

# **BBIT HACKATHON 2023**

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## **Problem Statement-Abstract Hackathon-2023**

### **PS01. Attendance System for Students:**

Currently the attendance system for the students is done manually. Hence requirement of a robust and low-cost system is needed. Addressing this problem will ensure the proper attendance and will help teachers in taking attendance.

### **PS02. Student Life Cycle Management System:**

As on today, there is a lack of master database of students linking it to unique student Id & maintaining it throughout the life cycle of students including school education, higher education, employment phase, etc., which can be accessed by the concerned authorities for updating / validating the credentials of students throughout the different phases of life.

### **PS03. SOS App:**

Aim is to create an advanced emergency app that can rescue you and/or your loved ones if you and/or they find themselves in any distress / life-threatening emergency situation and need immediate assistance. When you need some personal assistance, you can actually turn on your phone and can call or message someone for help. But in a distress/ life-threatening emergency like attack, sexual assault, robbery, harassment, accident, fire, medical emergency etc. we don't have time to open our phone, instead, we need some accessibility methods by which we can reach out for help without actually operating the phone.

#### **PS04. Food Waste as Consumable Organic Resource:**

Today, food waste is discharged daily from various places like factories, restaurants, supermarkets, etc. Most of this food waste are either dumped or destroyed by some means. We want this food waste to be reused in such a manner that it can be helpful for the society. This waste has potential to be reused as an organic resource. Collection of the food waste from such areas and categorizing them to what they can be used into is a major task for this problem statement. Food waste reusability can highly boost the economical sector of the country. We are looking for ideas to reuse food waste as a consumable organic resource or ideas in Digital management or Effective Use of Waste Material for the Food and Beverage Industry (e.g. Factory, Restaurant, Supermarket, and Warehouse, Building and so on) and its supply chain. Some issues which could be tackled under this category include, but are not restricted to the following, Biogas power generation, Compost, transforming food waste into animal feed.

#### **PS05. Application to Regulate Private Health Care Sector:**

During Covid-19 crisis, many private hospitals had charged huge and unimaginable amounts from patients and made enormous profits taking advantage of panic conditions. Notwithstanding of spending huge amounts many families lost their members and in some instances hospitals even demanded clearance of pending bills for handing over bodies to their families. There was no proper information about availability of beds and details of treatment provided etc. In order to curb this exploitation by private hospitals, there is a requirement of national information portal /Application which can regulate all the private hospitals and provide accurate details of rates and medical facilities available in the private hospitals across the country to guide the citizens to get affordable medical emergency services as per their choice and availability.

#### **PS06. Consumer Complaint Tracking, Assigning, and Monitoring Mechanism:**

Electricity Related: As the technology progresses, the use of Information Technology for consumer satisfaction is the need of the time. In DISCOMs, whenever there is any fault, the consumer registers his complaint to complain center and from the work task for corrective action is assigned to a specific workforce. However, from the registration of the complaint to the closure of the complaint, there is no tracing of status available to consumers. The platform provided by some of the successful start-ups like Ola, Swiggy can be taken as a reference to provide the consumer information regarding their current status of the complaint.

### **PS07. Milk Delivery App:**

There is a need of milk delivery app in two sides. On User side there is an “Android app” and on admin side “website”. In user side functionality should like create and track order, user profile, payment gateway, subscription system like daily, monthly, weekly, and use customize subscription system. In admin side there should be management functionally like filter orders in monthly, yearly. Ex. If user subscribed daily base so we want get automatically notification in admin side. So we get information about order and user.

### **PS08. Society Management System:**

Society Management system is the website portal designed to reduce conflicts among society member. Society Management system has automated functionality for calculating monthly maintenance and member can be able to view all societies bill/status on their own account. The society management system allows members to login with system provides a dashboard according to the user role. Admin can see the due payments, payment history, etc. resident can see about payment history, complaints, etc.

### **PS09. Digital Platform for Study Material Sharing:**

It is required to develop a platform where alumni and faculties can donate their unused books or stationary materials for newly entered students to the institutes. The platform should be capable of showing data of books and its photos. The platform should be capable of showing data of book donor and book donee. It should be able to reduce the communication gap between senior students and junior students.

### **PS10. E-Waste Management System:**

Develop effective and sustainable solutions for collecting, sorting, recycling, and disposing of electronic waste. This involves addressing the environmental and health hazards associated with e-waste and promoting a circular economy by recovering valuable materials from electronic waste. The goal of this solution is to help manage e-waste in a responsible and sustainable manner, while also making it easy for people to donate or recycle their electronic devices. By providing a streamlined and efficient system for collecting, processing, and disposing of e-waste, the solution can help reduce the environmental impact of electronic devices and promote a more sustainable future.

### **PS11. Khel Mahakumbh Portal :**

The Khel Mahakumbh portal is an online platform designed to promote sports and fitness activities, encourage healthy competition, and identify and nurture sporting talent at the grassroots level. The portal aims to provide a seamless and user-friendly experience for athletes and sports enthusiasts, allowing them to easily register for events, view schedules and results, and connect with coaches and mentors. The goal is to enhance participation, efficiency, and transparency in sports management, leading to better outcomes for athletes, coaches, and organizers.

### **PS12. Employee Transport Management System:**

Pickups and drop-offs are an essential service that organizations provide transport for employees. If not managed well, it can be a problem rather than being a solution. The Employee transportation solution will provide an application platform to organize the entire pick and drop related services. The employee transport service application to be designed will provide a smooth flow of services between the admin and the users, where the admin will be the management of an organization and the user will be the employees. The admin panel needs to login into the application, the admin will have many functions by which he/she can modify the pick-ups and drop-offs related services. These functions include add driver where he can add the driver, add vehicle where he can add vehicles to the employees, Admin can view bookings and manage time slot. On the other end, the employee has to first register into the system by filling basic registration details. After successful registration, employee can login by using their login credentials. Once the user logs in into the system, he/she can view available time slots and employee can select a time slot according to their shift timings. All these features will provide a hassle-free pick and drop management system for an organization.

### **PS13. Online Paying Guest Accommodation Portal:**

It has become easy to search pg accommodation nearby the work place. It was difficult earlier to go a place to work which was situated at long-distances and hence had to lose good opportunities, as we don't know where to stay and where unaware about a particular city. But now it has become easier to find an accommodation nearby the work place in cheap rates. In this online paying guest system, users can find a number of paying accommodation nearby work place or desired place. Even user can add his/her own desired places and get the tenant easily by just uploading picture and details of the respective place. In this system user can register to get login id and password. With login id and password user can get logged in. After logging in, user can post the paying guest post by adding details and pictures of the place. He/she can also view the interested users in his/her uploaded post. The uploaded post can be removed or deleted. User can also see for the paying accommodation and after getting the desirable place he/she can select the place he/she is interested in. After selecting the desired place, user will get the personal details of the owner; he/she can get in contact with the owner and go for further processing.

### **PS14. Organ Sharing App – Donor Finder:**

In this donation the donor can easily reach the needy through the consent of the admin. In the other kinds of donations, it mainly collects the donations of the donors and delivers them to the respective organizations and provides the information to the respective doctors of that organization to maintain transparency and manages the donor registration and user maintenance. People who interested can register themselves through this system.

### **PS15. Agri Shop for Farmers (E-Commerce):**

For several years, farmers in India have had little liberty in choosing markets and purchasers for their produce. All states in the country, except three, decree that marketing and selling of farm produce must be directed through state-owned mandis, retail markets where mediators (middlemen) crush farmers to increase margins. According to research, mediators have become dominating buyers of the agricultural market, resulting them to take control over the plight of the farmers and gulping all the profits. The farmers work day and night expecting a good yield. They use a lot of financial resources lending money and buying fertilizers, seeds etc. So, they have the right to enjoy every rupee gained on their corp. In this context, we propose a system which brings farmers close to the retailers cutting the middlemen. The middlemen usually take up to 70% of the profits of farmers leaving them helpless. Our system consists of a mobile or web application which will serve as a platform for farmer the growers and retailers or customers to sell and buy their farm products. This system aims at giving a profitable price to farmers to their farm products cutting the middlemen. This allows the retailers or the customers to buy products from the farmers at a lower than the normal price. This system is used to farmer and user. Farmer uploads their product with details and buyers view these details and book that product with in a time

### **PS16. Second-Hand Goods:**

In today's world, the market for second-hand goods is growing significantly. However, there are still many challenges for people looking to buy, sell, or exchange their second-hand items; including finding a reliable platform and ensuring that the items are in good condition. Furthermore, reducing waste and promoting sustainable consumption habits are increasingly critical concerns for individuals and the environment. Therefore, the objective of this problem statement is to develop a web-based application that provides a platform for users to buy, sell, or exchange second-hand goods and helps promote sustainable consumption habits.

### **PS17. Medishare App:**

There is a significant shortage of essential medicines and healthcare resources in many parts of the world. Despite the abundance of unused or unexpired medicines, it is challenging to get them to those who need them the most. Additionally, many people cannot afford to purchase essential medications, which leads to untreated illnesses and, in some cases, even death. The objective of this problem statement is to develop a web-based application that enables users to donate their unused or unexpired medicines and provides access to those in need.



### **PS18. Internships/Job Finder:**

Develop a website or mobile application that facilitates the search for internships or job opportunities for students in their chosen field of study. The platform will allow students to create a profile highlighting their skills, experience, and education, and enable them to search for relevant opportunities based on their location, preferences, and career goals.

### **PS19. Property Tax Collection for Smart Cities:**

Property Tax and Professional Tax collection are the two main sources of revenue via e-governance. However less than 1/3rd of all collections is happen online. Can we increase this via a digital solution?

### **PS20. Scholarship Management System:**

Lakhs of people who belong to BPL (below poverty line) in the Country were eagerly waiting for the “Scholarship Management System”. That helps the people to overcome the economic needs in many terms. In today’s world, education has become one of the most essential and expensive assets. Most high school pass outs look for financial assistance to pursue the career of their dreams that requires several years of education. In such a scenario, scholarships come up as the most desired form of financial aid. This is because, unlike educational loans, you don’t have to repay scholarships. If you deserve, you can get scholarships on merit basis. This makes scholarships prestigious and also pays for your degree. You should definitely apply for scholarships in the college of your choice. After all, a scholarship comes with numerous benefits. “Scholarship Management System” is the system for the needy people especially family who are living under below poverty line can apply and will get 15000 Rs. per annum for their ward. It makes the whole process of the system easy by providing the easier application filling, payment receiving system, etc.