

**Article Info**

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**Implementation of Efficient Data Storage Management using Common Corporate Social Responsibility System**

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**ABSTRACT**

*In the proposed system is overcoming the drawbacks of another available CSR systems by providing the COMMON CSR System for CSR activities with efficient storage management in place of manual record maintenance. Currently, there is no available dataset of various CSR activities, therefore the record of these activities are a big concern, and this system provides the record maintenance of data efficiently. One of the incidents of attack on world trade centre, New York (2001), emphasizes us to think about data losses and recovery. Data loss is a major inconvenience that disrupts many functions of corporate activities entertained. This system brings the main focus on efficient storage management by using Excel Sheet because it is convenient to recover data and if required, it is easy to convert it in any other format. This System automatically deletes the data after any specified time period and transfer it in an Excel Sheet. The storage in the Excel Sheet can be used for data analysis and other related activities to extract valuable information. This Common CSR system also provides a user-friendly environment for a better interaction and assistance to the new user through a Chatbot.*

**Keywords:** *Common CSR; Storage management; Excel sheet; DataSet; AI chatbot.*

**1.0 Introduction**

Corporate Social Responsibility CSR [1-2] system refers to Corporate Social Responsibility. According to Indian government, every organization has to contribute its 2% of share for the benefit and growth of society. For the fulfilment of this aim, most of the organizations have their own Common Social Responsibility (CSR) System and perform social events separately. These separate activities of each organization unable to create various social event on the large scale and in remote areas, due to the lack of resources and man power. This also limits reachability of social events. Due to lack of awareness only a few people get to know about the ongoing events which may increase the gap between the society and corporate's CSR activities. This Common CSR System is used to enable collaboration among many companies and individuals, who want to take part in the social welfare of society. Due to a lack of resources and budgets, it limits their ability to perform these activities on a large scale and in remote areas. To develop a system which will enable

different Corporates or Institutions to come together, collectively provides valuable service to society. Only authorized user have accessed to the proposed system to maintain the integrity, confidentiality and authenticity. The system provides a separate data repository of each organization at one place, and they can perform factorization on available data as per their requirement. To increase the performance of system concerning fast data access by removing data from database after a specified time period and copying the data in separate Excel Sheet. The system provides a Chatbot to experience a user-friendly environment to the user.

The scope of CSR according to The World Business Council for Sustainable Development has described CSR as the business contribution to sustainable economic development and includes commitment and activities pertaining to the following topics:

- Health and safety
- Environmental concerns
- Community development

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- Women Empowerment
- Human rights in relation to labour
- Accountability and transparency in financial reporting
- Customer satisfaction and fair competition
- Maintaining relationship with suppliers etc.

The concept of CSR extends beyond notions embodied in current law and it introduces new dimensions and new problems. There is no generally accepted concept of social responsibility of business enterprises.

### 2.0 Common CSR System

The proposed system provides a common platform to various Corporates for organizing social events and other corporate can request to collaborate into other’s social event. This system also maintains balance between corporate and individual. Individual can easily collaborate or volunteer in social events. The system manages all records and display them on the profile of the user. User can easily views all upcoming and previous events done by all the corporates. This system also highlights those areas that had low ratio of social events, so user know those areas. The system provides a user friendly environment for efficient use. Any user can give suggestion for those events that they want to highlight.

### 3.0 Workflow of the System

The system can be used by Corporates and also an individual who want to volunteer in the social events by any means. An individual can volunteer or collaborate in event only after registration on the system for authentication purpose and same action require for the corporate. Corporate after registering in the system by verifying its details like CIN number, address able to create its events. Corporate also able to collaborate in other corporate social events.

The main works are as-

- Login/SignUp for both (corporate and individual) with Authentication – It will take almost 10 days to complete all the UI related activities and implementation of the backend processing.
- Complete Dashboard Implementation for both(corporate and individuals)-

Dashboard implementation for corporate will include many things like list of my initiative, others initiative, collaboration activities, suggestion review and many other activities. So it will take around 15 days for corporate dashboard implementation.

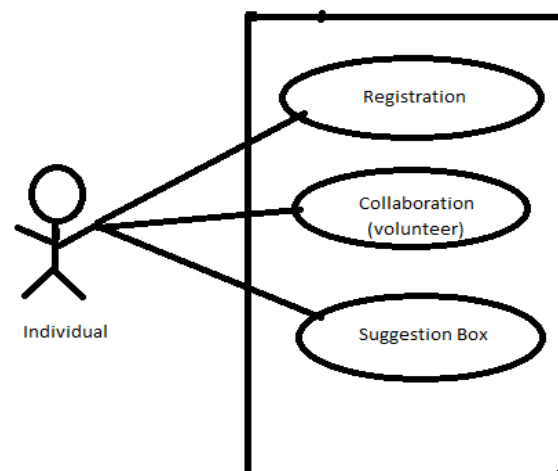
Dashboard implementation for individual will include many things like list of my corporates initiative, collaboration activities, give suggestions and many other activities. So it will take around 15 days for corporate dashboard implementation.

So, dashboard implementation will take atleast 1 month to complete.

- Chatbot implementation – Using chatbot in our system for providing reliable and systematic use of the proposed system. It will take almost 10 days to implement it and integration with the proposed system.
- Automatic Deletion and Excel sheet creation – It will take atleast 15 days to implement this. Because this process will use external API, so take some extra time to earn and then implement.
- Email notification and OTP generation – It is atleast 5 days process for anyone who is implementing this , for the very first time.
- Database creation and Management – Designing and creation will take atleast 10 days because different things like data flow in the system, relationship between entities etc are analysed in this process and the database management is a continuous process till the proposed system completion.

### 3.1 Complete flowchart of system

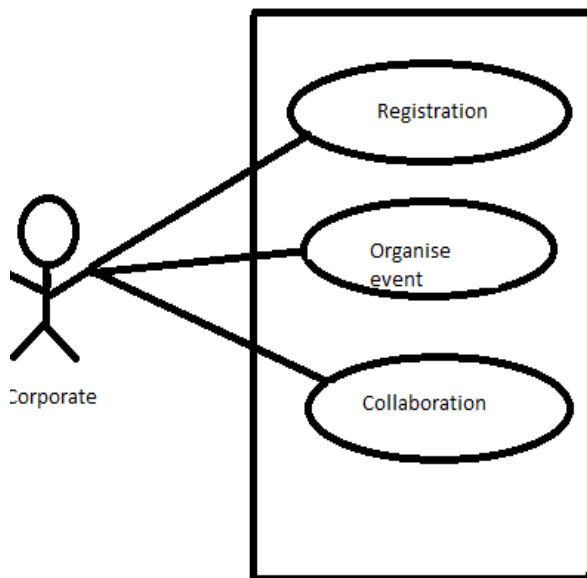
**Figure 1: Working of Individual**



These flowcharts explain the activity of user on this CCSR system for performing activities (collaboration, volunteer) after registration. Main working areas for the system are:

- Individual and Corporates Registration
- Individual and Corporate Sign In and Sign Up
- Corporates Collaboration
- Individuals Volunteering
- Suggestion box
- Upcoming Events and Previous Events
- My Initiative and Other's Initiative

**Figure 2: Working of Corporate**



**3.2 Module description**

The activity of corporate start with registration, for this corporate need to verify detail like Company CIN Number, mobile number, etc. After registration corporate can create its social events, and it can add other collaboration if needed. Corporate can also view other Corporate's events and can send collaboration request. Activity of Individual also start with verification of Aadhaar Number and Address. After registration individual able to volunteer in social events. The details are as shown by figure 1 and figure 2.

The main module of our system is describe as follows:

- It is a main module on which the entire system resides.
- After registration when a corporate creates his

profile he is able to create events.

- After some specific time interval the data become to large in database.
- So our proposed system automatically remove those data which resides in that time interval.
- For the future convince and to maintain a full proff Dataset it transfer that data into an excel sheet.
- So the data size in database become precise.

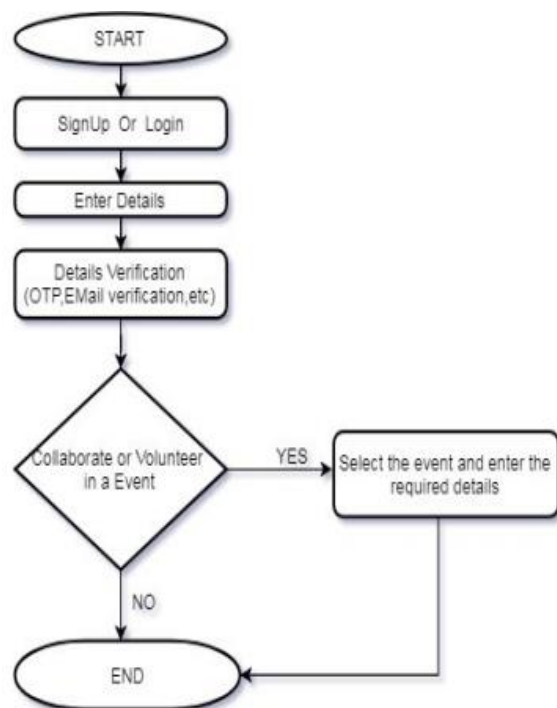
**3.3 Complete flowchart of system**

These flowcharts explain the activity of user on this CCSR system for performing activities (collaboration, volunteer) after registration. The flowchart of corporate and individual are as given by figure 3 and figure 4.

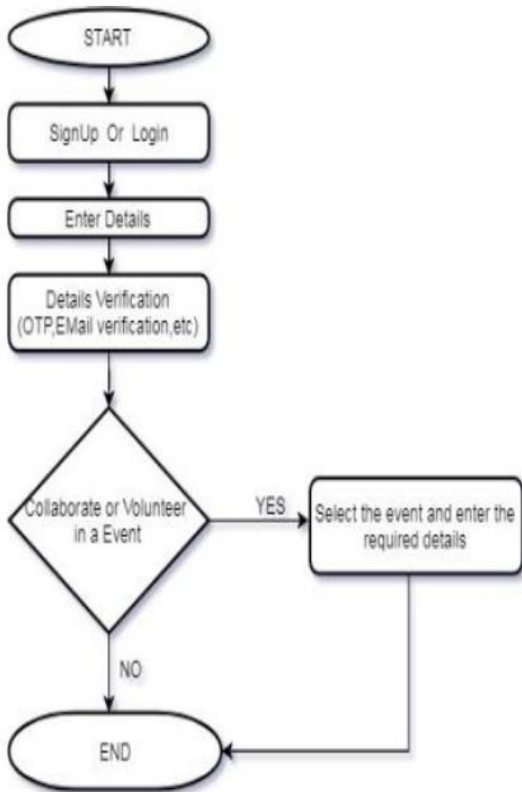
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**Figure 3: Flowchart for Corporate**



**Figure 4: Flowchart for Individual**



**Figure 5: Pseudo Code**

The workflow of creating the excel sheet is using HSSF object. It checks the event date by system date and remove these records from database. At the same time it create ExcelSheet and transfer records to this sheet.

```

    Procedure ExcelSheet{
    When event trigger
    Create blank sheet by HSSFSheet object
    While(Sys.date>event.date){
    Copy entries
    paste in excel sheet
    }
    If(sys.date>event.date)
    {Remove all entries from database
    }
    Save excel sheet
    }
  
```

Incident of "Attack on World Trade Center[1], NewYork(2001)" emphasizes us to think about the storage Management and recovery of the lost data. Recovery procedures should be easy and efficient enough.to fulfil this aim, we have used the excel sheet because it is easier to recover from excel sheet and it can also be converted in any required format easily. Pseudo code for this operation is given by figure 5

**4.0 Output Screen**

The figure 6 represent the record based on previous data in the database to show the events details happen previously through this system. It also represent the upcoming events. All the information available on the home screen and any user whether registered or not able to view the details. It helps them to know about which type of events done on which location and organised by which company. Therefore user able to know about the demanding locations and also able to see the corporate interest towards the social events and society.

From figure 7, when a registered user login the system it is able to view its dashboard that provides details about its previously organized events and upcoming events organize by other corporates. If user want to collaborate in other corporate events it easily do this by simply press collaborate button and a notification go to that corporate. They will communicate through emails.

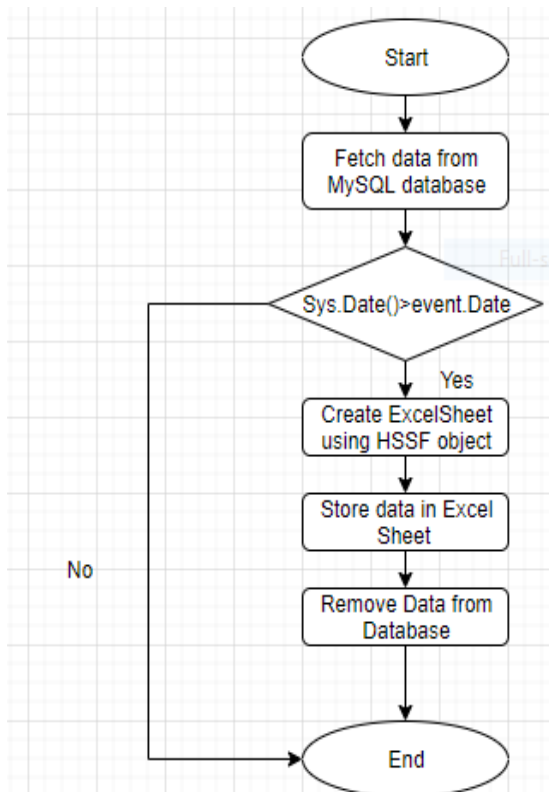


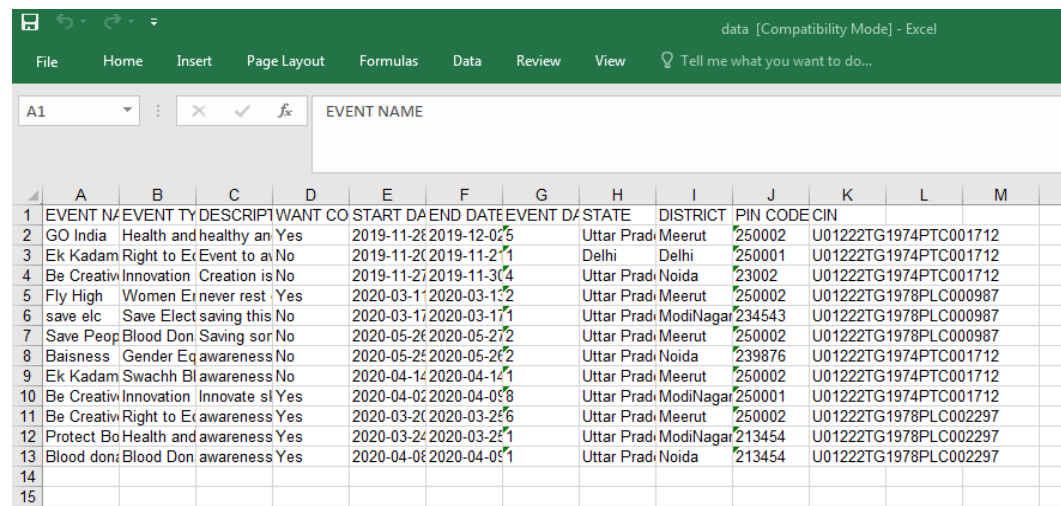
Figure 6: Upcoming and Previous Events Done by Corporates



Figure 7: Dashboard to Show Initiative Taken by Corporates and Other



Figure 8: Excel Sheet after Deleting Data from Database





As shown by figure 8, excel sheet after deleting data from the database and store it in a xlsformat.it can easily convert from xls format in any other format to be used in future.

## 5.0 Conclusions

This CCSR overcomes various disadvantages faced when various Corporates creates event separately. Due to creation of separate event, the Corporates experiences various problems such as a lack of resources and money to create event separately. And people may not aware of the ongoing events.

Thus, these events not provides benefit to the people properly. But through this CCSR system various Corporates can collaborate each other to organize the event and individual can also perform volunteering, this collaboration increases the reachability in remote area and able to perform many events according to the people need. The resources of corporates also utilized in the right manner when various corporate collaborate the event become more effective in terms of its impact and corporates promotion.

It also affect remote area by providing records of previous data that show those area where the reachability of the social event is very low. It resolve the problem of storage management of these social events organized by corporates. As the dataset of social events organized by corporates not available on the internet, so it simply add all the records to excel sheet and for fast system access remove those set of records from database and transfer it to excel sheet.

It create a proper dataset for corporates when a corporate need information about the detail it simply reach to it. The records in excel sheet easily restore in any of the format require by user. Therefore the system able to give a communicative environment to corporates as well as individuals, increase reachability in remote area and timely create records of the events.

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