DIGITAL SOLUTION TO COMBAT BRIBERY AND JUSTICE RESTORATION SYSTEM

Dr. M. Prabhakar
Associate Professor
Department of Information Technology
Vignan Institute of Technology and Science
Hyderabad, India
marryprabhakar@gmail.com

Shivaram Emmidi
UG Scholar
Department of Information Technology
Vignan Institute of Technology and Science
Hyderabad, India
shivarambabloo@gmail.com

Nischal Parsi
UG Scholar
Department of Information Technology
Vignan Institute of Technology and Science
Hyderabad, India
nischalparsi@gmail.com

Rajasree Bharatha
UG Scholar
Department of Information Technology
Vignan Institute of Technology and Science
Hyderabad, India
rajasree.tejaswini@gmail.com

Tapaswi Chidella
UG Scholar
Department of Information Technology
Vignan Institute of Technology and Science
Hyderabad, India
chidellatapaswi@gmail.com

I. Abstract

With our aim to fight against bribery, we seek Digital Solution to Combat Bribery & Justice Restoration Systemfor better policing and improved public delivery system. Solutionshould (1) Provide efficient ways of public delivery system for combating bribery (2) Reporting bribery incidences to authorities. This Application will help the common people toregister complaint against bribery through a web application in a short period of time. The existing Handling System is not centralized, it is manual approach, and user has to call to authorities to register their complaints, so the communication between authorities is not fast. This proposed application provides an interface to register one's complained and follow it up. Users can upload the videos, images or audio files as evidence. If complaint is once registered, will be send to specific Investigation department by admin.

The proposed application makes the communication between different investigation departments to complete with in less amount of time. Bribery has rooted all over our system and it has started making our system hollow over a period of time. It has hindered the cycle of workflow and as well the justice system. With a rise in the number of instances where people ask for bribes even for basic and fundamental works there is a dire need to find a solution, thus an efficient way to report a bribe has become a prevalent topic. With the increase in popularity of smartphones, application-based solutions would be an appropriate method to make the reporting process more efficient. Our solution is a mobile application that helps in reporting the bribe and decentralized storage that would mitigate the risks involved in maintaining the security of data, ease the reporting process, reduce the chances of false reports, and provide direct insight regarding the progress of the report. The mobile application will collect data from users regarding bribery and will also allow uploading of evidence on a portal which will store the evidence on a decentralized storage. All this data can be accessed by an admin panel system which is basically a website dedicated for admins to monitor all the complaints and help them to restore the justice in the system by having access to tamper-proof data and insights about the complaints. Application consist of certain additional feature which can easy and fasten the decision process, this feature includes video calling, Image recognition on media files and filling for government documents like NOC and NCR.

II. INTRODUCTION

The purpose of the Digital Solution to Combat Bribery & Justice Restoration System is to assist the responsible coordinating body to meet the national / internationalstandards required for the fight against bribery . The Digital Solution to Combat Bribery & Justice Restoration System provides the necessary IT support for the management of an anti-bribery action plan, antibribery measures, anti-bribery activities and the source of funding of those activities.

As this system provides an total online-based process starting from complaint posting to complain rresults Every update will be received by the complaint raiser via email, hence there will be no lack of communication. Hence, the online complaint system will make the user to deal with the complaint without any interaction with the organization or any form of interaction. Those the user , admin, and employee this three also no need of any interaction. This system is user-friendlyendly and very interactive for the user and organizational employee.

It has hindered the cycle of workflow and as well the justice system. With a rise in the number of instances where people ask for bribes even for basic and fundamental works there is a dire need to find a solution, thus an efficient way to report a bribe has become a prevalent topic

The aim of this project is to reduce the bribery that is happening in the society by changing to digital. When we do a transaction digitally it will be legal and countable. In government offices even nowadays the bribery is going on through money in physical form. To reduce that we developed an application by using Java technology in Eclipse this provides user an interface to compliant against the corrupted persons with the proof.

The proposed database driven application can be applied to various organizations such as the academic institution, business organization, local government units and many more. Database system is very vital to the success of the organization’s processes. Digital Solution to Combat Bribery & Justice Restoration System is an example of a database system that organizes the records in termsof customer or stakeholders complaints and queries. Complaints are hard to manage, monitor and resolve. The existing manual way is considered as inefficient especially in responding quickly to the complaint. Filing and addressing the complaint takes a lot of time and effort for both parties.

III. LITERATURE SURVEY

Bribery is a pervasive problem in many societies worldwide, and combating it has been a challenge for governments and law enforcement agencies. Digital solutions have been proposed as a way to address this issue and restore justice in the system. In this literature survey, we will review some of the recent studies on digital solutions to combat bribery and justice restoration system.

Digital Solutions for Anti-Corruption: Evidence from India by Archana Pandey and Jonathan D. Rosen. (2018). This study iinvestigates the effectiveness of digital solutions in combating corruption in India, specifically in the area of public service delivery. The authors find that the use of digital solutions, such as online portalsand mobile applications, has led to a reduction in the instances of bribery and improved service delivery. However, the authors also notethat digital solutions alone cannot eliminate corruption and that they need to be complemented by other measures, such as transparency and accountability. The authors find that the use of digital solutions, such as online portals and mobile applications, has led to a reduction in the instances of bribery and improved service delivery. However, the authors also note that digital solutions alone cannot eliminate corruption and that they need to be complemented by other measures, such as transparency and accountability. Therefore, the study concludes that digital solutions are an effective tool in the fight against corruption, but they need to be integrated with other measures to have a greater impact.

Blockchain Technology for Anti-Corruption: Opportunities and Challenges by Tiberiu Dragu and Radu Vranceanu. (2020). This study explores the potential of blockchain technology as a tool for combating corruption. The authors argue that blockchain technology can help prevent bribery by providing a secure and transparent platform for transactions. They also discuss the challenges associated with implementing blockchain technology in anti-corruption efforts, such as the need for standardization and interoperability. the challenges associated with traditional anti-corruption efforts, such as the lack of transparency and accountability, and explore how blockchain technology can address these challenges by providing a secure and transparent platform for transactions.The study highlights how blockchain technology can prevent bribery by creating a tamper- proof record of transactions that can be easily audited, thus providing greater transparency and accountability. The authors also discuss how blockchain technology can improve supply chain management, which is often a source of corruption.However, the study also highlights the challenges associated with implementing blockchain technology in anti-corruption efforts, including the need for standardization and interoperability. The authors acknowledge that there are multiple blockchain platforms, and interoperability between them is limited, making it difficult to implement blockchain technology on a large scale.

E-governance and Anti-Corruption in Developing Countries: A Case Study of Pakistan by Shafqat Saeed and Muhammad Azeem. (2019). This study examines the role of e-governance in combating corruption in Pakistan. The authors find that the use of digital solutions, such as online portals and mobile applications, has led to a reduction in the instances of bribery and improved service delivery. However, the authors also note that e-governance alone cannot eliminate corruption and that it needs to be complemented by other measures, such as transparency and accountability. e-governance can provide a transparent and efficient platform for public service delivery, thus reducing the opportunities for corruption. The studyuses Pakistan as a case study to explore the relationship between e- governance and anti-corruption efforts.The authors begin by providing an overview of e-governance and its potential for promoting transparency and accountability. They then discuss the challenges associated with corruption in developing countries, including Pakistan, and how e-governance can help address these challenges.The study examines the impact of e-governance in various sectors of the Pakistani economy, including tax collection, public service delivery, and public procurement. The authors find that e- governance has led to a reduction in corruption in these sectors by providing a transparent and efficient platform for transactions. The authors also highlight the

challenges associated with implementing e- governance in Pakistan, including the lack of infrastructure and technological expertise. The study suggests that the government needs to invest in improving the technological infrastructure and capacity- building to ensure the effective implementation of e-governance.

Using Artificial Intelligence to Combat Corruption by Mariarosaria Taddeo and Luciano Floridi. (2021). This study discusses the potential of artificial intelligence (AI) as a tool for combating corruption. The authors argue that AI can help prevent bribery by detecting and flagging suspicious transactions. They also discuss the ethical implications of using AI in anti-corruption efforts, such as the need to ensure fairness and avoid bias. The article highlights the challenges associated with implementing AI in anti- corruption efforts, such as the need for ethical guidelines and accountability frameworks to ensure transparency and fairness. The authors also discuss the risks associated with the use of AI in anti- corruption efforts, such as the potential for bias and unintended consequences. Overall, the article suggests that AI can be an effective tool in the fight against corruption, but it needs to be implemented carefully and ethically to ensure its effectiveness and prevent negative consequences.

Digital Technologies and Corruption: A Review of the Literature by Pranav Gupta and Auroop Ratan Ganguly. (2021). This study provides a comprehensive review of the literature on the use of digital technologies to combat corruption. The authors find that digital solutions have the potential to reduce corruption by increasing transparency, accountability, and efficiency. However, the authors also note that the effectiveness of digital solutions depends on several factors, such as the level of technology adoption and the political will to implement anti-corruption measures. The article highlights the benefits of digital technologies in promoting transparency, efficiency, and accountability in government transactions, thus reducing the opportunities for corruption. The authors also discuss the challenges associated with implementing digital technologies in anti-corruption efforts, such as the need for infrastructure and capacity-building. Overall, the article suggests that digital technologies have the potential to be effective tools in the fight against corruption, but their implementation needs to be carefully planned and executed to ensure their effectiveness.

IV. ARCHITECTURE AND METHODOLOGY

A. Data Collection

The project may involve the collection of data related to bribery and corruption in a particular sector or region. This data can be collected through various means, such as surveys, interviews, and analysis of existing data sources.

B. Data Analytics

Once the data is collected, it needs to be analyzed to identify patterns, trends, and potential areas of corruption. This can be done through data analytics tools and techniques such as machine learning and artificial intelligence.

C. Mobile Application

Mobile applications can be developed to allow citizens and officials to report incidents of corruption and bribery. These applications can provide an anonymous reporting mechanism, ensuring the safety of whistleblowers.

D. Transparency and Accountability

The project should focus on increasing transparency and accountability in the justice restoration system. This can be achieved through the use of public reporting mechanisms, open data policies, and monitoring and evaluation frameworks.

E. Capacity Building

The project may involve capacity building efforts aimed at enhancing the skills and knowledge of stakeholders involved in the justice restoration system. This can include training on ethical practices,anti-corruption laws, and data analytics.

F . Partnership and Collaboration

The project can involve partnerships and collaboration with various stakeholders, including government agencies, civil society organizations, and private sector entities. These partnerships can help to increase the effectiveness and sustainability of the project.

G. Tomcat

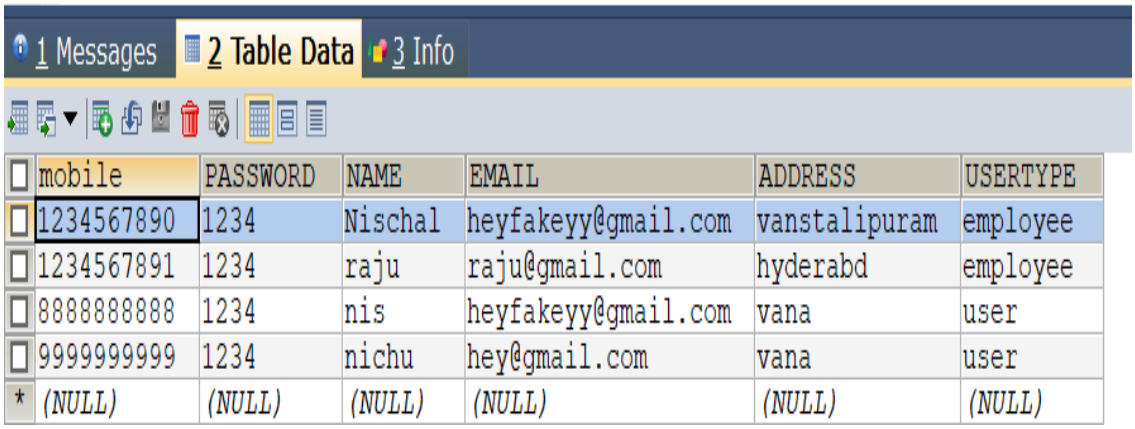
Tomcat is an application server from the Apache Software Foundation that executes Java servlets and renders Web pages that include Java Server Page coding. Described as a "reference implementation" of the Java Servlet and the Java Server Page specifications, Tomcat is the result of an open collaboration of developers and is available from the Apache Web site in both binary and source versions. Tomcat can be used as either a standalone product with its own internal Web server or together with other Web servers, including Apache, Netscape Enterprise Server, Microsoft Internet Information Server (IIS), and Microsoft Personal Web Server. Tomcat requires a Java Runtime Enterprise Environment that conforms to JRE.

H. Eclipse platform

On the windows platform, if you extracted the contents of the zip file to c:\, then you can start eclipse by using c:\eclipse\eclipse.exe.When eclipse starts up for the first time it prompts you for the location of the workspace folder. All your data will be stored in the workspace folder. You can accept the default or choose new location. If you select "Use this as the default and do not ask again", this dialog box will not come up again. You can change this preference using the Workspaces Preference Page .

V. IMPLEMENTATION

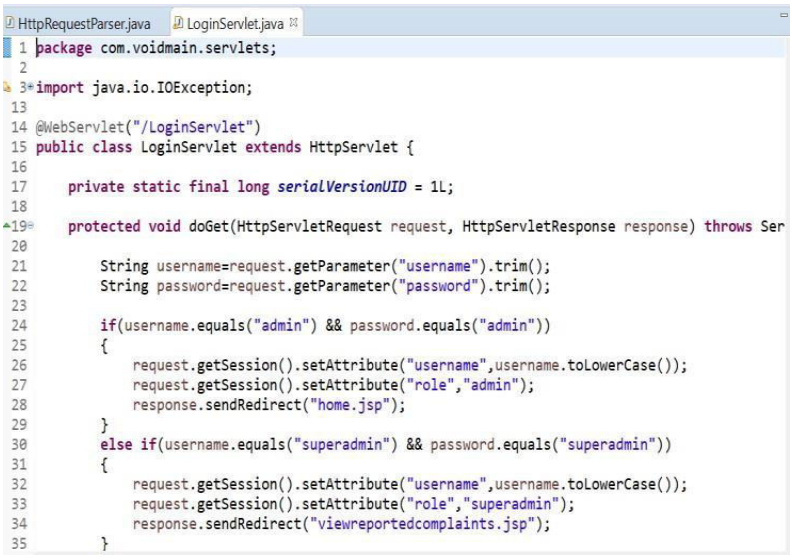
Install all the softwares mentioned in the requirements. Open the tomcat server make sure it started the service. Launch an workspace in the spring tool suite. Add all the justice restoration system files into the workspace. Select the servers at the bottom of the workspace window.Select tomcat server and click run button on the right.Once the tomcat server is showing “started, synchronized”, you’re good to go.Go to the browser(any) and enter the following linkhttp://localhost:8080/JusticeRestorationSystemOnce the above link is open we can see the project . “Digital solution to combat bribery and justice restoration system”. Now ,you can use the functionality of the system.



1 Messages | 2 Table Data | 3 Info

mobile	PASSWORD	NAME	EMAIL	ADDRESS	USERTYPE
1234567890	1234	Nischal	heyfakeyy@gmail.com	vanstalipuram	employee
1234567891	1234	raju	raju@gmail.com	hyderabd	employee
8888888888	1234	nis	heyfakeyy@gmail.com	vana	user
9999999999	1234	nichu	hey@gmail.com	vana	user
(NULL)	*(NULL)*	*(NULL)*	*(NULL)*	*(NULL)*	*(NULL)*

Fig 1: Storing successfully in Database



HttpRequestParser.java | LoginServlet.java

```
1  package com.voidmain.servlets;
2
3+import java.io.IOException;
13
14 @WebServlet("/LoginServlet")
15 public class LoginServlet extends HttpServlet {
16
17     private static final long serialVersionUID = 1L;
18
19     protected void doGet(HttpServletRequest request, HttpServletResponse response) throws Ser
20
21         String username=request.getParameter("username").trim();
22         String password=request.getParameter("password").trim();
23
24         if(username.equals("admin") && password.equals("admin"))
25         {
26             request.getSession().setAttribute("username",username.toLowerCase());
27             request.getSession().setAttribute("role","admin");
28             response.sendRedirect("home.jsp");
29         }
30         else if(username.equals("superadmin") && password.equals("superadmin"))
31         {
32             request.getSession().setAttribute("username",username.toLowerCase());
33             request.getSession().setAttribute("role","superadmin");
34             response.sendRedirect("viewreportedcomplaints.jsp");
35         }
```

Fig 2 : program running successfully

VI. RESULTS

Fig 4: Home page

Fig 5: User signup

VI. CONCLUSION

Now a day as technology is increasing usage are also increasing so Complaints is also increasing. It demands for developing new Complaint management applications which have attracting features. As this system provides an total online based process starting from complaint posting to complaint result. Every update will be received by the complaint raiser via email, hence there will be no lack of communication. Hence, the online complaint system will make the user to deal with the complaint without any interaction with the organization or any form of interaction. Those the user ,admin, employee this three also no need of any interaction. This system is very user friendly and very interactive for the user and organizational employees .

The proposed system includes a centralized database that allows for the tracking and monitoring of all transactions, as well as the implementation of a whistleblower mechanism to encourage individuals to report bribery and corruption. Moreover, the use of AI and machine learning algorithms can help identify suspicious patterns and behaviors that may indicate corrupt practices. Additionally, the project proposes a Justice Restoration System that aims to restore justice to victims of corruption by providing them with a platform to voice their grievances and seek redress. The system also provides mechanisms for restitution and compensation to the victims.

VIII. ACKNOWLEDGEMENT

We sincerely appreciate the Vignan Institute of Technology and Science's Information Technology Department for providing us with the resources, guidance, and assistance needed to accomplish this study.

REFERENCES

a. . Anti-Corruption Resource Center. (2018). Best practices in thefight against corruption: Case studies from around the world.

[2]. United Nations Development Programme. (2018). Using technology to fight corruption: The role of civil society.

[3]. Transparency International. (2019). Corruption Perceptions Index 2019.

[4]. World Bank Group. (2021). Global indicators of anti-corruption and good governance.

[5]. Organization for Economic Cooperation and Development. (2019). OECD integrity review of Brazil: Managing risks for a cleanerpublic sector.

[6]. World Economic Forum. (2021). The Global CompetitivenessReport 2020.

[7]. United Nations Office on Drugs and Crime. (2021). Global programme against corruption.

[8]. United Nations Convention against Corruption. (2003). United Nations Treaty Collection.

[9]. U.S. Department of Justice. (2020). The Foreign Corrupt Practices Act resource guide.

[10]. United Nations Development Programmer. (2019). Using open data to combat corruption.