



MKSSS's Cummins College of Engineering For Women, Pune
(An Autonomous College affiliated to Savitribai Phule Pune University)
Department of INFORMATION TECHNOLOGY



Course Name: Green IT Infrastructure and sustainability Metrics Laboratory

Course Code: 23MmIT501L A

Semester: 5

Year: TY

Name of Course In-Charge: Dr. Dipti D. Patil

Name of Activity: Open Ended assignment -Mini Project

Objective: To encourage students to design and develop innovative mobile applications aligned with the United Nations Sustainable Development Goals (SDGs) for addressing real-world societal, environmental, healthcare, educational, or economic challenges.

Dissemination of Problem statement:

Classroom > 23MmIT501A Green IT Infrastructure and S...

Instructions Student work

Open Ended Assignment: Mini Project

Dr. Dipti Patil • Jul 28 (Edited Jul 28)

15 points Due Today

Design and develop a mobile app for solving a real-world problem contributing to one or more of 17 Sustainable Development goals.

1. Identify the problem Statement
2. Analyse the feasibility
- 3: Decide the functionality
4. Design the solution
5. Choose the h/w and s/w configuration
6. Implement the application
7. Demonstrate the working
8. Perform Impact analysis
9. Prepare the project report.

Submissions:

Timely updates of development of project

Final app code and executable

Report (report should cover the above all points, snapshots of developed app, system architecture, conclusion, contribution of each member)

List of Projects:

Gr. No.	Student UNO	Student Names	Topic Names	
1	UIT2023847	Anagha Nikam	GreenCart	
	UIT2023848	Vaishnavi Pandule		
	UIT2023849	Siddhi Pardeshi		
	UIT2023861	Saumya Jain		



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2	UIT2023823	Reema Desle	E waste management	
	UIT2023830	Ishwari Shekade		
	UIT2023840	Shreeya Malu		
	UIT2023867	Tanvi Shirwadkar		
3	UIT2023801	Divya Koul	Community Cleanup Organizer App	
	UIT2023805	Risha Agrawal		
	UIT2023806	Anushka Ahirrao		
	UIT2023844	Sneha Mukane		
4	UIT2023803	Aditi Gurav		
	UIT2023814	Sharvari Bobade	EcoScan	
	UIT2023820	Srushti Desai		
	UIT2023851	Anushka Patil		
5	UIT2023808	Arshia Singh	AI platform for smart waste classification and recycling	
	UIT2023809	Ashlesha Chaware		
	UIT2023845	Nandini Pathak		
	UIT2023846	Shreya Nigudkar		



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6	UIT2023836	Sanika Kamble	Nurture Smart Spending	
	UIT2023816	Sejal Chavan		
	UIT2023842	Aishwarya Marshettiwar		
7	UIT2023826	Geetanjali Kulkarni	WarmBite – Connecting Meals to Need	
	UIT2023838	Srushti Madhekar		
	UIT2023839	Shradha Magar		
	UIT2023860	Ankita Sarvale		
8	UIT2023811	Gauri Bansode	Compost Guide	
	UIT2023819	Poorva Damle		
	UIT2023813	Shruti Bargale		
	UIT2023854	Shreya Patil		
9	UIT2024002	Tanaya Bhoyar	PlanetQR – scan for planet-friendly products.	
	UIT2024003	Shravani Vetel		
	UIT2024005	Alvina Afsheen		
	UIT2022856	Shrawani Rane		
10	UIT2023829	Arya Halmare	Food Wastage Reduction System	
	UIT2023834	Sanika Kolhe		
	UIT2023837	Samruddhi Kalbhor		



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11	UIT2023827	Gauri Gerange		
	UIT2023831	Anushka Jagdale	sustainable travel and tourism	
	UIT2023832	Aarya Joshi		
	UIT2023835	Rutuja Kamble		
	UIT2023866	Renuka Suryawanshi		
12	UIT2023807	Anushree Garg	SafeSpace: Women Safety and Empowerment Ecosystem	
	UIT2023825	Garima Kardbhajane		
	UIT2023828	Saujanya Grampurohit		
	UIT2023859	Saanjal Bhende		
	UIT2023872	Yashasvi Singh		
13	UIT2023841	Niharika Mangalpalli	Green Ledger: Corporate Carbon Emission Monitoring App	
	UIT2023843	Sneha Maslekar		
	UEC2023254	Sakshi Shinde		
	UIT2023862	Shatakshi Sinha		
14	UIT2023804	Mahek Agrawal	ElderlyCare: A Smart Medicine Reminder & Emergency Assistance App	ElderCare: A Smart Medicine Reminder & Emergency Assistance App
	UIT2023812	Sejal Barapatre		



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	UIT2023815	Sanyogita Chavan		
	UIT2023852	Manisha Patil		
	UIT2023817	Sneha Chavan		
15	UIT2023871	Arpita Wankhade	Sustainable Fashion: Upcycling old cloths	
	UIT2024004	Shreya Bhalerao		
	UIT2024006	Rajeshwari Daund		
	UIT2024007	Damini Thakur		
	UIT2024008	Shrutika Pawar		
16	UIT2023821	Ishwari deshमुख	EcoWin:Gamefying Sustainability	
	UIT2023833	Ambika kadam		
	UIT2023863	Tanvi shelar		
	UIT2023868	Priyanka vhatkar		
17	UIT2023853	Riya Patil	E-waste collection and recycling Coordinator	
	UIT2023864	Laxmi Shelke		
	UIT2023850	Aditi Patil		
18	UIT2023869	Vijaya Bandgar	Virtual Energy Home Coach	
	UIT2023858	Nandini Raut		



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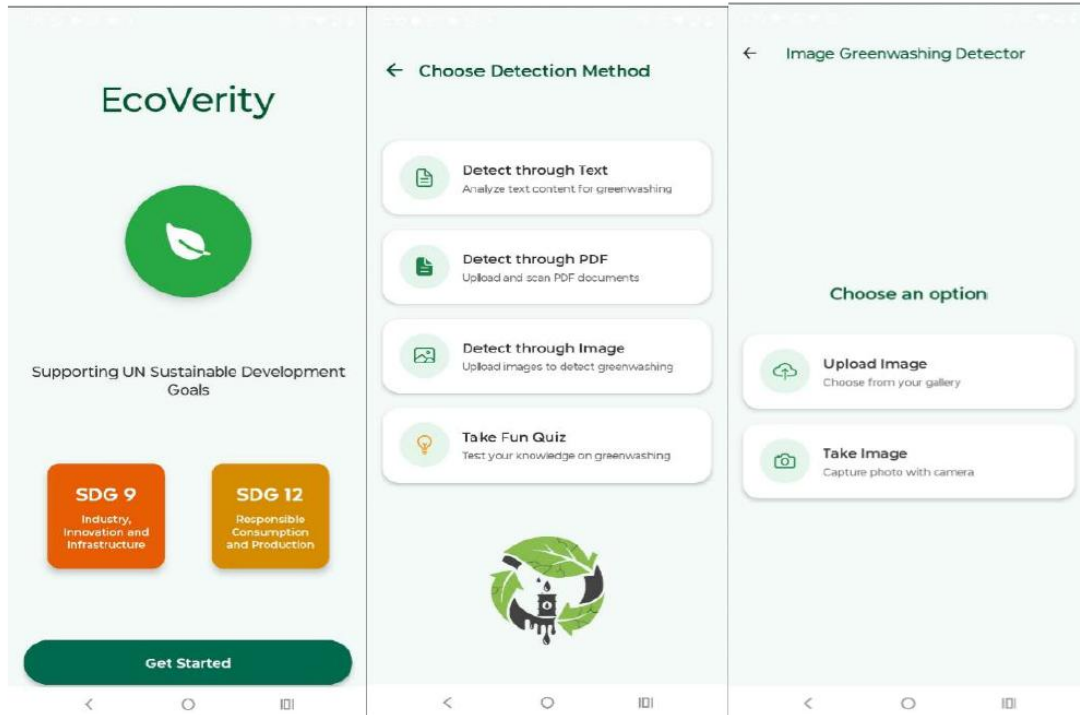
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	UIT2023857	Sonia Rathod		
	UIT2023873	Mannat Jamwal		
19	UIT2023870	Vedika Waghmare	Trash-To-Treasure	
	UIT2023874	Manayata Raina		
	UIT2024001	Vaishnavi Sable		
20	UIT2023810	Avantika Gurav	AI in climate change and sustainability	
	UIT2023822	Manushri Deshpande		
	UIT2023818	Sakshi Chemte		
	UIT2023855	Anita Prajapati		
	UIT2023824	Prajakta Gaikwad		
21	UIT2022801	Esha Belowo	EduReach – Free Learning Access for Rural Students	
	UIT2022802	Mannat Kaul		

Snapshots of the project:

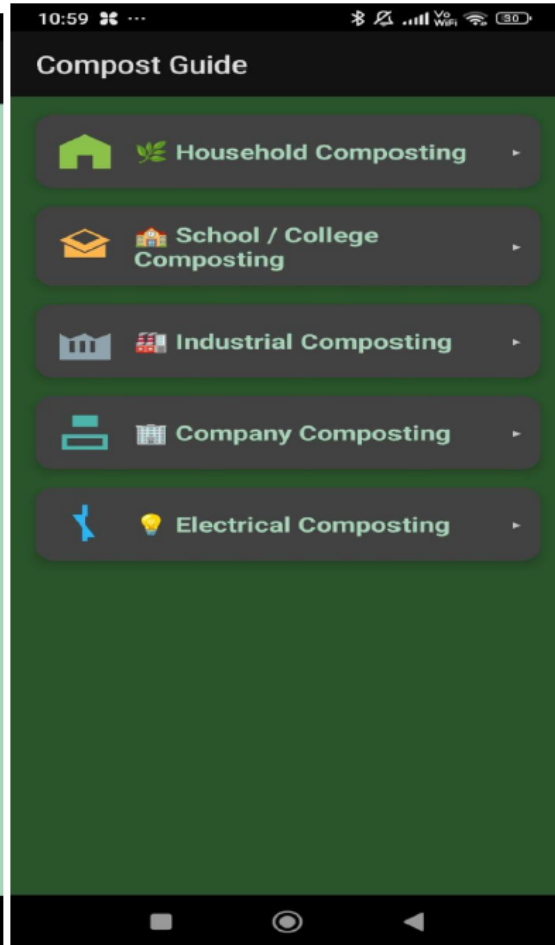




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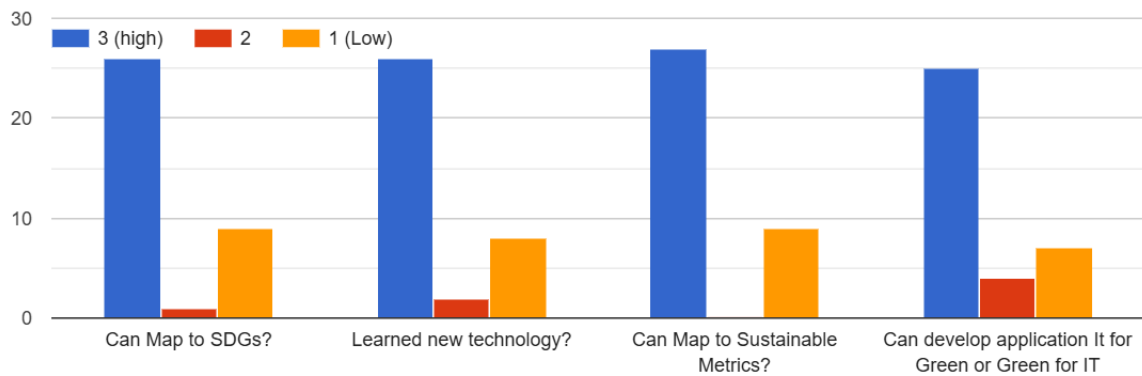
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Feedback of students:

Give feedback of Mini Project you completed as Open ended assignment in GISM laboratory (learnings, challenges, whether useful to achieve Course outcomes, understand SDGs etc

[Copy chart](#)



Give overall comments on improvement required in teaching

36 responses

None

no

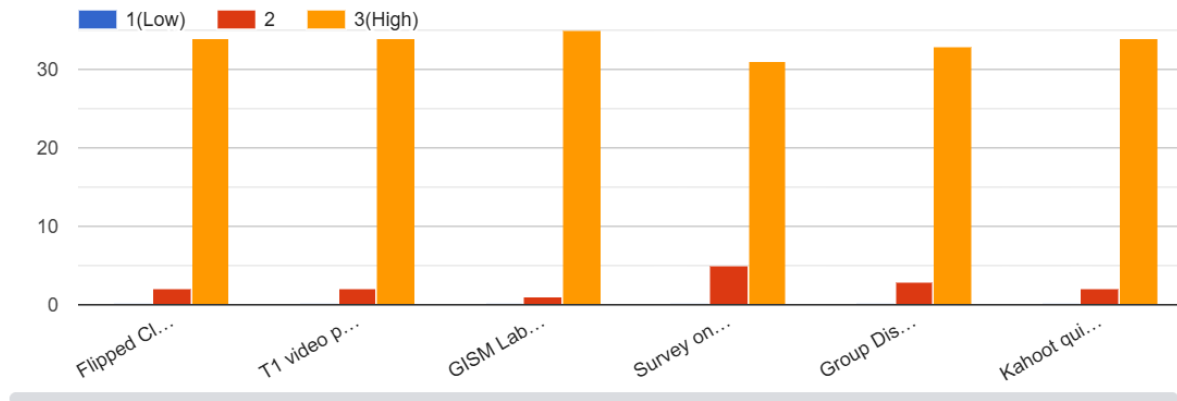
Overall I enjoy this subject and learning activities. We learn android app development in open ended assignment.

No

N/A

Rate the pedagogy techniques we used for learning the GISM course

[Copy chart](#)



This assignment is fundamentally aligned with the SDG framework. Depending on the chosen problem statement, student projects could contribute to one or more of the following SDGs:

SDG 3 – Good Health and Well-Being

Apps related to health monitoring, mental well-being, fitness tracking, or tele-consultation directly enhance community health outcomes.

SDG 4 – Quality Education

Learning apps, digital literacy tools, and educational resource platforms promote inclusive and equitable education.

SDG 5 – Gender Equality

Apps supporting women's safety, rights awareness, skill development, and reporting mechanisms contribute to empowerment.

SDG 6 – Clean Water and Sanitation

Solutions for water quality reporting, leak detection, or hygiene awareness help communities manage water sustainably.

SDG 7 – Affordable and Clean Energy

Energy consumption trackers, solar-usage planning apps, and power-saving advisory tools encourage efficient energy use.

SDG 9 – Industry, Innovation & Infrastructure

Developing technically sound mobile solutions promotes innovation and supports sustainable digital infrastructure.

SDG 11 – Sustainable Cities and Communities

Apps for waste segregation, public transport management, pollution tracking, and traffic optimisation contribute to smart city initiatives.



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SDG 12 – Responsible Consumption & Production

Apps encouraging recycling, eco-friendly habits, or carbon-footprint monitoring foster sustainable consumption patterns.

SDG 13 – Climate Action

Awareness-driven apps and tools for tracking emissions, climate indicators, or environmental activism promote climate-responsive behaviour.

SDG 17 – Partnerships for Goals

The teamwork model itself demonstrates SDG-aligned collaboration and strengthens interpersonal and leadership skills.

Impact assessment:

The mobile app development assignment under *Green IT Infrastructure and Sustainability Metrics* achieved the following:

- **Strengthened technical proficiency** through complete mobile app development lifecycle.
- **Instilled sustainability consciousness** by requiring SDG-aligned solutions.
- **Promoted teamwork, communication, and professional presentation skills.**
- **Reinforced green computing principles**, energy-efficient design, and responsible digital innovation.
- **Created meaningful social and environmental impact** through real-world, solution-driven applications.

This assignment successfully blended technology with sustainability, preparing students to design ICT solutions that are not only efficient and innovative but also ethically and environmentally responsible.

Action taken Thereof: Such open ended assignment will be continued to be given to students

Dr. Dipti Patil

(Professor, IT dept., CCEW-Pune-52)