Log Book

Terna Engineering College, Nerul, Navi Mumbai, 400706

Information Technology Department

Project Title: Plant Disease Detection Using Neural Network

Group No: 10

Group Members: Boora Satishchandra

Sah Smitasomya

Mandhare Hrishikesh

Supervisor: Prof . Smita Deshmukh

University of Mumbai (Academic Year-2022-23)

INSTITUTE VISION & MISSION

VISION:

To deliver value added quality education to the aspiring students, meeting stringent requirements of the changing technology, industry, business and society as a whole.

MISSION:

To provide an environment of academic excellence and to adopt appropriate teaching- learning processes to produce competent and skilled engineers ready to meet global challenges.

DEPARTMENT VISION & MISSION

VISION:

To be a center of excellence in the field of Information Technology Education and Training.

MISSION:

To educate and train the students to acquire professional competencies by applying fundamental knowledge to solve real time problem which will serve need of industry and society.

PROGRAM EDUCATIONAL OBJECTIVES (PEO's)

PEO I: To prepare students for Employment, Entrepreneurship, Higher education and Research.

PEO II: To acquire IT domain expertise with fundamental knowledge of mathematics, science and engineering.

PEO III: To enhance student's abilities in problem solving, analytical thinking and project management to meet industry needs.

PEO IV: To equip students with adequate breadth and depth of IT knowledge that enables them to solve real world and societal problems with an emphasis on professional values and ethics.

PEO V: To prepare students for life-long learning.

PROGRAM OUTCOMES (POs)

PO's	OUTCOMES
PO1	An ability to apply knowledge of mathematics, science and engineering fundamentals in the field of computing.
PO2	Critically identify, formulate and evaluate emerging topics and the recent development in the field and Provide solution to futuristic engineering problems.
PO3	The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context.
PO4	Ability in requirement gathering, design and implementation of software with computer systems to analyze and interpret the data.
PO5	An ability to use the techniques, logical and analytical skills and modern engineering tools necessary for engineering practice.
PO6	An ability to design a system component or process to meet desired needs within realistic constraints such as economic, environmental, social, cultural and safety issues.
PO7	An ability to understand an impact of engineering knowledge towards society and environment with need to sustainable solutions.
PO8	To inculcate professional ethics.
PO9	An ability to function effectively, individually and in teams to accomplish a common goal.
PO10	An ability to communicate solutions of complex computing problems effectively using reports and presentations to wide range of audiences.
PO11	To instill leadership and managerial skills in multidisciplinary environment.
PO12	Recognition of the need for and an ability to engage in life-long learning.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1	Students will be able to solve problems in Open Ended Programming Environments.
PSO2	Students will be able to use emerging Technologies like IOT, Big Data for effective and efficient real-time solutions.
PSO3	Students will be able to demonstrate and develop web and mobile applications in diversify environments.

STUDENT INFORMATION

PROJECT TITLE: Plant Disease Detection Using Neural Network
GROUP MEMBERS:

Sr. No.	Name	Roll No	Student ID	Email	Phone No
1.	Smitasomya Sah	33	TU4F1920035	smitasomyasah@ternanegg.ac.in	9226753777
2.	Boora Satishchandra	35	TU4F1920037	satishchandraboora@ternaengg.ac.in	9665593672
3.	Mandhare Hrishikesh	37	TU4F1920038	hrishikeshmandhare@ternaengg.ac.in	7715918054

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. Log book duly signed by guide must be submitted with 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 without plagiarism 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

1. Satishchandra Boora
2. Smitasomya Sah
3. Hrishikesh Mandhare

(Date & Signature of Students)

Letter of Approval

The project titled "Plant Disease Detection Using Neural Networks" is approved and accepted as Final Year Major Project for Semester VII & VIII of Information Technology Department for the Academic Year 2022-23, under the guidance of Prof. Smita Deshmukh.

The names of the students are:

1. Satishchandra Boora
2. Smitasomya Sah
3. Mandhare Hrishikesh

Prof.Smita Deshmukh	**Dr. Vijayalaxmi Kadrolli**	**Dr. Vaishali Khairnar**
(Project Guide)	**(Project Coordinator)**	**(HOD-Information Technology)**

COURSE OUTCOMES (as per project specific)

CO No.	COURSE OUTCOME	POs covered	PSOs covered
CO1	Identify problems based on societal /research needs.	PO1,PO3,PO5	PSO1, PSO2,PSO3
CO2	Apply Knowledge and skill to solve societal problems in a group.	PO1,PO3,PO9,PO10	PSO1,PSO2,PSO3
CO3	Develop interpersonal skills to work as a member of a group or leader.	PO9,PO10,PO11,PO12	PSO1,PSO2,PSO3
CO4	Draw the proper inferences from available results through theoretical/ experimental/simulations.	PO3,PO4,PO12	PSO1,PSO2,PSO3
CO5	Analyze the impact of solutions in societal and environmental context for sustainable development.	PO6,PO7,PO8	PSO1,PSO2,PSO3
CO6	Use standard norms of engineering practices	PO3,PO4,PO5,PO8	PSO1,PSO2,PSO3
CO7	Excel in written and oral communication.	PO3,PO4,PO5,PO8	PSO1,PSO2,PSO3
CO8	Demonstrate capabilities of self-learning in a group, which leads to lifelong learning.	PO10,PO11,PO12	PSO1,PSO2,PSO3
CO9	Demonstrate project management principles during project work.	PO1,PO11,PO12	PSO1, PSO2,PSO3

CO-PO-PSO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1		3	1		1								1		
CO2	2		2						3	1			1		
CO3									3	2	3	1	1		
CO4			1	2				1				1	1		
CO5						1		2					1		
CO6			1	1	1								1		
CO7			1							2			1		
CO8										1	1	2	1		
CO9	1									2	2	2	1		

PROJECT SCHEDULE

(Can be redefined as per project requirement)

Milestone No.	Planned Milestones	Completion Date		Achieved	Remarks
		Planned	Actual	Y/N	
M1	Updated the UI of the disease section	14/01/2023	14/01/2023	Y	
M2	Implementation of the chatbot	04/02/2023	04/02/2023	Y	
M3	Implementation IOT component for data extraction	25/02/2023	25/02/2023	Y	
M4	Implementation of E-commerce section	15/03/2023	15/03/2023	Y	
M5	Integration in the Application	18/04/2023	18/04/2023	Y	

PROJECT GANTT CHART

(Can be redefined as per project requirement)

No	Project Activity/Milestone	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14
M1	Updated the UI of the disease section														
M2	Implementation of the chatbot														
M3	Implementation IOT component for data extraction														
M4	Implementation of E-commerce section														
M5	Integration in the Application														

PROGRESS/ATTENDANCE REPORT

Project work progress report	Week No: 1 Date of meeting: 12/01/2023

Write report on activity related to project work:

- UI is updated in the disease section of the application
- Confidence in disease prediction has been added to the UI.

Discussion with guide:

- UI was approved by the guide.

Remark by Guide about Progress in work

○ Excellent ○ Good ○ Satisfactory ○ Not Satisfactory

Suggested Activity for Next Week:

- Implementation of confidence in disease section.

Group Code: 10	Date:	Signature of Guide:

Project work progress report	Week No: 2 Date of meeting: 19/01/2023
Write report on activity related to project work: • Addition of the confidence in disease section.	
Discussion with guide: • Confidence of the disease section was approved by the guide	
Remark by Guide about Progress in work ○ Excellent ○ Good ○ Satisfactory ○ Not Satisfactory	
Suggested Activity for Next Week: • Implementation start of Backend.	
Group Code: 10	Date: Signature of Guide:

Project work progress report	Week No: 3 Date of meeting: 24/01/2023
Write report on activity related to project work: • Studied about Flask Backend.	
Discussion with guide: • Guide has provided research papers to understand and implement Flask BackEnd.	
Remark by Guide about Progress in work ○ Excellent ○ Good ○ Satisfactory ○ Not Satisfactory	
Suggested Activity for Next Week: • Implementation of the Final Model.	
Group Code: 10 Date: Signature of Guide:	

Project work progress report	Week No: 4 Date of meeting: 02/02/2023

Write report on activity related to project work:

- Implementing Final Model for Detection.

Discussion with guide:

- Guide suggested improvement regarding Model.

Remark by Guide about Progress in work

○ Excellent ○ Good ○ Satisfactory ○ Not Satisfactory

Suggested Activity for Next Week:

- Implementing Connection of Model with FrontEnd.

Group Code: 10	Date:	Signature of Guide:

Project work progress report	Week No: 5 Date of meeting: 09/02/2023

Write report on activity related to project work:

- Implemention of FrontEnd.

Discussion with guide:

- Approval of FrontEnd by guide.

Remark by Guide about Progress in work

○ Excellent ○ Good ○ Satisfactory ○ Not Satisfactory

Suggested Activity for Next Week:

Complete Front End Implementation

Group Code: 10	Date:	Signature of Guide:

Project work progress report	Week No: 6 Date of meeting: 16/02/2023

Write report on activity related to project work:

- Completed Front End Implementation.

Discussion with guide:

- The guide has given research articles and videos to help us understand connection of Flask with FrontEnd.

Remark by Guide about Progress in work

Excellent Good Satisfactory Not Satisfactory

Suggested Activity for Next Week:

- Implementation Connection Backend with frontend.

Group Code: 10	Date:	Signature of Guide:

Project work progress report	Week No: 7 Date of meeting: 23/02/2023

Write report on activity related to project work:

- Implementing Connection frontend and backend.

Discussion with guide:

- Guide suggested different ways to link frontend with backend.

Remark by Guide about Progress in work

○ Excellent ○ Good ○ Satisfactory ○ Not Satisfactory

Suggested Activity for Next Week:

- Complete Connecting BackEnd with FrontEnd.

Group Code: 10	Date:	Signature of Guide:

Project work progress report	Week No: 8 Date of meeting: 02/03/2023

Write report on activity related to project work:

- Completed the Connection with front end and backend.

Discussion with guide:

- Approved Connection .

Remark by Guide about Progress in work

○ Excellent ○ Good ○ Satisfactory ○ Not Satisfactory

Suggested Activity for Next Week:

- Testing Connection is Succesfull.

Group Code: 10	Date:	Signature of Guide:

Project work progress report	Week No: 9 Date of meeting: 09/03/2023

Write report on activity related to project work:

- Problems in detection of Disease by Model .

Discussion with guide:

- Guide suggested few changes in dataset.

Remark by Guide about Progress in work

○ Excellent ○ Good ○ Satisfactory ○ Not Satisfactory

Suggested Activity for Next Week:

- Fix the detection error of model.

Group Code: 10	Date:	Signature of Guide:

Project work progress report	Week No: 10 Date of meeting:13/03/2023

Write report on activity related to project work:

- Improving Model for detection.

Discussion with guide:

- Suggested tips for improving accuracy of model.

Remark by Guide about Progress in work

○ Excellent ○ Good ○ Satisfactory ○ Not Satisfactory

Suggested Activity for Next Week:

- Complete the Model.

Group Code: 10	Date:	Signature of Guide:

Project work progress report	Week No: 11 Date of meeting: 23/03/2023

Write report on activity related to project work:

- Made Model working for detection of different Disease.

Discussion with guide:

- Approval of Model for detection by the guide.

Remark by Guide about Progress in work

○ Excellent ○ Good ○ Satisfactory ○ Not Satisfactory

Suggested Activity for Next Week:

- Give teatment for detected Disease.

Group Code: 10	Date:	Signature of Guide:

Project work progress report	Week No: 12 Date of meeting: 28/03/2023

Write report on activity related to project work:

- Completion of the providing Treatment for different disease that can be detected.

Discussion with guide:

- Approval of the Treatments provided .

Remark by Guide about Progress in work

○ Excellent ○ Good ○ Satisfactory ○ Not Satisfactory

Suggested Activity for Next Week:

- Completion of Project.

Group Code: 10	Date:	Signature of Guide:

Project work progress report	Week No: 13 Date of meeting: 06/04/2023
Write report on activity related to project work: • Completed project.	
Discussion with guide: • Approved by guide	
Remark by Guide about Progress in work ○ Excellent ○ Good ○ Satisfactory ○ Not Satisfactory	
Suggested Activity for Next Week: • Complete Documentation.	
Group Code: 10	Date: Signature of Guide:

Project work progress report	Week No: 14 Date of meeting: 13/04/2023
Write report on activity related to project work: • Implementing Documentation.	
Discussion with guide: • Approval by guide	
Remark by Guide about Progress in work ○ Excellent ○ Good ○ Satisfactory ○ Not Satisfactory	
Suggested Activity for Next Week: • Completion of the PPT, Logbook, Project report and Black book.	
Group Code: 10	Date: Signature of Guide:

Project work progress report	Week No: 15 Date of meeting: 20/04/2023

Write report on activity related to project work:

- We completed the PPT, Logbook, Project report and Black book.

Discussion with guide:

- Approval of Logbook, project report and Black book.

Remark by Guide about Progress in work

○ Excellent ○ Good ○ Satisfactory ○ Not Satisfactory

Suggested Activity for Next Week:

Group Code: 10	Date:	Signature of Guide:

REVIEW-I FORM

Group No: 10

Title of Project: Plant Disease Detection Using Neural Network

Date of Review-I: 28/09/2022

No. of students in project team: 3

Student Performance Analysis

	Excellent (5) Very Good (4) Good (3) Satisfactory (2) Poor(1)	
Sr. No.	**Observation**	**Max. Marks (5)**
1	Clearly defined motivation and scope	
2	Detailed literature survey	
3	Feasibilty of project	
4	Clearly defined objective	
5	Organization and quality of presentation content	
Remarks:		

Project Guide & Panel Members Signature: 1) Prof. Smita Deshmukh
2) Dr. Vijaylaxmi Kadrolli
3) Dr. Vrajesh Mehta

REVIEW-II FORM

Group No: 10

Title of Project: Plant Disease Detection Using Neural Network

Date of Review-II: 27/10/2022

No. of students in project team: 3

Student Performance Analysis

Excellent (5) Very Good (4) Good (3) Satisfactory (2) Poor(1)		
Sr. No.	**Observation**	**Max. Marks (5)**
1	Methodology and modern tool usage	
2	Design of prototype model	
3	Partial implementation of prototype (as per feasibility)	
4	Expected results & discussion with Gantt chart	
5	Organization and quality of presentation content	
Remarks:		

Project Guide & Panel Members Signature:

1) Prof. Smita Deshmukh
2) Dr. Vijaylaxmi Kadrolli
3) Dr. Vrajesh Mehta

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

Excellent (5) Very Good (4) Good (3) Satisfactory (2) Poor(1)		
Sr. No.	**Observation**	**Max. Marks (5)**
	Overall performance of students	
Remarks		

Name, Date & Signature
External Examiner

Name, Date & Signature
Internal Examiner

Name, Date & Signature
HOD- Information Technology