able to innovatively think, visualize and function on multidisciplinary areas?		✓	
Q4. To what extent do you think the students have understood professional and ethical responsibility through project work?	✓		
Q5. Are the students able to communicate effectively in both verbal and written form?		✓	
Q6. Are the students able to understand the impact of engineering solutions in a global, economic, environmental, and societal context?		✓	
Q7. Indicate the extent to which students have understood project management and team work?		✓	
Q8. To what extent do you think the students are able to use modern engineering tools along with knowledge of contemporary issues?		✓	
Q9. How will you rate student's ability to recognize the need of engaging in life-long learning?			✓

Date:

Signature (External)



Remarks if any:

	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
Record No.: ACA/D/003B Revision: 00	Dol: 02/01/2023 Version: 3B.0		
Project Diary			

UNDERTAKING BY STUDENTS

We, the students of B.E. Computer Department Students are here by assured that we will follow all the rules and regulations of Savitribai Phule Pune University related to the project work for the academic year 2023-2024.

The Project entitled-

Controlling Robot By Using Google Assistant, Bluetooth And Voice Command

will be designed and developed by us and no part of the project will be designed/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 unethical and illegal. The Examiners /University can initiate an action against us as per Savitribai Phule Pune University norms if found violation of rules and regulations.

Sr. No.	Roll No.	Name of Student	Signature
1	3463	Pavani hanuman kawade	(PK)
2	3462	swapnil dhanaji mugarkar	swapnil mugarkar
3	3465	Nikhil sudhakar patil	Nikhil
4	3464	shivaji Balasaheb sawant.	Sawant



Project Diary

Project Plan

Sr. No.	Project Activity	Description	Date Of Completion	Sign of Guide
1	Analyzing of work	we plan all the details which are required	06-01-24	
2	start working	using various equipment	12-01-24	
3	build prototype	here we builded the prototype.	20-01-24	
4	running the prototype	we implemented all necessary codes to run it.	29-01-24	
5	Installation of features	Here we added some modules to execute our plan	09-02-24	
6	show demo	successfully shows the demo.	17-02-24	
7	participated in competitions	- we successfully attended Robotics competitions	23-02-24	



Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00

DOI: 02/01/2023
Version: 3B.0



Project Diary

Library Visit Record

Sr. No.	Date	Resources Used	Sign of Librarian
1	06-01-24	software engineering - haorem A. saleh,	Sachin 20/1/2024
2	12-01-24	machine learning using python - sanjan pradhan	Sachin 20/1/2024
3	20-1-24	Neural networks Fundamentals with graphs Algorithm & applications - H.K. Dose.	Sachin 20/1/2024
4	29-01-24	Fundamentals of Digital Image processing - AI B.Burke.	Sachin 20/1/2024
5	09-02-24	The essential guide to image processing - Anil K.Tam	Sachin 20/1/2024
6	17-02-24	Deep learning from scratch - seth weidman	Sachin 20/1/2024
7	23-02-24	Digital image processing an algorithm - madhuri A. sohoni	Sachin 20/1/2024
8	02-03-24	Fundamentals of Deep learning - Nitin Buduma	Sachin 20/1/2024
9	16-03-24	web Technologies a computer science perspective - Jeffrey.	Sachin 20/1/2024
10	22-03-24	machine learning - Dr. S. Sondher	Sachin 20/1/2024
11	06-04-24	Deep learning with Tensorflow, second edition - Md. Rezaul.	Sachin 20/1/2024
12	12-04-24	Int. base Robotics handling protocol. Dr. M. Vijayakrishnan.	Sachin 20/1/2024
13			
14			
15			



Project Diary

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan hanumant kawade	(PK)
2.	3462	swapnil dhanaji magar	swapnil magar
3.	3465	nikhil sudhakar patil	Nikhil
4.	3464	shivaji balarabeh sawant	Sawant

Project Progress: To complete the project we need workshop. so we take all the permission regarding workshop. first we take permission from HOD comp and incharge of workshop i.e vice principal.

Comments by Guide:

Given the permission to start the work

Date: 06-01-2024

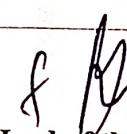
Guide



Project Coordinator



Head of the Department





Project Diary

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan hanumant kawade	
2.	3462	swapnil dhanaji mayar	
3.	3465	Hikhil sushakar patil	
4.	3464	shivaji balasaheb sawant.	

Project Progress: we started work in the workshop by using equipments. we cut the still shield. we are take the all measurement to build it.

Comments by Guide:

guided to build the Project suggested more parameters that can be beneficial

Date: 12 - 01 - 2024

Guide

Project Coordinator



Head of the Department



Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00

DoI: 02/01/2023
Version: 3B.0



Project Diary

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavlin hanumant hawade	
2.	3462	swapnil chandaji magar	
3.	3465	Nikhil sudhakar patil	
4.	3464	shivaji balaratna sawant.	

Project Progress:

we build prototyp. after that inserted the code to command it.

Comments by Guide:

To research the all things that needed suggested to rewrite the code by using C/C++

Date: 20-01-2024

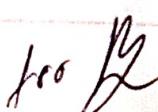
Guide



Project Coordinator



Head of the Department





Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B Date: 02/01/2023
Revision: 00 Version: 3B.0



Project Diary

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan hanumant kawade	
2.	3462	swapnil dhunaji magar	
3.	3465	Hikhil sudhakar patil	
4.	3464	Shivaji balarabheb sawant.	

Project Progress:

we face the error so then after we fix it and. It started running.
The project prototype work here.

Comments by Guide:

All the suggestions given are implemented properly.

Date: 29 - 01 - 2024

Guide



Project Coordinator



Head of the Department



Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00

DoI: 02/01/2023
Version: 3B.0



Project Diary

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan hanuman kawade	
2.	3462	Swapnil dhanaji magar	
3.	3465	Hikhil sudhakar patil	
4.	3464	Shivaji balarahab sawant	

Project Progress:

We installed the main features of our robot. i.e [google assistant model, Bluetooth model] and voice sensor to sense the or detect the voice.

Comments by Guide:

The sensor and modules have to work properly.

Date: 09 - 02 - 2024

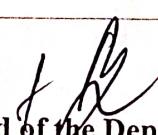
Guide



Project Coordinator



Head of the Department





Project Diary

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan hanumant kawade	
2.	3462	Swapanl dhanaji magar	
3.	3465	Nikhil sudhakar patil	
4.	3464	Shiraji balasubheb sawant	

Project Progress:

After the all process we show the demo at the department. we discussed the about the our prototype model with the our guide teacher. and done the necessary changes.

Comments by Guide:

The project is working smoothly.

Date: 17-02-2024

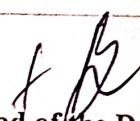
Guide



Project Coordinator



Head of the Department





Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00
DoI: 02/01/2023
Version: 3B.0



Project Diary

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan hanumant kawade	
2.	3462	Swapanil chandaji magar	
3.	3465	Nikhil sudhakar patil	
4.	3464	Shivaji balsahab sawant	

Project Progress:

We participated in the competitions.

Name :- AAVISHKAR - 2023

Address :- AISMS college of engineering.
Pune.

Comments by Guide:

As they got very good opportunity to showcase their research work.

Date: 23-02-2024

Guide

Project Coordinator

Head of the Department



Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B DOI: 02/01/2023
Revision: 00 Version: 3B.0



Project Diary

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan Hanumant Kawade	
2.	3462	Swapnil Dhanaji Magar	
3.	3465	Nikhil Sudhakar Patil	
4.	3464	Shivaji Balasaheb Sawant	

Project Progress:

We participated in the second competition i.e. "Maharashtra state Innovation society" at the SPPU University, Achievement :- Here first we selected at the district level, [in pune district].

Comments by Guide:

As hard work they got another good opportunity to showcase their research. I personally, congratulate and all the department all of them and taken review for completion.

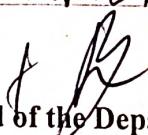
Date: 02-03-2024

Guide



Project Coordinator

Head of the Department





Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00

Dol: 02/01/2023
Version: 3B.0



Project Diary

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan hanumant kawade	(Phy)
2.	3462	Swapnil dhanaji mayar	Swapnil
3.	3465	Nikhil sudhakar patil	Nikhil
4.	3464	Shivaji balarahab sawant.	Sawant

Project Progress:

In our project make the some change according the competitions.

Comments by Guide:

They are implemented the extra feature that helped them of research.

Date: 16 - 03 - 2024

Guide



Project Coordinator

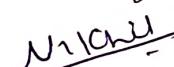
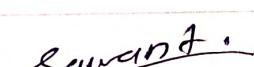


Head of the Department



	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
Record No.: ACA/D/003B Revision: 00	DOI: 02/01/2023 Version: 3B.0		
Project Diary			

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan hanumanth kawade	
2.	3462	Swapnil dhanaji magar	
3.	3465	Nikhil sudhakar patil	
4.	3464	Shiraji balaramb sawant	

Project Progress:

After we take a review with the guide regarding the changes in the project.

Comments by Guide:

Implemented feature has been working successfully.

Date: 22-03-2024

Guide



Project Coordinator


Head of the Department

	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
	Record No.: ACA/D/003B Revision: 00	DoI: 02/01/2023 Version: 3B.0	
Project Diary			

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan hanumant kawade	
2.	3462	Swapnil dhanaji magar	
3.	3465	Nikhil sudhakar patil	
4.	3464	Shivaji balasaheb sawant	

Project Progress:

we attempted third competition . i.e " NETRARIT foundation " at the RIT polytechnic college bhotgome pune.

Achivement:- we are clear the first round and selected for second round.

Comments by Guide:

They got another good opportunity
I personally congratulates them.

Date: 06 - 04 - 2024

Guide



Project Coordinator



Head of the Department





Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00

DOI: 02/01/2023
Version: 3B.0



Project Diary

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan hanumant kawade	(PK)
2.	3462	Swapnil dhanaji magar	<u>Swapnil</u>
3.	3465	Hikhil sudhakar patil	<u>Nicai</u>
4.	3484	shivaji balarabeb sawant.	<u>Sawant</u>

Project Progress: we added some features in the model with the discussion of guide. we added the "remote sensing", "line following sensor" and "obstacle avoiding".

Comments by Guide:

It makes the attractiveness of it will help them to make more rating. Guide all work completed successfully.

Date: 12-04-2023

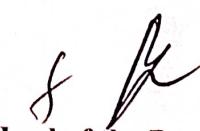
Guide



Project Coordinator



Head of the Department





Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00



DoI: 02/01/2023
Version: 3B.0

Project Diary

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan hanumant kawade	
2.	3462	Swapnil dhanaji magar	
3.	3465	Nikhil sudhakar patil	
4.	3464	Shivaji Balasaheb Sawant.	

Project Progress:

We have submitted the research paper application to publish it.
And finally tested all the features of our model.

Comments by Guide:

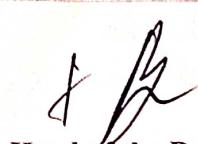
Prepared a research paper and submitted for the review purpose.

Date: 20 - 01 - 2024

Guide



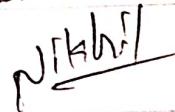
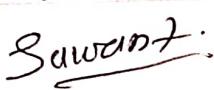
Project Coordinator



Head of the Department

	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
	Record No.: ACA/D/003B Revision: 00	DOI: 02/01/2023 Version: 3B.0	
Project Diary			

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan hanumant kawade	
2.	3462	swarnil dhanaji mayar	
3.	3465	Nikhil sukhakar patil	
4.	3464	shivaji Balasaheb Sawant	

Project Progress:

Paper has been selected for presentation.

Comments by Guide:

Prepared for the research paper and attended successfully.

Date: 26 - 04 - 2024

Guide



Project Coordinator

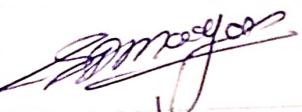
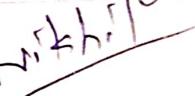
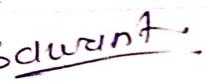


Head of the Department



	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
	Record No.: ACA/D/003B Revision: 00	DOI: 02/01/2023 Version: 3B.0	
Project Diary			

Project Review Details

Sr. No.	Roll No.	Name of Student	Signature
1.	3463	Pavan hanumant kawade	
2.	3462	Swapnil dhanaji magar	
3.	3465	Nikhil sudhakar patil	
4.	3464	shivaji balasaheb sawant	

Project Progress:

Project review scheduled
 Documentation, ppt, project report,
 project diary was reviewed and
 approved.

Comments by Guide:

All the necessary documentation
 as per the university expectation is
 discussed and guided for its completion
 with good presentation at the end.

Date: 04-05-2024

Guide



Project Coordinator

Head of the Department



	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
Record No.: ACA/D/003B Revision: 00		DOI: 02/01/2023 Version: 3B.0	
Project Diary			

Project Review Approval sheet by Guide

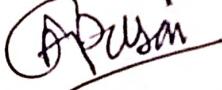
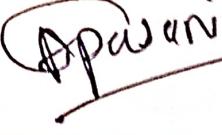
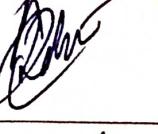
Review Number	Date of Review	Comment	Approval for Project Review (Y/N)	Sign of Guide
1	06-01-2024	satisfactory work	yes	
2	12-01-24	satisfactory work	yes	
3	20-01-24	satisfactory work	yes	
4	29-01-24	satisfactory work	yes	
5	09-02-24	satisfactory work	yes	
6	17-02-24	satisfactory work	yes	
7	23-02-24	satisfactory work	yes	
8	02-03-24	satisfactory work	yes	
9	16-03-24	satisfactory work	yes	
10	22-03-24	satisfactory work	yes	
11	06-04-24	satisfactory work	yes	
12	12-04-24	satisfactory work	yes	
13	20-04-24	satisfactory work	yes	
14	26-04-24	satisfactory work	yes	
15	04-05-24	satisfactory work	yes	

	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
Record No.: ACA/D/003B Revision: 00	DoI: 02/01/2023 Version: 3B.0		
Project Diary			

Project Reviews

Sr. No.	Date of Review	Name of Reviewer	Sign of Reviewer	Comments
1	20-01-2024	prof. Anil Lohar prof. Shweta Joshi	 	Prototype of model completed.
2	09-02-24	prof. Anil Lohar prof. Chetana Upasani	 	necessary features added in the model
3	23-02-24	prof. Anil Lohar prof. Shweta Joshi	 	AAVISHKAR competition attended
4	16-03-24	prof. Anil Lohar		Review done by guide.

	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
Record No.: ACA/D/003B Revision: 00	DoI: 02/01/2023 Version: 3B.0		
Project Diary			

Sr. No.	Date of Review	Name of Reviewer	Sign of Reviewer	Comments
5	22-03-24	prof. Anil Lohar		Participation in various competition completed
		prof. Chetana Upasani		
6	12-04-24	prof. Shweta Toshi		Research paper published completely.
		prof. Anil Lohar		
7	26-04-24	prof. Chetana Upasani		Required documentation completed.
		prof. Anil Lohar		
8	04/05/2024	prof. Anil Lohar		Final project presentation is completed
		prof. Shweta Toshi		



Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00

DOI: 02/01/2023
Version: 3B.0



Project Diary

Publication Record

Sr. No.	Name of Conference/ Journal	ISSN/ISBN Number	National/ International	Date of Publication	Impact factor
1	International conference on robotics and automation (ICRA)	AR-CRA - PUNE - 170424 - 9600	International	17/04/2024	
2	RRIT international conference	KJ JCIT ET 1 APR 24/ K2179	International		
3					
4					
5					



Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research

Record No.: ACA/D/003B
Revision: 00



Project Diary

Cost Estimation

Sr. No.	Particular	Amount in Rupees
	RBH - 22	133
	RSF 11 Red	115
	5W 90 E19/1	200
	ESP 32 CAM E-618	475
	LED , 37,19, 48,11 , 12,	490
	# 4060 BT-1	450
	RSF-11 BH	122
	RMT-14	228
	E-68 UNO	649
	E-68 UNO	649
	Installation Fare	111
	dc motor	250
	FCT - 25H, 25J, 25K	200
	100 mm fan	150
	small fully	250
	CAM stand	300
	HC 05 E26	250
	led 38, 28, 21, 22,	280
	st+11 shield	500
	GST 18%	1598 .

Grand Total = 17398



Project Diary

References

Sr. No.	E-Book / E-Journals / IEEE Journals / Conference Paper Referred
1	Brown, C., & White, B. (2023) - voice command integration for robot control.
2	Wilson, E., et al (2021) - Enhancing Robot control through google assistant.
3	Adams, O., et al (2021). Bluetooth communication protocols for robotics.
4	Patel, R., et al (2019) voice recognition Technologies Advances and challenges.
5	Patel, S., & Gupta, R. - Bluetooth Technology A comprehensive overview.
6	Smith, K., & Lee, M (2023) - Bluetooth Technology A comprehensive of voice controlled Robot using Raspberry.