# IMPLEMENTATION OF ECO SMART COLLEGE CAMPUS

Ankit Prakash Sharma, Rohit Ahuja, Mayank Songirkar, Swati Patil

Student, Department of Computer Science and Engineering, G.H. Raisoni Institute of Engineering and Management, Jalgaon, Maharashtra, India

Student, Department of Computer Science and Engineering, G.H. Raisoni Institute of Engineering and Management, Jalgaon, Maharashtra, India

Student, Department of Computer Science and Engineering, G.H. Raisoni Institute of Engineering and Management, Jalgaon, Maharashtra, India

Assistant Professor, Department of Computer Science and Engineering, G.H. Raisoni Institute of Business Management, Jalgaon, Maharashtra, India

# **ABSTRACT**

The purpose of this paper is to offers a strategic framework to help guide sustainability initiatives in the age of mobile technology opens the windows to the android app. Mobile phones are emerging. It is time to upgrade from conventional websites to apps, which has become a part of our daily routine. We are launching "GREEN CAMPUS APP" the android application software which would be helpful. It works as a small college Management software that is used to make Green Initiative. This paper focuses on the approach to apply the green initiative through the campus. Now the world is looking forward to raising the social issues in research, innovation, educations. The eco campus means the combination of eco-friendly practices and the education which helps to get new sources and techniques to achieve the moto.

**Keyword:-** Green Campus, Gps Based Waste Report System, E-Directory of College Staff, Point Reward System, Quiz, E- Notifications (Notice), Digital Notes, Geotag Plantation, Sustainability.

# 1. Introduction

The Educational institutes are the best ways to implements the social changes in the society. The application of the organizational motivation theory to IT and eco-sustainability implies that, an organization's belief and value system associated with eco-sustainability as well as the influence of external institutions can drive organizational actions to Green IT. Based on the review of the literature and using principal component analysis. In the context of IT (Information Technology) adoption, motives are defined as "the desire that initiates the activities of an organization to adopt an innovative system such as an IT enabled information system.

Sustainability is a broad concept and includes economic, social and ecological considerations. This project however focuses only on the eco-sustainability dimension as until recently the role of IT in eco-sustainability has not been researched from an information system perspective. [4].

Eco-sustainability aims at coordinating organizational efforts to prevent pollution at the end of business and production processes minimize the environmental footprint during production processes use clean technologies to reduce polluting materials and develop environmentally friendly competencies. The green campus objective is clearly understands by name that to achieve the green initiative with the help of educational Institutions. It is also taking into account that how the study is done in the field of awareness about green campus and it can improve to get maximum benefit of it.

If the study is done in the Educational institution then the level of awareness amongst the student and the working people of educational institute is also taken into the account.

With these objectives an attempt is made to check awareness about green campus in Indian context with a focus on institutions.

# 2. Literacy Survey

- 1. Research conducted by Mahendra Saam, Zulfan Nasution and Syafruddin at the University of Riau with the title "Implementation of the Green Campus Concept in Riau University Colleges" in 2013 outlined the results of an assessment of the implementation of the green campus concept in the PSLH UR (Riau Study Center for Environmental Studies) policy. [5]
- 2. Saeed Rezaei Sharifabadi (02 July 2014) IranAlzahra university: in these paper the author hopes that he has supplied the compressive summary of the current key area of necessary interaction between the e-learning and digital library worlds, and also some perspective on command services that both of these world should draw upon rather than re-developing them.
- 3. Jefferson Hopewell Robert Dvorak and Edward Kosior (16 June 2014) London: In summary, recycling is one strategy for end of life waste management of plastic we products. It makes increasing sense economically as well as environmentally and recent trends demonstrator substantial increase in rate of recycling of plastic waste.
- 4. Anwar M. A. Naseer Ahmed: Proposed an e- course file management system to shift from a current method of compelling paper based course file to a more versatile method of compelling and maintaining an electronic course files. The system also offers tremendous benefit in saving papers and printing cost, reducing the human and financial resources for future generation, and contributing towards a green sustainable environment.

# 3. Proposed Approach

These are some initiatives that has been taken into consideration for a better response of our application.

- 1. Gps Based Waste Report System
- 2. E-Directory of College Staff
- 3. Point Reward System
- 4. Quiz
- 5. E- Notifications (Notice)
- 6. Digital Notes
- 7. Geotag Plantation (Point Reward)

Given above modules helps the application to achieve the initiative of making this app.

- 1. Gps Based Waste Report System: getting a geotagged pic of waste to report to the management that helps the cleaning staff to know about the them.[1]
- 2. E-Directory of College Staff- This can help the student to contact the faculty.
- 3. Point Reward System- In every 3 month the student having maximum point will be rewarded. Student gain points by quiz, plantation.
- 4. Quiz- Every week we quiz will be posted and point will be rewarded.
- 5. E- Notifications (Notice) Notification regarding college is posted.
- 6. Digital Notes- As the digital Era arrived so we have so many digital hardware and software for our notes preparation. Digital reference and books are saved. [3].
- 7. Geotag Plantation (Point Reward) Capture pic of plantation with geo tag for getting the point. Though plants are extremely important for the existence of life, many of us do not find motivation in caring, planting or sharing the location of plants. [2]

Our focus is on the how our modules meet the requirement to attain the green Campus. As the Green campus is not new topic for research, many researches are famous due to their unique concept so we have tried to make this research unique.

Waste Management System inside the campus is first priority. As the plastic waste, and other stationary waste is the major problem in the campus. Another waste is food wrapper and other non-biodegradable waste which affect our ecosystem which should be monitored very strictly so we have made one module of Waste Management System which always useful to report the waste and help the campus management team to get it clean and make the campus clean and hygienic to have a sustainability.

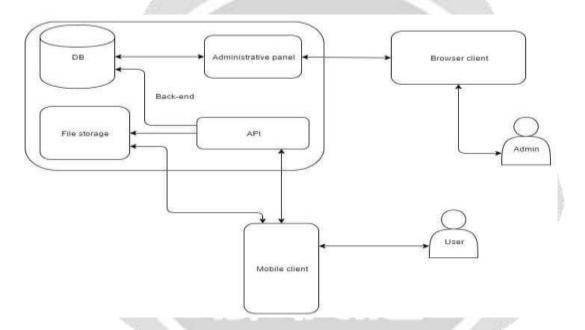
E-Directory of College Staff which makes this app more usefull for the students as student will get all the contact information about the college staff. This can help the student to contact the faculty.

The other green campus initiatives is by providing a digital library/e-learning. Where the student get the handwritten notes or reference notes saved as a e library.

Another initiative is to make the Geotagged Plantation which increases the greenery in the campus as we plant the tree which help to generate more oxygen and also provide a healthy environment. Reducing the use of the plastic in campus by promoting the staff as well to the students. We are trying to promote through the banners and by the social awareness also. Plastic is a major problem faced by all so there should be a proper management or it should be totally banned in the campus.

Quiz System is another main focused module of or project as the quiz help the student to get to know more about the sustainability. By attempting those quiz we will know about the different act related to ecosystem and green revolution.

# 4. System Architecture



# 5. Conclusion

As discussed above, it can be concluded that: The green campus concept is a change towards a sustainable campus. The application of this concept can bring a positive change in both teaching and learning activities in campus.

Use of this project helps customer in having immediate information about Campus Green Initiatives. User friendly interface also for the Admin as well as User. This concept has a good impact on the process of creating a sustainable campus. Constraints faced in implementing new concepts are common. Everything depends on the readiness and willingness of the campus to apply the concept. With the software and technological devices, exceptions are reduced and even terminated.

There are some ideas that we would have liked to try during the description and the development like College fees payment, Student Profile with Fees Detail, Second Hand Book E-Mart, Social Media Connect, Digital E-library Pass. These are some future work that should give a path to try the new model for the project so that the motive of the app is achieve.

# 6. References

- [1]. Ngosa, W., Lucy, K., Shadrick, K., Victor, P.D., & John, S. (2018). GSM and GPS Based Garbage and Waste Collection Bin Overflow Management System for Kitwe City Council. *International Journal of Engineering Research and*, 7.
- [2]. R. Dhuny, G. Sajeevan and S. Pardeshi, "An open framework to geotag and locate plants around the world," 2015 International Conference on Smart Technologies and Management for Computing, Communication, Controls, Energy and Materials (ICSTM), 2015, pp. 153-158, doi: 10.1109/ICSTM.2015.7225405.
- [3]. Mosleh, Mogeeb & Baba, Mohd Sapiyan & Malek, Sorayya & Alhussein, Musaed. (2016). Challenges of Digital Note Taking. Lecture Notes in Electrical Engineering. 362. 10.1007/978-3-319-24584-3\_19.
- [4]. Prof. P. R. Khobragade "Towards Green Campus in BDCE" Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-3 | Issue-3, April 2019
- [5]. Gandasari, Imas & Hotimah, Oot & Miyarsah, Mieke. (2020). Green Campus As a Concept in Creating Sustainable Campuses. KnE Social Sciences. 10.18502/kss.v4i14.7853.

