

REVAMP OF PROPERTY TAX

A Project Report

Submitted By

MALAV SHAH 210303105799

DHRUV VARIA 210303105821

VISHAL SHINGALA 210303105811

TIRTH SHAH 210303105803

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Under the Guidance of

Prof. Ankita Gandhi



PARUL UNIVERSITY

VADODARA

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PARUL UNIVERSITY

CERTIFICATE

This is to Certify that Project - 2 -Subject code 203105400 of 7th Semester entitled “Revamp Of Property Tax” of Group No. PUCSE_196 has been successfully completed by

- MALAV SHAH - 210303105799
- DHRUV VARIA - 210303105821
- VISHAL SHINGALA - 210303105811
- TIRTH SHAH - 210303105803

under my guidance in partial fulfillment of the Bachelor of Technology (B.TECH) in Computer Science and Engineering of Parul University in Academic Year 2023- 2024.

Date of Submission :-

Prof. Ankita Gandhi,

Head of Department,

Project Guide

Dr. Amit Barve

Prof. Yatin Shukla

CSE, PIET

Project Coordinator

Parul University

External Examiner

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“The single greatest cause of happiness is gratitude.”

-Auliq-Ice

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MALAV SHAH

DHRUV VARIA

VISHAL SHINGALA

TIRTH SHAH

B.Tech

Parul University,

Vadodara

Abstract

Integration of electronic tax systems is a significant step towards improving the overall effectiveness, transparency, and efficiency of tax administration and collection, especially in the context of municipal governments. This abstract explores the many-faceted effects of such innovations in more detail: Municipal governments are becoming increasingly aware of the crucial significance of taxes as a strategic cornerstone for sustaining essential public services and infrastructure development in today's quickly changing technological landscape. In addition to streamlining the payment process for citizens, the transformation of tax collection practises, supported by digitalization and online platforms, revolutionises governance itself. In a time of regional autonomy, the introduction of electronic tax systems is a prime example of the complex interplay between innovation and democratisation of governance. Utilising information technology to encourage tax compliance is an example of how governments can adapt to societal change.

It demonstrates how dedicated governments are to fostering a climate of openness, receptivity, and accountability. An application-based online tax system functions fundamentally as a change agent with the power to usher in a new era of money management. When properly implemented, it results in significant time and money savings for governments, freeing up valuable resources that can be used to improve public welfare. This transformation opens the door to a time when people can easily, affordably, and quickly access information about taxes and payment options. Due in large part to the Internet's widespread, managing property taxes has undergone a remarkable transformation in the modern world. In addition to bridging the gap between the public and government, the development of user-friendly applications has also ushered in a time of unprecedented responsiveness.

Open channels of communication between taxpayers and authorities have enabled the quick and accurate resolution of a wide range of issues. The Online Tax module offers a strong online conduit for both taxpayers and governmental organisations. It is a symbol of this digital renaissance. Its main result is the simultaneous reduction of time and cost, which is a significant advancement in the field of public administration. Municipal governments are able to redefine the relationship between citizens and the state as they use the potential of online property tax units to remove barriers that previously stood in the way of effective governance.

Table of Contents

Acknowledgements	iii
Abstract	iv
Table of Contents	v
List of Figures	ix
1 Introduction	1
1.1 Problem Statement	1
1.2 Motivation	2
1.3 Objective	3
1.4 Scope of project	4
1.5 Learning Perspective	5
1.5.1 Property Evaluation:	5
1.5.2 Tax Calculation:	5
1.5.3 Rebates and Exemptions:	5
1.5.4 Mechanisms for Collection:	5
1.5.5 Dispute Settlement:	6
1.5.6 Distribution of Revenue:	6
1.5.7 Fostering Compliance	6

2 Literature Survey	7
2.1 Implementation of Online Tax System	7
2.1.1 Dissection of paper	8
2.2 E-Payment System for Municipal Services	8
2.2.1 Dissection of paper	8
2.3 An empirical study on the impact of quality antecedents on tax payers' acceptance of Internet tax-filing systems	9
2.3.1 Dissection of paper	9
2.4 The Incidence of the Property Tax and Property Tax Preferences.	10
2.4.1 Dissection of paper	10
2.5 Design and Implementation of a Secure Online Payment System	11
2.5.1 Dissection of paper	11
2.6 Estimating Property Tax Shifting Due to Regressive Assessments:	12
2.6.1 Dissection of paper	12
2.7 A Model of Constitutional Constraints on Benevolent Governments and a Reassessment of the 1970s Property Tax Revolt.	13
2.7.1 Dissection of paper	13
2.8 Development of a Web-Based Tax Payment System for Local Government	15
2.8.1 Dissection of paper	15
2.9 Implementation of a Secure Online Payment System for E-Commerce	16
2.9.1 Dissection of paper	16
2.10 Design and Implementation of an Online Payment System for Tax Collection	17
2.10.1 Dissection of paper	17
2.11 Washington: Blockings Inst.	18
2.11.1 Dissection of paper	18

2.12 Property Taxation in India : Issues Impacting Revenue Performance and Suggestions for Reform. Governance Discussion Paper	19
2.12.1 Dissection of paper	20
2.13 Tax Reform in Vietnam : Toward a More Efficient and Equitable System	21
2.13.1 Dissection of paper	22
2.14 The Property Tax as a Capital Tax	23
2.14.1 Dissection of paper	23
3 Proposed System	25
3.1 Class Diagram	25
3.2 Use Case diagram	26
3.3 Entity Relationship Diagram	27
3.4 Admin- Flow diagram	28
3.5 User- Flow diagram	29
3.6 Data Flow Diagram	30
4 Project Flow And Methodology	31
4.1 Methodology	31
4.2 Project Flow	35
4.2.1 Front-End Flow Diagram	35
4.2.2 Back-End Flow Diagram	36
4.3 Framework	37
5 Implementation And Results	38
5.1 Working Module Screenshots	38
5.1.1 Home	38
5.1.2 User-Portal	39
5.1.3 User-Current Year Details	40

5.1.4	User-Paid Details	41
5.1.5	User-Measurement Details	42
5.1.6	Admin Login	43
5.1.7	Admin Portal	44
5.1.8	Admin- Bill Generation Portal	45
5.1.9	Admin- Edit Factor Portal	46
5.1.10	Admin- Aakarni	47
5.1.11	Responsive Design(1)	51
5.1.12	Responsive Design(2)	52
5.1.13	Sample Bill PDF	53
6	Test Cases	54
6.1	Residential (FLAT)	54
6.2	Residential(Lakshmi Villas Palace)	55
6.3	Non-Residential	56
6.4	State Government Property	57
7	Conclusion	58
8	Future Work	59

List of Figures

3.1 Class Diagram	25
3.2 Use Case diagram	26
3.3 Entity Relationship Diagram	27
3.4 Admin- Flow diagram	28
3.5 User- Flow diagram	29
3.6 Data Flow Diagram	30
4.1 ASP.NET	32
4.2 c#	32
4.3 ORACLE 11G	33
4.4 VISUAL STUDIO	33
4.5 Oracle SQL Developer	34
4.6 Crystal Reports	34
4.7 Front-End Flow Diagram	35
4.8 Back-End Flow Diagram	36
5.1 Home Page	38
5.2 User-Bill Assessment Portal	39
5.3 User-Current Year Details	40
5.4 User-Paid Details	41
5.5 User-Measurement Details	42
5.6 Admin Login	43
5.7 Admin Portal	44
5.8 Admin- Ward Wise Assessment	45
5.9 Admin- Ward Wise Bill Closing Portal	45
5.10 Admin- Ward Wise Bill Closing Year End Portal	45

5.11 Admin- Bill Generation Portal	46
5.12 Admin- Aakarni Page 1	47
5.13 Admin- Aakarni Page 2	48
5.14 Admin- Aakarni Page 3	49
5.15 Admin- Aakarni Page 4	50
5.16 Responsive Design(1)	51
5.17 Responsive Design(2)	52
5.18 Sample Bill PDF	53
6.1 Residential (FLAT)	54
6.2 Residential(Lakshmi Villas Palace)	55
6.3 Non-Residential	56
6.4 State Government Property	57

Chapter 1

Introduction

1.1 Problem Statement

The primary justification for addressing the issue is that the current module in use is no longer supported and can only be used with previous iterations of the Windows operating system. This restriction makes the system less compatible with contemporary technology and exposes it to security risks because outdated operating systems may be missing crucial updates and safeguards.

The lengthy billing process within the current system is another important factor that requires attention. Bill generation can take several days, which can cause delays in money transfers and revenue collection. This inefficiency may result in financial irregularities, user annoyance, and administrative difficulties for municipal government.

These strong justifications make it necessary for municipal government to address the outdated module, fix the system's flaws, and simplify the billing procedure. They can improve operational effectiveness, guarantee data security, and offer a more seamless experience for both staff and users by doing this.

1.2 Motivation

The realisation that the current module was dependent on severely out-of-date technology and had undergone numerous revisions without adequate documentation served as a potent catalyst for action. The urgency of a thorough overhaul to address these flaws and provide a significantly better user experience, increased security, and improved customer support were highlighted by this discovery.

The knowledge that the project is an IDP (Industry Defined Project) is one of the primary motivations behind this initiative. Given that thousands of people who depend on municipal government services will be affected by the project's results, this designation carries with it a greater sense of responsibility. It represents a dedication to acting in the community's and the general public's best interests.

Another source of motivation is the possibility that this project will result in a modification to the current charging structure. This modification might result in a system of financial transactions that is more equitable, effective, and transparent, which would be advantageous to the company and its users. It displays a dedication to ongoing development as well as flexibility in response to changing demands and conditions.

In result, the desire to address major weaknesses in the current system, uphold a sense of responsibility towards the community, and promote positive changes in the charging structure serve as the driving forces behind this project's motivation. These motives support the commitment to providing a better, more secure, and user-centric experience by collectively highlighting the significance and impact of this endeavour.

1.3 Objective

The development of a website for online tax payments represents a significant response to a pervasive problem in our contemporary, fast-paced world. The creation of this online platform aims to close the time gap that the modern lifestyle frequently creates between people and their ability to physically visit government institutions.

The user-friendly tax payment process is one of the main goals of this website. By providing an online portal, the government makes it simple for its citizens to conveniently pay their taxes while lounging at home or at work. In addition to saving time, this is in line with the growing trend of digitization and improves the effectiveness of transactions.

Additionally, through the platform, the website hopes to give users useful information about the tax breaks and incentives that are readily accessible. Individuals are better able to make wise financial decisions and take advantage of savings opportunities thanks to this proactive approach, which also improves their overall financial well-being.

Another noteworthy aspect of the platform is its ability to help people and the government communicate. It encourages openness and accessibility by enabling users to directly ask questions, get help, or express concerns. An informed and engaged populace benefits from this open channel of communication.

In the long run, the update to the online tax module for municipal government holds the promise of cost savings and the removal of perceived barriers between the general public and the government. It introduces a new era of financial interaction and collaboration in the digital age by embodying the principles of effectiveness, accessibility, and transparency.

1.4 Scope of project

Indeed, taxes have a significant impact on how financially stable governments are, particularly at the local level. They allow governments to finance fundamental services and community-beneficial infrastructure because they are their main source of funding. Recognising the strategic importance of taxes, efforts have been made continuously to improve the taxpayer experience by streamlining tax collection procedures and practises.

Modernising tax collection has advanced significantly with the introduction of an electronic tax system, also known as an online tax system. Utilising the power of information technology, this creative strategy streamlines the tax payment process, increasing taxpayer accessibility and convenience. By doing this, it not only improves taxpayer compliance but also streamlines administrative tasks for the government.

The lives of thousands of people in the community could be impacted by this web portal, which is intended to facilitate online tax payments. Both individual taxpayers and businesses can take advantage of its reach and user-friendly platform to efficiently complete their tax obligations. The portal aims to increase compliance rates and improve the overall financial health of the local government by easing the administrative burden on taxpayers and offering a seamless digital experience.

Additionally, the adoption of this electronic tax system is consistent with larger trends in digital transformation and e-governance. It demonstrates a dedication to utilising technology to improve governmental operations, encourage transparency, and encourage citizen engagement. The web portal becomes an essential tool in bringing tax collection practises in line with the expectations of a tech-savvy populace as more people and businesses adopt online transactions.

In brief, the launch of this online tax portal marks a significant advancement in the modernization of tax collection procedures. Its strategic significance in the area of public finance and governance is underlined by the possibility that it will have an impact on thousands of people by streamlining tax payments, encouraging compliance, and fostering a digitally connected community.

1.5 Learning Perspective

An important piece of legislation governing property taxation in Maharashtra, India, is the Bombay Provincial Municipal Corporations (BPMC) Act. The assessment, computation, and collection of property taxes within municipal corporations—important sources of funding for urban development and public services—are governed by this act. Here, we examine the specifics of the property tax provisions of the BPMC Act, using numbers to provide clarity:

1.5.1 Property Evaluation:

The BPMC Act requires a methodical approach to property evaluation. It establishes the standards for evaluating properties while taking into account their type, purpose, and location. Residential properties, for example, are valued at 10,000 per square metre of built-up area, whereas commercial properties are valued differently depending on their use, such as retail shops, which are valued at 15,000 square metres.

1.5.2 Tax Calculation:

The act specifies a methodological framework for computing real estate taxes. For various property categories, it sets fixed tax rates. Typically, residential properties are taxed at 1% of their assessed value. Therefore, the annual property tax would be \$10,000 for a residential property with an assessed value of \$1,000,000.

1.5.3 Rebates and Exemptions:

To ensure fairness and support specific groups or objectives, the BPMC Act permits specific exemptions and rebates. Seniors who own properties below a certain threshold, for example, may be completely exempt from paying property taxes. A 20% property tax refund could be given to educational institutions.

1.5.4 Mechanisms for Collection:

The act establishes due dates for the annual collection of property taxes. Penalties apply to late payments. A typical fine is 2% per month on past-due sums. Tax payment options for property owners include online payment portals, in-person payments at municipal offices, and authorised banks.

1.5.5 Dispute Settlement:

If there are mistakes or discrepancies, property owners have the right to contest their property tax assessments. A formal dispute resolution procedure with a set deadline is outlined in the act. Decisions on appeals are typically rendered within 60 days of filing.

1.5.6 Distribution of Revenue:

Property tax money is allotted to pay for different municipal projects and services, ensuring effective use of the money. For example, 20% of property tax revenue could be set aside for urban planning and upkeep, 30% for infrastructure development, and 50% for sanitation and waste management.

1.5.7 Fostering Compliance

The BPMC Act encourages property owners to adhere to their tax obligations by defining clear guidelines and assessment criteria. The transparency of the act and its organised methodology make tax evasion less likely, resulting in a more equitable distribution of the tax burden among property owners.

Chapter 2

Literature Survey

2.1 Implementation of Online Tax System

Author: Prayoga Bestari, Obsatar Sinaga, Mohd Haizam, Mohd Saudi

Overview: While using an online tax system, compliance is one of the indicators that determines accountability. There are numerous approaches of approaching tax compliance, according a study: Tax compliance may be viewed as a matter of the public purse, the legal system, structural design, labour availability, culture, or a combination of all of these. A different study found that the complexity of the tax system, financial difficulty, confidence in tax fairness, and ignorance of the amount of tax due all had an effect on tax compliance. According to a related research, tax compliance has five features, all of which are common in Asian jurisdictions: fair tax imposition, advantages for taxpayers provided by the government, wealth tax provisions, tiered or single tax rate structure and personal interest .The findings are supported by research on Malaysian taxpayers that found similarities in how Malaysian, American, and Australian taxpayers see the significance of the variable of tax fairness in determining tax compliance. The implementation of an online tax system in West Java is still unproductive, according to the conclusions of the present study [1].

2.1.1 Dissection of paper

What is the objective of the paper?

Based on the information presented, it suggests the article's objective is to examine and analyse different aspects and indicators related to tax compliance, particularly in the context of an online tax system in West Java or possibly more broadly in Asian jurisdictions.

What rational is given by the authors, attributing importance to the research problem?

By highlighting the complexity and variety of the research problem, the authors demonstrate its importance. They contend that tax compliance is a multifaceted issue affected by a variety of variables, such as judicial systems, economic conditions, cultural norms, and administrative setup. This complexity alone makes it a crucial area for investigation because effective tax administration depends on comprehending and addressing these varied influences.

2.2 E-Payment System for Municipal Services

Author: B. V. Desai and P. R. Vakharia.

Methods: ASP.NET and Oracle Database. Overview: This article describes the creation of a municipal e-payment system utilising Oracle Database and ASP.NET. The system enables users to pay for a variety of municipal services, including real estate taxes, utility bills, and water and electricity. The system architecture, database design, and implementation specifics are covered in the article [2] .

2.2.1 Dissection of paper

What is the objective of the paper?

Outline the development and implementation of an electronic payment (e-payment) system for municipal services in the paper "E-Payment System for Municipal Services," written by B. V. Desai and P. R. Vakharia. The paper's specific goal is to describe how this system was developed using Oracle Database and ASP.NET technologies. The main objective of the system is to make it easier for citizens to pay a variety of municipal services online, such as real estate taxes, utility bills, and water and electricity bills. With the overall goal of providing a thorough understanding of how such a system can be designed and used for municipal service payments, the paper probably offers insights into the system's architecture, database design, and specific implementation details.

2.3 An empirical study on the impact of quality antecedents on tax payers' acceptance of Internet tax-filing systems

Author: I-Chiu Chang, Yi-Chang Li, Won-Fu Hung and Hisn-Ginn Hwang

Overview: In Taiwan, there are three primary methods for filing taxes: manually, electronically, and online. The Taiwanese government established the e-government initiative in 1998, and since then has actively promoted online tax filings as part of its goals for a paperless environment, efficient procedures, and the public's convenience in contacting government organizations. The National Tax Administration (NTA), Taiwan's tax collecting agency, promoted the system by providing incentives such as faster tax refunds and online credit card payments, which resulted in an increase in the number of online tax filers (see Table 1). Of the three methods mentioned above, the public is most happy with the 2D bar code filing method and is least satisfied with manual filing [3].

2.3.1 Dissection of paper

What is the objective of the paper?

Given the synopsis supplied, the paper's goal is to examine and likely analyse Taiwan's tax filing procedures, paying particular attention to the adoption and effects of electronic and online tax filing procedures. The goal of the paper seems to be to comprehend the development of Taiwan's tax filing systems, particularly in light of the government's e-government initiative, which encourages online tax filings. The impact of this initiative on tax-filing habits and public satisfaction may be examined by the authors.

What rational is given by the authors, attributing importance to the research problem?

The authors give their research problem significance by placing it within the larger context of Taiwan's 1998-launched e-government initiative. In order to usher in a new era of digitalization, this government-led initiative focused on efficiency, a paperless environment, and improved public convenience when dealing with government organisations. The authors see their research as a chance to evaluate the impact and efficacy of these policies and goals by concentrating on tax filing procedures, particularly the promotion of online tax filings.

2.4 The Incidence of the Property Tax and Property Tax Preferences.

Author: Borg, Mary O., Stranahan, Harriet A., and William Voorhees.

Overview: The primary focus of this article is on how the property tax assessment system—more particularly, property tax appeals—affects vertical equity in property taxes. I investigate the preliminary data in favor of vertical equality in assessment to property tax ratios and tax appeals. The assessment ratio of a property is the discrepancy between the actual sale price of the property in the year it was sold and the market value calculated by the Cook County Assessors' Office (CCAO). The effective tax rate on housing wealth is the amount of taxes paid relative to the sale price of a property in the same year. I view a strong negative association between effective tax rates and house prices as proof that real estate taxes are progressive. Using administrative data from the Chicago County Assessors' Office, I discover that property taxes in American County were incredibly regressive after the housing bubble crashed in 2008. (CCAO) [4].

2.4.1 Dissection of paper

What is the objective of the paper?

The objective of the paper by Mary O. Borg, Harriet A. Stranahan, and William Voorhees, "The Incidence of the Property Tax and Property Tax Preferences," is to investigate how the property tax assessment system, with a focus on property tax appeals in particular, affects the idea of vertical equity in property taxes. The fairness and equality of property tax assessments for properties with different values are referred to as vertical equity.

What rational is given by the authors, attributing importance to the research problem?

By focusing their efforts on the system of property tax assessment, particularly property tax appeals, the authors highlight the significance of their research problem. They appear to believe that property tax assessment is crucial in determining the fairness and equity of property taxes, based on their choice of focus. Furthermore, the authors emphasise their interest in the idea of "vertical equity" in property taxation, demonstrating their commitment to making sure that tax assessments are fair for properties with different values. They also highlight the relevance of their research by mentioning the effects of the 2008 housing bubble crash, acknowledging how economic events can have a significant impact on taxpayer preferences and property tax assessments.

2.5 Design and Implementation of a Secure Online Payment System

Author: R. A. Adedoyin, I. B. Adeleke and O. J. Omotosho.

Methods: ASP.NET and Oracle Overview: In this work, we present the design and implementation of an Oracle and ASP.NET-based secure online payment system. A web interface, a business logic layer, and a data access layer are all components of the system's multi-tier design. The usage of SSL/TLS for secure communication, the encryption of sensitive data, and Oracle Database security features are all covered in this article [5].

2.5.1 Dissection of paper

What is the objective of the paper?

The authors of the paper, R. A. Adedoyin, I. B. Adeleke, and O. J. Omotosho, set out to describe the development of a secure online payment system based on ASP.NET and Oracle technologies. The paper focuses on the creation of this system, which has a web interface, a business logic layer, and a data access layer as part of a multi-tier architecture. Making sure that online payments are secure is the paper's main focus. The authors describe the use of SSL/TLS protocols for secure communication, encryption methods for protecting sensitive data, and Oracle Database security features in order to accomplish this goal. In essence, the paper aims to advance the field of online payment systems by offering insights and recommendations on how to design and implement a secure payment system using Oracle and ASP.NET technologies, with a focus on security precautions to safeguard sensitive data during online transactions.

What rational is given by the authors, attributing importance to the research problem?

The authors emphasise the significance of their research problem by recognising the critical role that security plays in online transactions. They understand that protecting the security and integrity of online payments is a matter of utmost concern for both businesses and consumers given the widespread use of digital transactions in today's economy. They probably intend to meet an urgent need in the industry and contribute to the creation of best practises for secure financial transactions by deciding to design and implement a secure online payment system based on Oracle and ASP.NET technologies.

2.6 Estimating Property Tax Shifting Due to Regressive Assessments:

Author: Christopher Berry, William and Alicia Townsend Freidman.

Overview: According to estimates for Chicago, \$2.2 billion was shifted from properties with low taxes to those with high taxes between 2011 and 2015. Regressive assessments make it more probable that the most expensive homes will be undertaxed. According to my calculations, the richest 10% of properties paid close to \$800 million in property taxes over this time, compared to the other 90%. When assessments are accurate, every property in the same class (such as a residential property) ought to pay the same effective tax rate, net of exemptions. In other words, the amount of taxation based on market value, before exemptions, should be the same for every property. When assessments are regressive, or when homes with lower market values are assessed at a higher rate than homes with higher market values, the resultant property tax burdens will also be regressive, leading to a variety of effective tax rates for different properties. Due to the nature of property taxes, other properties must be overtaxed while one property must be under taxed in order to reach a fixed levy, or the full amount of required tax income [6].

2.6.1 Dissection of paper

What is the objective of the paper?

The primary objective of this paper is to look into and address issues surrounding Chicago's property tax assessments' equity and fairness. The authors want to raise awareness of the phenomenon of property tax shifting, where between 2011 and 2015 in Chicago, a sizable amount of \$2.2 billion was shifted from properties with low taxes to those with high taxes. The paper's main objective is to draw attention to the fact that property tax assessments are regressive, which causes an unequal distribution of the tax burden that disproportionately affects more expensive homes. The authors' goal is probably to examine the scope of the problem and show how regressive assessments cause some properties to be undertaxed.

What rational is given by the authors, attributing importance to the research problem?

The authors use a number of compelling arguments to emphasise the importance of their research problem. The largest of these is the staggering scale of property tax shifting, where during a specific time in Chicago, an estimated \$2.2 billion was transferred from properties with lower taxes to those with higher taxes. The issue will have real-world repercussions for both property owners and the revenue collection system, as evidenced by this significant financial impact. The authors also stress how property tax assessments are regressive, which not only violates basic notions of

equity but also has an uneven and noticeable effect on taxpayers. The stark disparities caused by regressive assessments are highlighted by their calculation that the wealthiest 10% of properties paid nearly \$800 million in property taxes over the specified period, compared to the remaining 90%. Additionally, they make the case for the significance of equity in assessments, highlighting the ideal scenario in which every property belonging to the same class would pay the same effective tax rate. Regressive assessments' violation of this rule emphasises how urgently fair property taxation needs to be brought back to its original state.

2.7 A Model of Constitutional Constraints on Benevolent Governments and a Reassessment of the 1970s Property Tax Revolt.

Author: Anderson, Nathan and Andreas Pape.

Overview: Real estate tax assessment is a contentious political procedure. It has gotten more difficult and technical to determine a person's "ability to serve herself" as assets have become more muddled and difficult to understand. Modern property tax assessment systems are the outcome of several technical and legal developments that have made them into a quasi-judicial system subject to both administrative and legal levels of scrutiny. Despite this, property taxes continue to be a major source of revenue for local governments, and tax equality is essential to the political and economic stability of these governments [7].

2.7.1 Dissection of paper

What is the objective of the paper?

The authors of the papers, Nathan Anderson and Andreas Pape, set out to examine and, most likely, resolve the difficult and divisive subject of real estate tax assessment. The goal of the paper is to examine the difficulties associated with determining a person's "ability to serve herself" through property taxation, particularly in light of changing and more complex asset structures. The paper seems to be attempting to shed light on how contemporary property tax assessment systems have changed due to technological and legal advancements, becoming quasi-judicial systems that are subject to both administrative and legal review.

What rational is given by the authors, attributing importance to the research problem?

Through a number of strong arguments, the authors assign their research problem a profound significance. They draw attention to the complexity and technicality of real estate tax assessment, which has grown as assets have complicated and become more difficult to value. This serves as a fundamental justification, demonstrating the complexity of the problem at hand. The authors also emphasise the development of current property tax assessment systems, pointing out how they became quasi-judicial bodies subject to both administrative and legal regulation. The perceived importance of their research is influenced by the historical and legal context because it highlights the system's complexity and the need for in-depth analysis. The authors also stress the continued financial importance of property taxes as a sizable source of revenue for local governments, highlighting how crucial it is in practise to address the difficulties associated with property tax assessment. They emphasise the critical role that tax equity plays in maintaining the political and economic stability of these local governments, which is significant and amplifies the societal implications of their research.

2.8 Development of a Web-Based Tax Payment System for Local Government

Author: O. A. Adeleke and R. A. Adedoyin.

Methods: ASP.NET and Oracle. Overview: The creation of a web-based tax payment system for local government using ASP.NET and Oracle Database is described in this article. The technology offers real-time information on taxpayers' tax status and enables online tax payment. The system architecture, database design, and implementation specifics are covered in the article [8].

2.8.1 Dissection of paper

What is the objective of the paper?

The authors of the paper, O. A. Adeleke and R. A. Adedoyin, set out to describe the planning and execution of a web-based tax payment system for local government that makes use of Oracle Database and ASP.NET technologies. This paper's main objective is to offer suggestions and advice on how to create an effective and user-friendly tax payment system that enables online tax payments and offers real-time information on taxpayers' tax situations. By outlining the system's architecture, database design, and implementation details, the authors hope to advance tax administration and financial technology within local governments.

What rational is given by the authors, attributing importance to the research problem?

Through a number of compelling arguments, the authors prove the significance of their research issue. Their main argument centres on the necessity of modernising tax payment systems within local government organisations. They acknowledge the importance of keeping tax administration in line with technological advancements by creating a web-based tax payment system using ASP.NET and Oracle Database technologies. The system's capacity to offer real-time information on taxpayers' tax statuses and enable online payments, satiating modern demands for efficiency and convenience, is also highlighted by the authors. The relevance of their work in addressing the changing needs of tax authorities and taxpayers is highlighted by this practical aspect. Their thorough examination of the system's architecture, database design, and implementation details demonstrates their dedication to streamlining tax procedures in an effort to improve the effectiveness and user-friendliness of tax administration. Notably, the authors probably see their approach as a way to increase local governments' revenue collection, possibly reducing tax evasion while ensuring the accuracy and promptness of tax payments.

2.9 Implementation of a Secure Online Payment System for E-Commerce

Author: E. A. Popoola and I. M. Ogunlade.

Methods: ASP.NET and Oracle. Overview: This paper outlines the use of Oracle and ASP.NET to construct a safe online payment system for e-commerce. The usage of SSL/TLS for secure communication, the encryption of sensitive data, and Oracle Database security features are all covered in this article. The system has three layers: a display layer, a layer for business logic, and a layer for data access [9].

2.9.1 Dissection of paper

What is the objective of the paper?

The comprehensive examination of security measures, such as the use of SSL/TLS for secure communication, data encryption methods for protecting sensitive information, and the incorporation of Oracle Database security features, underlines the paper's goal. These features underline the authors' dedication to preserving the privacy and security of online transactions. The authors also present a structured system architecture with three layers: a layer for business logic, a layer for data access, and a layer for display.

What rational is given by the authors, attributing importance to the research problem?

Through a number of noteworthy factors, the authors attribute significant importance to their research problem. The most important of these is a profound understanding of the importance of security in the context of e-commerce. The authors give priority to addressing the crucial issue of online security because they recognise the crucial role of secure financial transactions and the protection of private customer information. They put a lot of emphasis on using SSL/TLS for secure communication and data encryption, which shows how steadfastly committed they are to making sure that online payments made through their system are protected from security risks.

2.10 Design and Implementation of an Online Payment System for Tax Collection

Author: S. S. Oluwole and O. S. Adetoye.

Methods: ASP.NET and Oracle Overview: The design and implementation of an online payment system for tax collecting using ASP.NET and Oracle are discussed in this article. The system offers real-time information on taxpayers' tax status as well as the option for online tax payment. The system architecture, database design, and implementation details are covered in the paper, along with security precautions including SSL/TLS and data encryption [10].

2.10.1 Dissection of paper

What is the objective of the paper?

The authors of the paper, S. S. Oluwole and O. S. Adetoye, set out to provide a thorough account of the conception and implementation of an online payment system specifically intended for tax collection. This paper's main objective is to provide insights, recommendations, and useful information regarding the development of an effective and secure online tax payment system using Oracle and ASP.NET technologies.

What rational is given by the authors, attributing importance to the research problem?

With a multifaceted strategy that reflects their keen understanding of the complexities and significance of tax collection in the modern context, the authors emphasise the significance of their research problem. They place a strong emphasis on improving tax collection efficiency because they understand how important it is for efficient tax administration. They are aware that streamlining tax collection procedures can help the government collect money more quickly and effectively while also reducing administrative work. The authors also emphasise the significance of openness and accessibility by providing real-time data on taxpayer tax statuses. This demonstrates their dedication to enabling taxpayers with immediate access to their financial information, encouraging compliance, and reducing the likelihood of disputes. This feature's potential to build a more fair and harmonious tax ecosystem makes it significant.

2.11 Washington: Blockings Inst.

Author: Netzer D.

Publication year: 1996

Overview: Analysis of property tax policies, mostly in the US, is done from a quantitative and institutional standpoint. In the US, they have grown to be a significant source of tax income and exhibit high administrative efficiency. Nonetheless, there are issues with the tax's allocational efficiency and it is not entirely egalitarian. Agriculture and other industries that depend heavily on real estate are at a disadvantage. W. M. S. considers a number of solutions for enhancing equality and decreasing the property tax's effects on misallocation [11].

2.11.1 Dissection of paper

What is the objective of the paper?

The goal of the author's paper is based on a careful examination of property tax laws, primarily those that apply in the United States. This thorough analysis is carried out from both a quantitative and institutional standpoint, demonstrating a commitment to a multifaceted evaluation. The paper's first goal is to examine property tax policies in-depth, concentrating on their quantitative aspects. Examining the financial aspects of property taxes, including their role as a significant source of tax revenue in the US, is probably involved. A fundamental understanding of the fiscal ramifications of these policies is provided by the quantitative analysis.

What rational is given by the authors, attributing importance to the research problem?

Through a number of crucial channels, the author emphasises the significance of the research problem: The author first acknowledges the importance of property taxes in the context of the United States, noting that they have grown to be a sizable source of tax revenue. This acknowledgment emphasises the importance of property taxes from an economic and financial standpoint in supporting public services and government functions. Therefore, it is deemed essential to comprehend the subtleties and implications of property tax policies. Second, the author's focus on administrative effectiveness highlights the significance of efficient tax management and collection. In addition to affecting government revenue, administrative effectiveness also has an impact on how well the tax system operates as a whole. An ineffective administration of property taxes can waste resources and impede the fair distribution of tax burdens.

2.12 Property Taxation in India : Issues Impacting Revenue Performance and Suggestions for Reform. Governance Discussion Paper

Author: Awasthi, Rajul; Nagarajan, Mohan.

Overview: Cities in India are facing an enormous difficulty in providing and financing the growing demand for basic municipal services. This is due to the country's rapid urbanisation. India does poorly when measured against its counterparts in the Organisation for Economic Co-operation and Development (OECD) in terms of collecting money from the urban immovable property tax. According to the data, India's property tax collection is just approximately 0.2 percent of its national gross domestic product, or roughly one-sixth of the OECD group's average of about 1.1 percent. In comparison to OECD nations, the majority of Indian states—including those that do comparatively better—collect little sums. Low property tax income in India is a result of a number of reasons, including undervaluation, inadequate registries, insufficient legislation, and inefficient administration. Lack of accurate property tax rolls within the purview of urban local authorities is a major barrier to property tax administration (ULBs). In general, it is believed that property tax rules offer several exclusions. There's a lot of undervaluation. ULBs' ability to efficiently manage a property tax is limited, especially for smaller towns and Nagar Palikas. A variety of changes would need to be made, including revising the laws governing property taxes, eliminating useless exemptions, finishing the property registries, adopting more accurate assessment methods, and improving administration. To aid in the development of a close the resource gap in ULBs' potential to raise income, a novel approach to property tax administration is required. A centralised entity that manages the property registers and databases of all ULBs within its purview using a special information technology platform might administer property tax (and possibly other municipal income streams as well) for tiny ULBs that lack the capability. The paper proposes the creation of a Municipal Revenue Board at the state level as a model to support and administer the technical and policy-related components of the property tax. In order to accomplish the "back office" tasks of a normal property tax administration, the board is designed to make use of the most recent technology [12].

2.12.1 Dissection of paper

What is the objective of the paper?

The authors emphasise the significant difficulties that Indian cities face, particularly when it comes to funding necessary municipal services, in order to emphasise the significance of their research problem. Local governments in the nation are under a great deal of pressure to provide these services in order to keep up with the country's rapid urbanisation. Urban local governments have identified property tax collection as a key revenue source, making it a crucial component of the financial viability of these cities. The authors emphasise the issue's urgency further by contrasting India's performance in collecting property taxes with that of other OECD nations. Compared to the much higher average of OECD countries, India's property tax collection accounts for a very small portion of its national GDP, according to the data presented.

What rational is given by the authors, attributing importance to the research problem?

The authors emphasise the significance of their research problem by taking a multifaceted approach that highlights the seriousness of the problems that India's cities face when it comes to financing basic municipal services. The following is how they explain why they believe the research problem is significant: First, the authors acknowledge the enormous challenges Indian cities face in meeting the rising demand for basic municipal services. They set this issue in the context of the city's rapid urbanisation, which has caused the population of the city to grow exponentially and, as a result, the demand for services. This way of phrasing the problem emphasises how urgent and immediate the problem is. By comparing India's property tax collection to that of other OECD members, the authors, in their second section, use a comparative lens to examine the subject. They find a significant disparity through this comparative analysis, with India's property tax collection representing just a small portion of its GDP in comparison to the OECD average. This stark contrast acts as a powerful indicator of the severity of the problem and forces the necessity of correction.

2.13 Tax Reform in Vietnam : Toward a More Efficient and Equitable System

Author: Shukla, Gangadha Prasad, Pham, Duc Minh Engelschalk, Michael Le, Tuan Minh.

Overview: To assist close the resource gap in ULBs' potential to raise income, a novel approach to property tax administration is required. A centralised entity that manages the property registers and databases of all ULBs within its purview using a special information technology platform might administer property tax (and possibly other municipal income streams as well) for tiny ULBs that lack the capability. The paper proposes the creation of a Municipal Revenue Board at the state level as a model to support and administer the technical and policy-related components of the property tax. In order to accomplish the "back office" tasks of a normal property tax administration, the board is designed to make use of the most recent technology. Lack of accurate property tax rolls within the purview of urban local authorities is a major barrier to property tax administration (ULBs). In general, it is believed that property tax rules offer several exclusions. There's a lot of undervaluation. ULBs' ability to efficiently manage a property tax is limited, especially for smaller towns and Nagar Palikas. A variety of changes would need to be made, including revising the laws governing property taxes, eliminating useless exemptions, finishing the property registries, adopting more accurate assessment methods, and improving administration. To aid in the development of a more reliable property tax system, it becomes sense to create a model municipal act. Lack of accurate property tax rolls within the purview of urban local authorities is a major barrier to property tax administration (ULBs). In general, it is believed that property tax rules offer several exclusions. There's a lot of undervaluation. ULBs' ability to efficiently manage a property tax is limited, especially for smaller towns and Nagar Palikas. A variety of changes would need to be made, including revising the laws governing property taxes, eliminating useless exemptions, finishing the property registries, adopting more accurate assessment methods, and improving administration. To aid in the development of a more reliable property tax system, it becomes sense to create a model municipal act. It is anticipated that each study in this series will contribute to the discussion around the adoption of new laws and regulations. Also, it is intended that the volume would help the reform movement in the field of tax law, resulting in greater effectiveness, openness, and equality [13].

2.13.1 Dissection of paper

What is the objective of the paper?

The goal of this paper's authors is to offer creative solutions to the problems that India's urban local bodies (ULBs) face in administering property taxes. They are aware of the lack of resources preventing ULBs from effectively collecting property tax revenue. The authors support the creation of a centralised organisation, the Municipal Revenue Board, at the state level to close this gap. The proposed board would manage property registers and databases for all ULBs under its jurisdiction using cutting-edge information technology. The authors hope that by using this strategy, smaller ULBs that lack the necessary resources will be able to administer property taxes more efficiently and possibly expand it to other municipal income streams as well.

What rational is given by the authors, attributing importance to the research problem?

The authors stress the critical importance of their research problem, which is based on the enormous difficulties that urban local authorities (ULBs) in India face in administering property taxes. They contend that these issues, which are made worse by rapid urbanisation, present a significant barrier to the delivery and financing of crucial municipal services. Additionally, they highlight the stark disparity between India's property tax collection and the global average, particularly when compared to the nations of the Organisation for Economic Co-operation and Development (OECD). This stark divergence, which was discovered through comparative analysis, sounds a loud alarm, signalling the immediate need for correction. The authors also identify flaws in India's property tax laws, particularly the widespread use of arbitrary exemptions that result in significant undervaluation and revenue loss. This acknowledgement emphasises the need for reform, pushing for the abolition of pointless exemptions and the improvement of the fairness of the tax system.

2.14 The Property Tax as a Capital Tax

Author: George R. Zodrow

Overview: Analysis of property tax policies, mostly in the US, is done from a quantitative and institutional standpoint. In the US, they have grown to be a significant source of tax income and exhibit high administrative efficiency. Nonetheless, there are issues with the tax's allocational efficiency and it is not entirely egalitarian. Agriculture and other industries that depend heavily on real estate are at a disadvantage. W. M. S. considers a number of solutions for enhancing equality and decreasing the property tax's effects on misallocation. The "traditional view," which contends that the property tax is fully shifted forward to consumers in the form of higher housing prices, the "benefit view," which claims that the property tax is merely a payment for local public services received, and the so-called "new view," which contends that the property tax is a distorting tax on the use of capital within a local jurisdiction, are the three alternative views of the incidence of the tax that have been presented in the literature. This article examines the current discussion surrounding the incidence of the property tax, including both the theoretical bases for the various points of view and the actual data that may be used to distinguish between them [14].

2.14.1 Dissection of paper

What is the objective of the paper?

The purpose of the author's paper is to achieve a broad goal that is motivated by a deep concern for the complexities of property tax laws, particularly those that apply in the United States. The author launches a thorough investigation of the property tax landscape using a lens that combines quantitative analysis with an institutional perspective. Property taxes have become a significant source of tax revenue in the United States, distinguished by their administrative process efficiency. The author is astute in recognising that a number of issues with the efficiency of property tax allocation and issues with equity lie behind this fiscal success.

What rational is given by the authors, attributing importance to the research problem?

The following factors and justifications are used by the authors to support the significance of their research problem: The authors begin by highlighting the significance of their research problem and the crucial role that property tax policies play in the United States. They draw attention to the fact that property taxes have grown to be a sizable source of tax revenue, demonstrating their economic importance and contribution to public finances. Additionally, the U.S. property tax systems' high administrative effectiveness is a testament to their usefulness as a source of revenue. Secondly, the authors admit that there are inherent difficulties with property taxes despite their financial success. They specifically address issues with allocational efficiency, highlighting how property taxes can result in resource misallocation, which can have negative economic effects. The authors' awareness of these difficulties reflects their comprehension of the intricate dynamics at work in property tax laws.

Chapter 3

Proposed System

3.1 Class Diagram

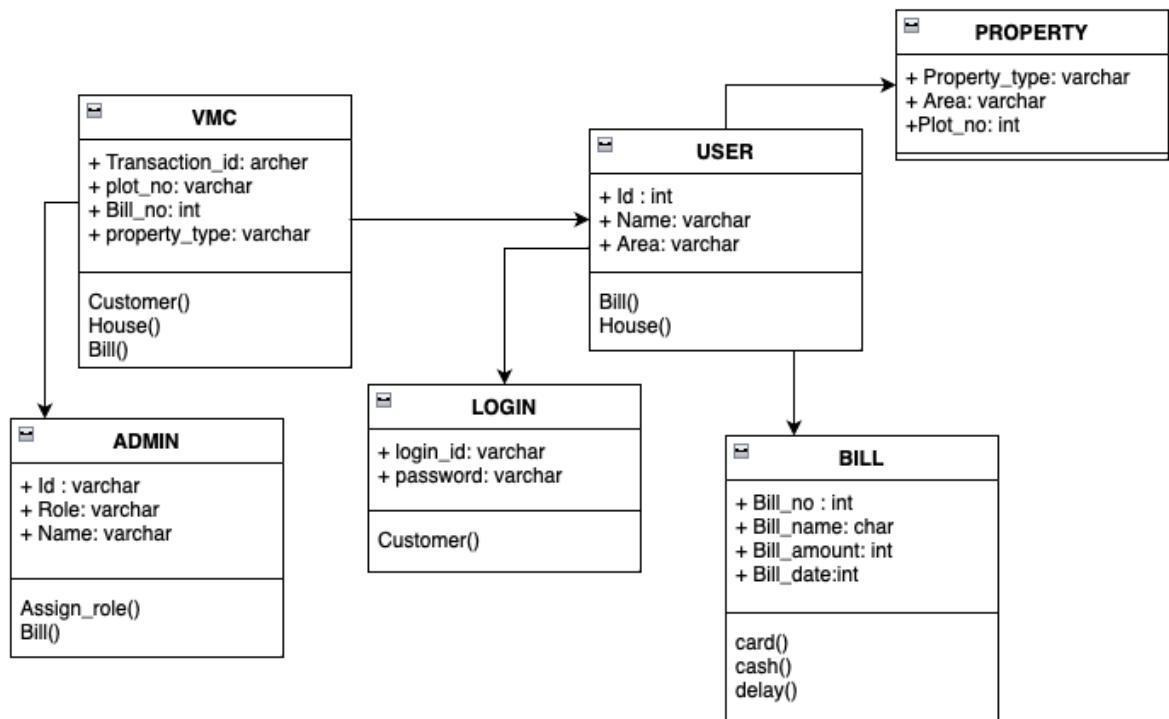


Figure 3.1: Class Diagram

3.2 Use Case diagram

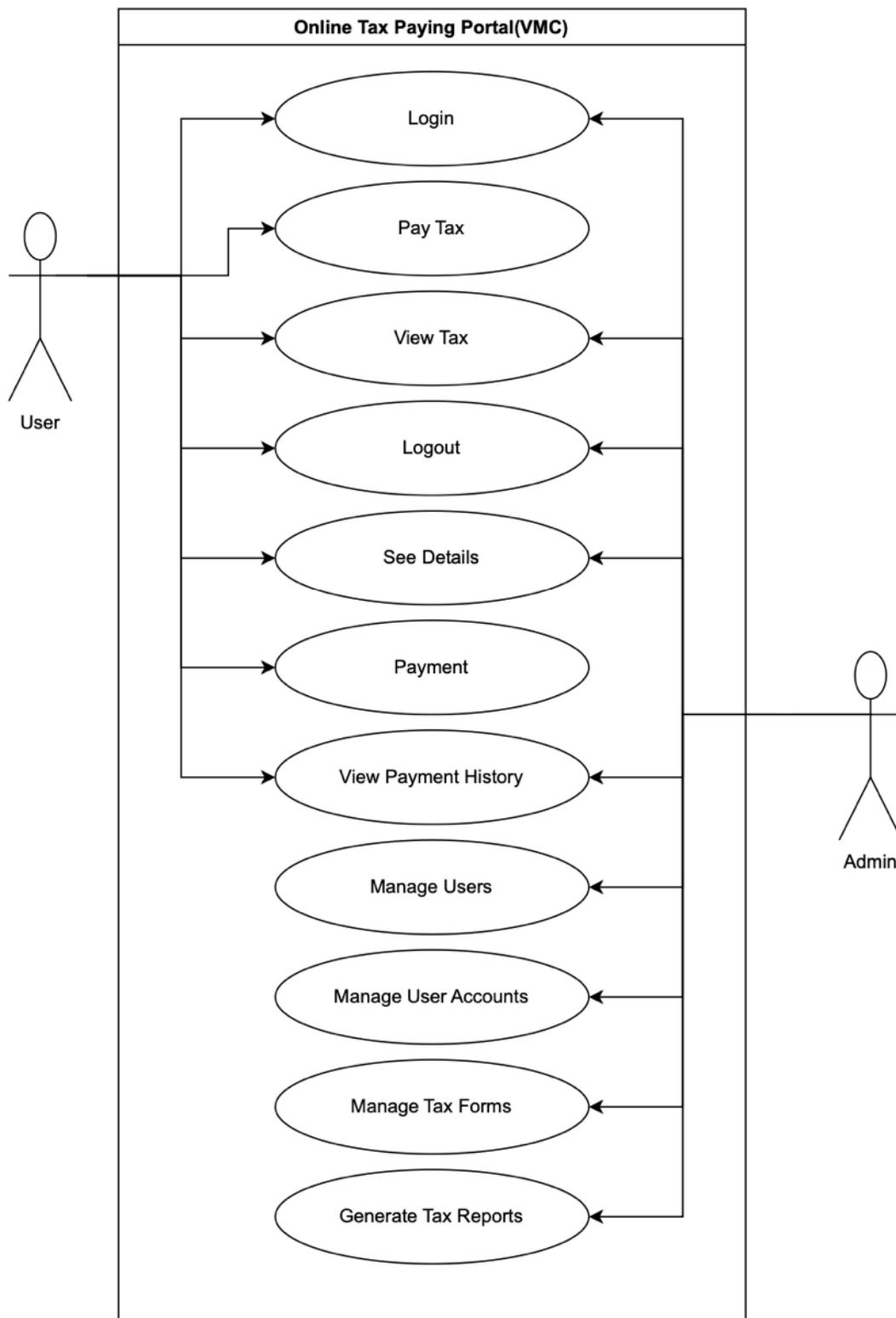


Figure 3.2: Use Case diagram

3.3 Entity Relationship Diagram

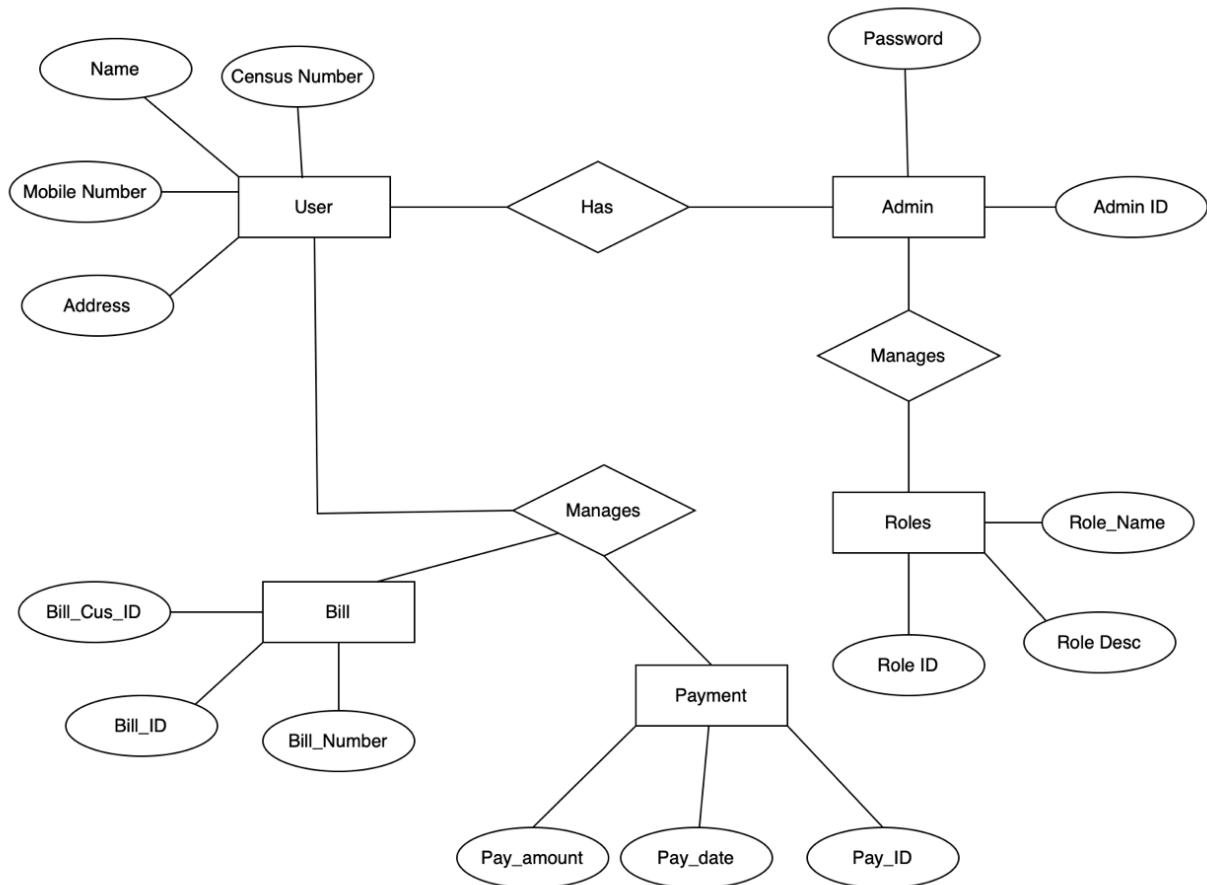


Figure 3.3: Entity Relationship Diagram

3.4 Admin- Flow diagram

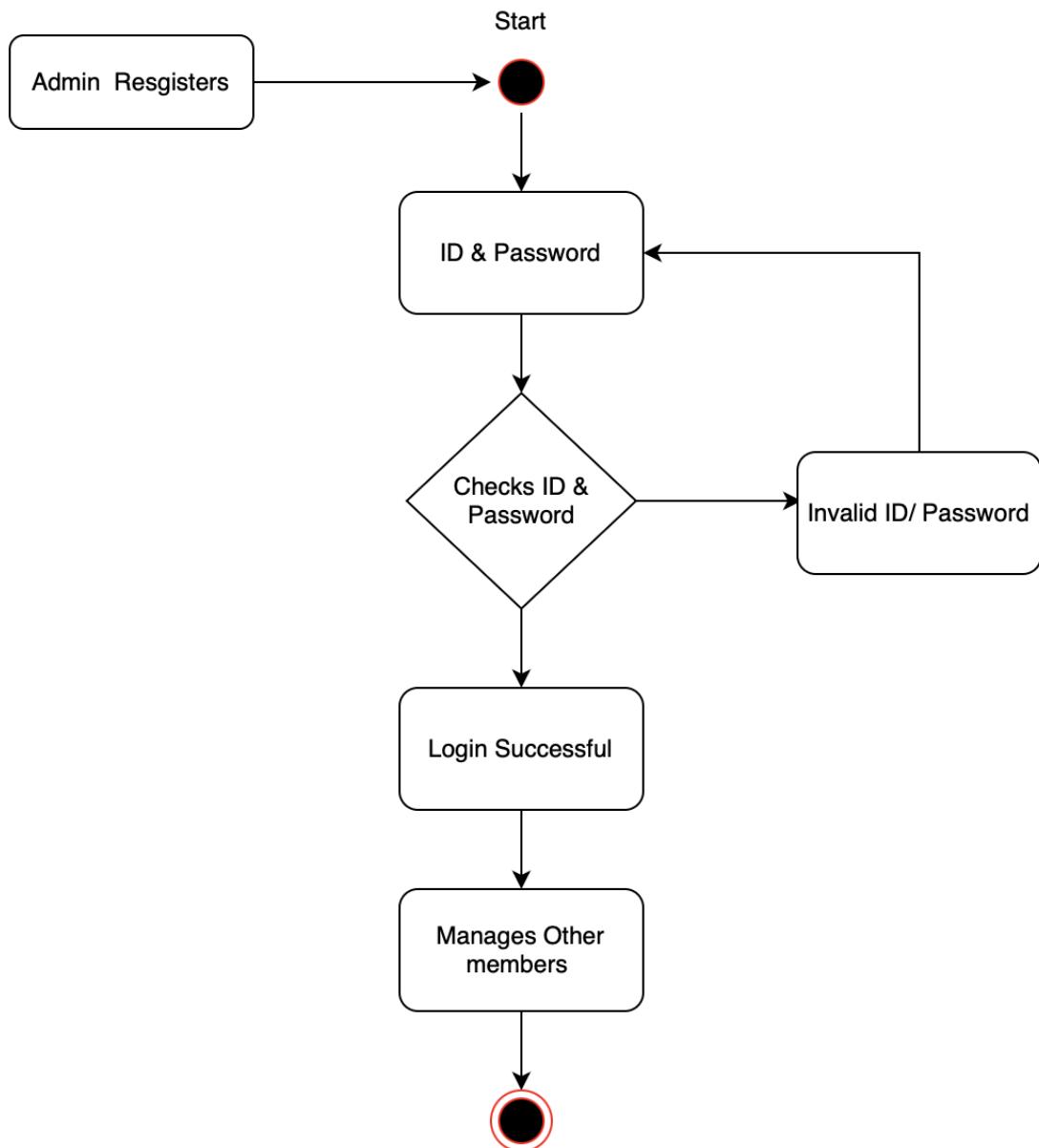


Figure 3.4: Admin- Flow diagram

3.5 User- Flow diagram

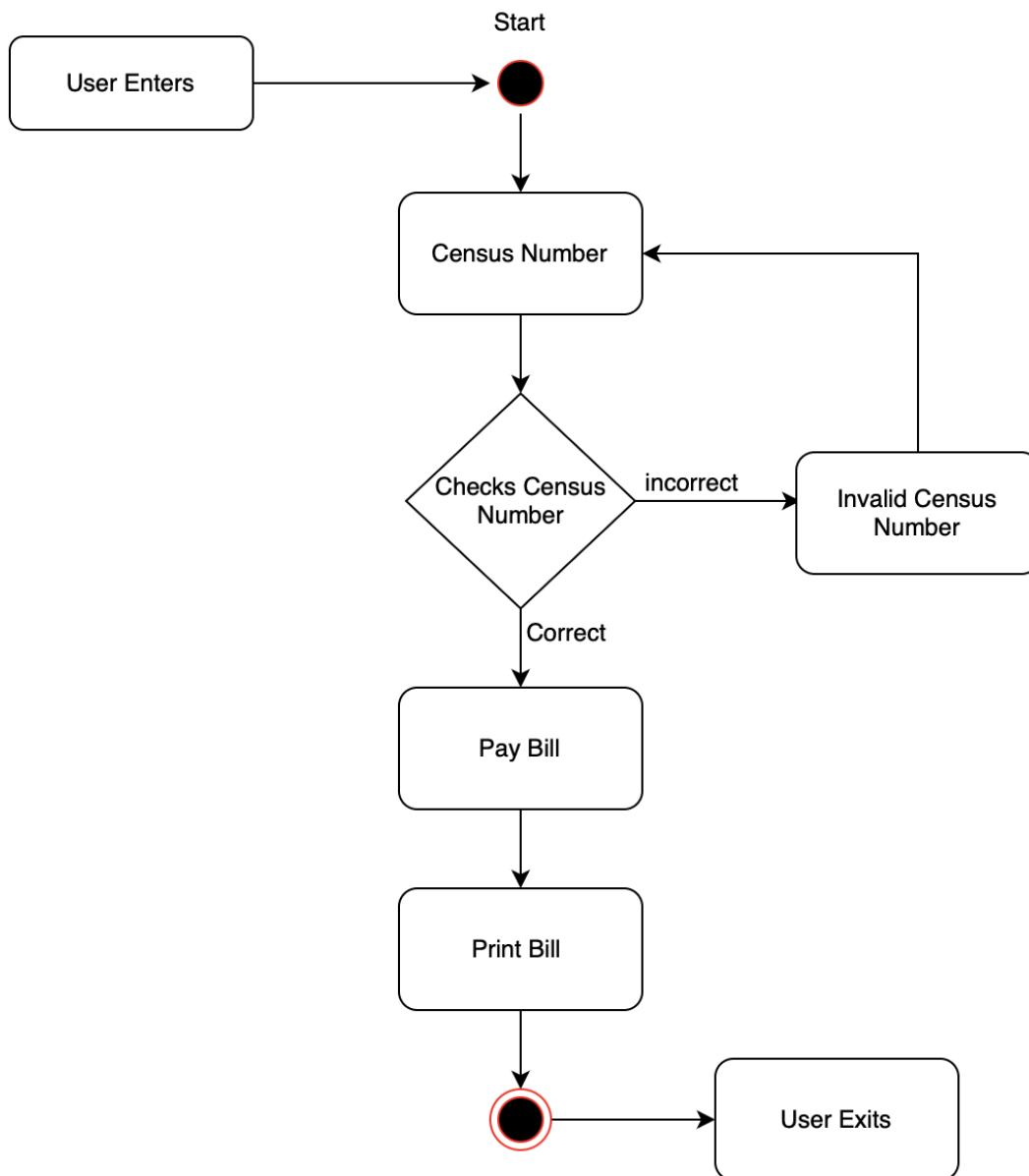


Figure 3.5: User- Flow diagram

3.6 Data Flow Diagram

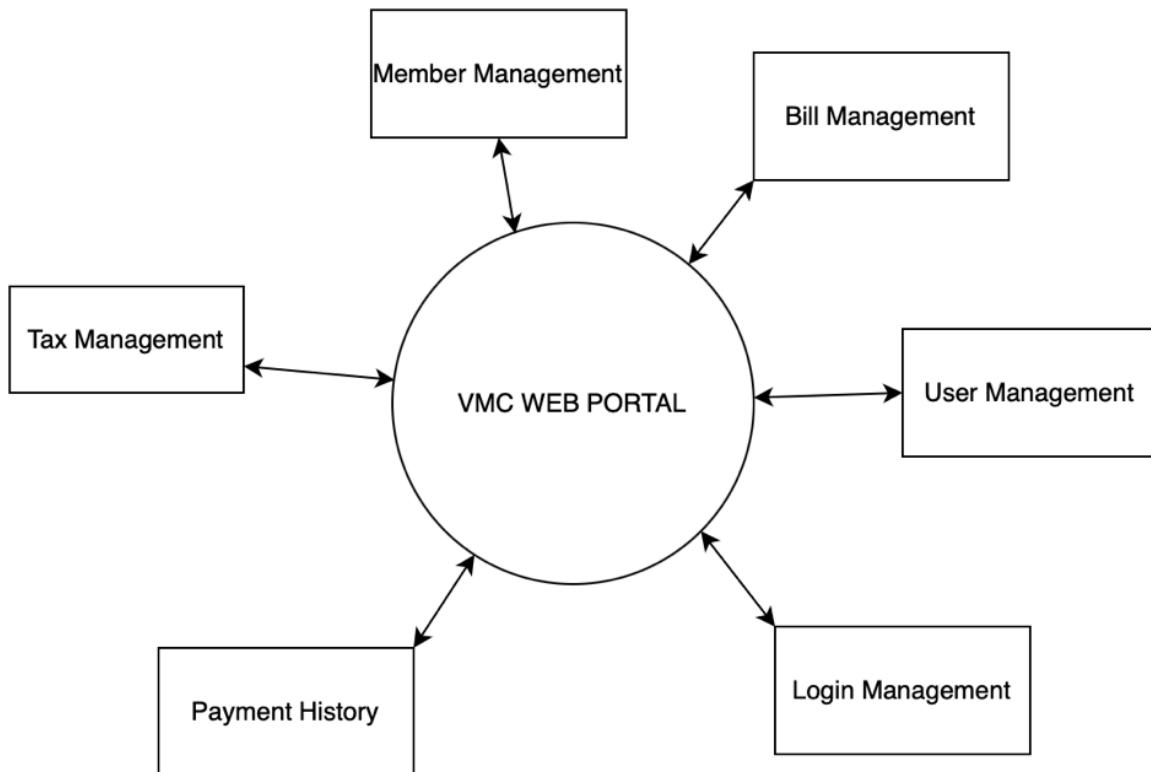


Figure 3.6: Data Flow Diagram

Chapter 4

Project Flow And Methodology

4.1 Methodology

- This section describes the process which follows different kind of methods which includes many types of research. which includes existing system how they work.
- Software:-
- The software methodology used in this project is spiral modal. In which from admin login to bill generation and management can be managed as well as user bill payment and information viewing is achieved.
 - Front-End: ASP.NET
 - Back-End: C# & ASP.NET
 - Database: ORACLE 11G
 - Tools: Visual Studio 2022/ Oracle SQL Developer
 - Reporting Tool: Crystal Reports

- ASP.NET
 - Microsoft created the popular web development framework known as ASP.NET. It is a key tool in the world of web development because it enables developers to create dynamic web applications and services.

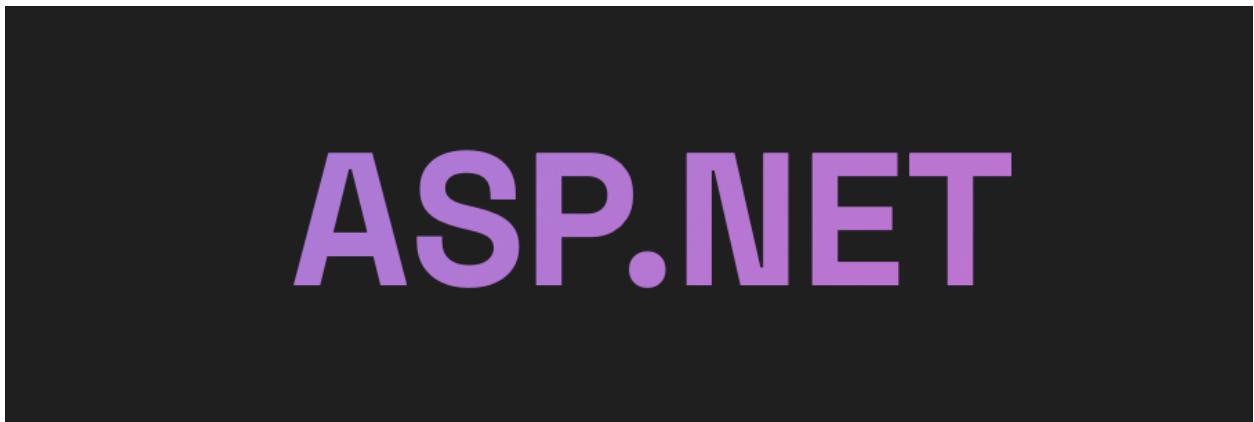


Figure 4.1: ASP.NET

- c#
 - Programming language C# is component- and object-oriented. C# makes it easy to create and use software components by providing language constructs that directly support these ideas.

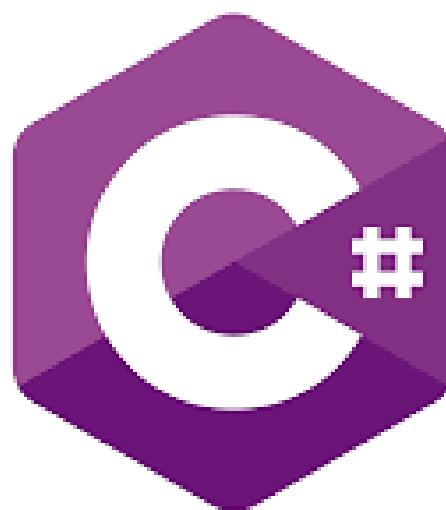


Figure 4.2: c#

- ORACLE 11G

- ORACLE is a Relational database management system (RDBMS), it was created by Oracle Corporation. It is a member of the Oracle Database family and is an important advancement in Oracle's database technology.



Figure 4.3: ORACLE 11G

- VISUAL STUDIO 2022

- Microsoft developed an Integrated Development environment (IDE) known as Visual Studio. It is a full-featured collection of development tools that offers a stable and effective environment for creating different kinds of software applications. Visual Studio is a well-liked option among developers for a variety of development tasks because it supports numerous programming languages, platforms, and application types.



Figure 4.4: VISUAL STUDIO

- Oracle SQL Developer
 - For interacting with Oracle databases, Oracle Corporation offers a free integrated development environment (IDE) called Oracle SQL Developer. It is a potent tool made to make database management, administration, and development tasks simpler. For developers, database administrators, and data analysts working with Oracle databases, SQL Developer provides a broad range of features and capabilities.



Figure 4.5: Oracle SQL Developer

- Crystal Reports
 - A business intelligence reporting tool called Crystal Reports was created by SAP (previously owned by Business Objects, which SAP acquired in 2007). It is frequently used to generate interactive reports with lots of features using different data sources.



Figure 4.6: Crystal Reports

4.2 Project Flow

4.2.1 Front-End Flow Diagram

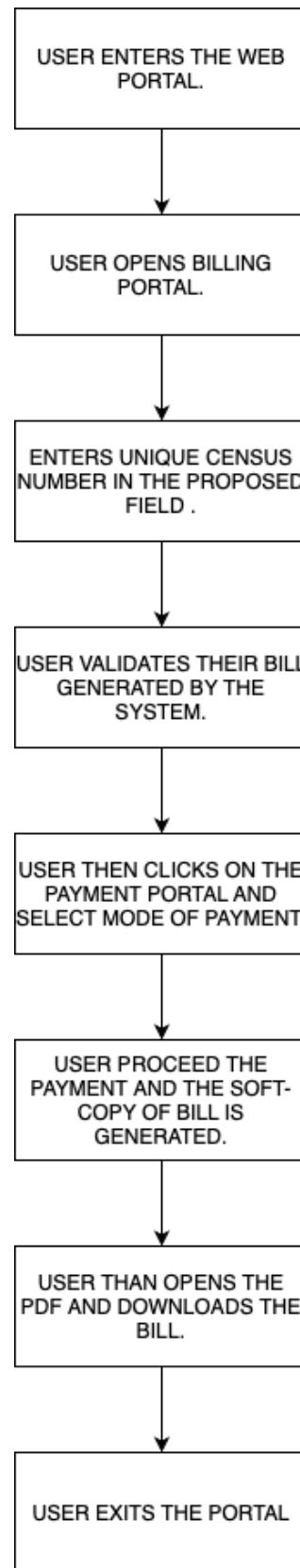


Figure 4.7: Front-End Flow Diagram

4.2.2 Back-End Flow Diagram

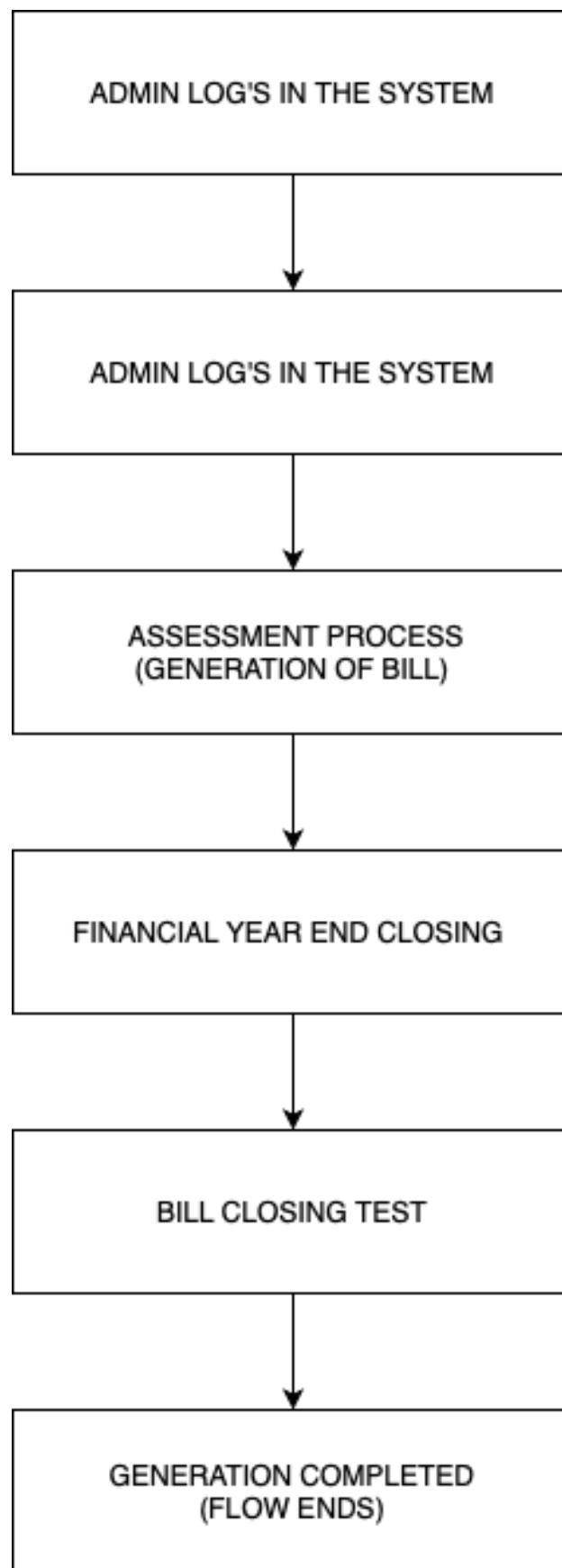


Figure 4.8: Back-End Flow Diagram

4.3 Framework

Web-page-Framework

A modular and efficient development framework for web applications is made up of ASP.NET and C#. The abundance of pre-built components, libraries, and templates that this framework offers helps to streamline and speed up the development process. These elements include user interface controls, server-side functionality, and libraries for a range of operations, including network communication and data access. ASP.NET enables developers to concentrate on the logic and functionality of their applications by giving them a strong foundation and decreasing the need for custom code. The flexibility of the framework is demonstrated by its support for various project templates, including MVC and Web API, which are tailored to different application types. With pre-configured settings and layouts, developers can jump-start their projects and save time and effort. Furthermore, ASP.NET's extensibility enables programmers to build unique controls and components that are specifically suited to a project's requirements while seamlessly integrating them with other Microsoft technologies. Because of the vibrant developer community that surrounds ASP.NET and C#, it is an appealing option for creating web applications because it provides access to a wealth of resources and support.

Chapter 5

Implementation And Results

5.1 Working Module Screenshots

5.1.1 Home

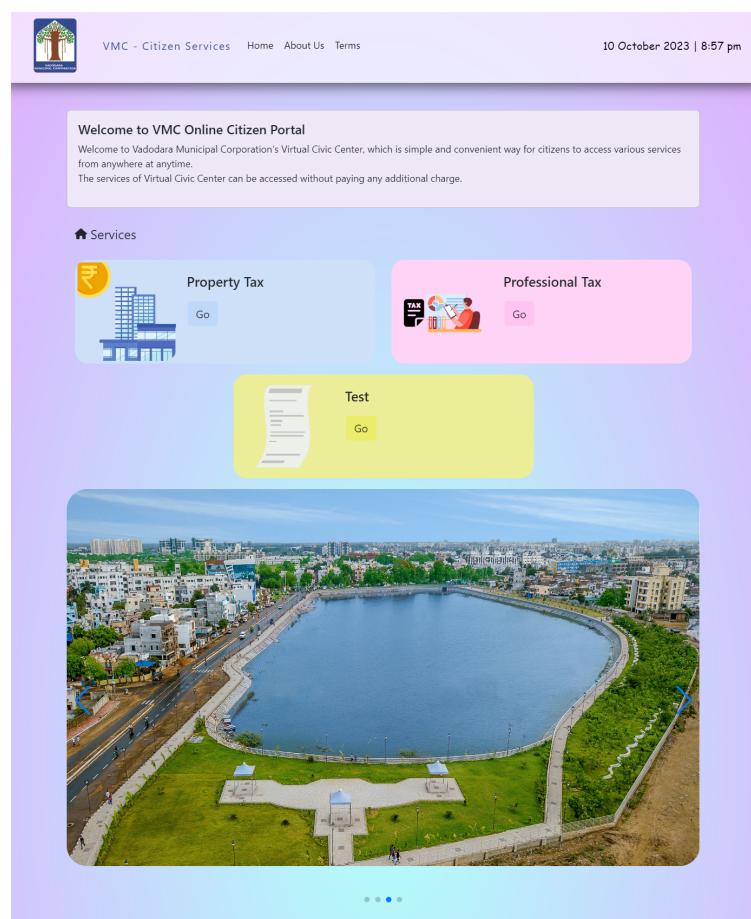
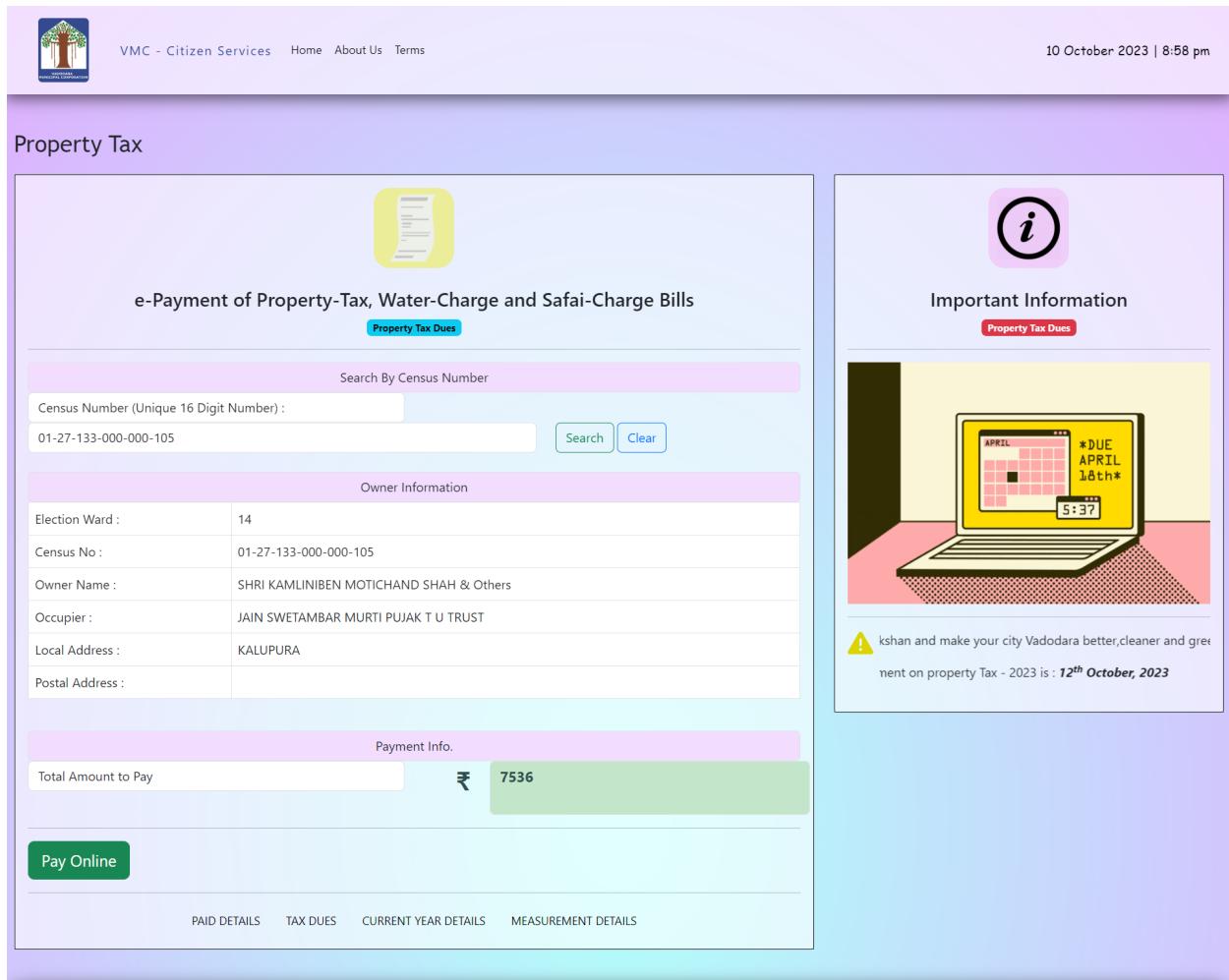


Figure 5.1: Home Page

5.1.2 User-Portal



The screenshot shows the VMC - Citizen Services portal interface. At the top, there is a logo of a tree and the text "VMC - Citizen Services". Below it are links for "Home", "About Us", and "Terms". The date and time "10 October 2023 | 8:58 pm" are also displayed.

The main title "Property Tax" is visible. On the left, there is a section titled "e-Payment of Property-Tax, Water-Charge and Safai-Charge Bills" with a "Property Tax Dues" button. It includes a search bar for "Census Number (Unique 16 Digit Number)" containing "01-27-133-000-000-105", and "Search" and "Clear" buttons. Below this is an "Owner Information" table:

Election Ward :	14
Census No :	01-27-133-000-000-105
Owner Name :	SHRI KAMLINIBEN MOTICHAND SHAH & Others
Occupier :	JAIN SWETAMBAR MURTI PUJAK T U TRUST
Local Address :	KALUPURA
Postal Address :	

Below the table is a "Payment Info." section with a "Total Amount to Pay" of ₹ 7536. A green "Pay Online" button is present. At the bottom, there are links for "PAID DETAILS", "TAX DUES", "CURRENT YEAR DETAILS", and "MEASUREMENT DETAILS".

On the right side, there is a "Important Information" section with a pink "i" icon. It features an illustration of a laptop screen displaying a calendar with the text "APRIL *DUE APRIL 18th*". Below the illustration, there is a message: "Kshan and make your city Vadodara better, cleaner and greener on property Tax - 2023 is : **12th October, 2023**".

Figure 5.2: User-Bill Assessment Portal

5.1.3 User-Current Year Details

The screenshot displays the Vadodara Municipal Corporation (VMC) Citizen Services portal. At the top, there is a logo and navigation links for Home, About Us, and Terms. The date and time are shown as 10 October 2023 | 9:00 pm.

CURRENT TAX DETAILS

Owner Information

Census No :	01-27-133-000-000-105
Owner Name :	SHRI KAMLINIBEN MOTICHAND SHAH & Others
Occupier :	JAIN SWETAMBAR MURTI PUIAK T U TRUST
Local Address :	KALUPURA
Postal Address :	

CURRENT TAX DETAILS

Details	Tax
Property Tax	600
Education Cess	120
Fire Tax	0
Water Tax	3900
Conservancy Tax	150
Safai Charge	2500
Environment improvement charge	0
Total Tax	7270

Important Information

Property Tax Due

A graphic shows a laptop displaying a calendar with the text "APRIL #DUE APRIL 30th#". Below it, a yellow warning icon says "Take a part in Swachhta Sarvekshan : Last deadline of Advance Payment on j".

Officers Login

CONTACT

Vadodara Municipal Corporation, Khanderao Market Building, Vadodara-390029

Map

A map of Vadodara city showing various landmarks like EME Temple, Laxmi Vilas Palace, etc., with roads and boundaries labeled.

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Figure 5.3: User-Current Year Details

5.1.4 User-Paid Details

The screenshot shows a user interface for managing tax payments. At the top, there is a logo of a tree and the text "VMC - Citizen Services". Below the logo, there are links for "Home", "About Us", and "Terms". On the right side, the date and time are displayed as "10 October 2023 | 8:59 pm".

TAX PAID DETAILS

PAST PAID RECEIPTS

PAID DETAILS TAX DUES CURRENT YEAR DETAILS MEASUREMENT DETAILS

Owner Information

Census No :	01-27-133-000-000-105
Owner Name :	SHRI KAMLINIBEN MOTICHAND SHAH & Others
Occupier :	JAIN SWETAMBAR MURTI PUJAK T U TRUST
Local Address :	KALUPURA
Postal Address :	

RECEIPT_DATE **RECEIPT_NO** **AMOUNT** **PAYMENTMODE** **CHEQUENO** **CHEQUE_DATE**

RECEIPT_DATE	RECEIPT_NO	AMOUNT	PAYMENTMODE	CHEQUENO	CHEQUE_DATE
28-FEB-2023	14530072	20766	CTS CHQ/DD	000023	28-FEB-2023
15-OCT-2019	02540012	7421	CTS CHQ/DD	098600	15-OCT-2019
10-JAN-2019	01570030	7690	CTS CHQ/DD	126667	09-JAN-2019
24-AUG-2017	02580039	5135	CTS CHQ/DD	043403	23-AUG-2017
29-JUL-2016	02190038	5010	CTS CHQ/DD	016364	29-JUL-2016
11-JUL-2015	02070020	5010	CTS CHQ/DD	697666	11-JUL-2015
13-AUG-2014	02160312	5010	CTS CHQ/DD	632151	13-AUG-2014
30-JUL-2013	02070253	5010	CTS CHQ/DD	542291	30-JUL-2013
28-AUG-2012	02190021	3620	CTS CHQ/DD	131598	28-AUG-2012
20-DEC-2011	02070039	3571	CTS CHQ/DD	549202	18-DEC-2011
20-JUL-2010	02080344	3847	CTS CHQ/DD	823933	20-JUL-2010
06-OCT-2009	02010027	7300	CTS CHQ/DD	490098	13-AUG-2009
17-MAR-2008	00821031	1260	CASH	0	
27-JUN-2007	00820321	366	CASH	0	
27-JUN-2007	00820306	540	CASH	0	
27-JUN-2007	00820305	360	CASH	0	

<<-- PAYMENT PAGE -->>

Important Information

Property Tax Dues

Take a part in Swachhta Sarvekshan and r
Last deadline of Advance Payment on propre

Figure 5.4: User-Paid Details

5.1.5 User-Measurement Details

The screenshot shows a web application interface for 'VMC - Citizen Services'. At the top left is the VMC logo. The top right shows the date and time: '10 October 2023 | 9:00 pm'. The main content area has a light purple header with the title 'MEASUREMENT DETAILS' and a blue 'MEASUREMENTS' button. Below this is a navigation bar with tabs: 'PAID DETAILS', 'TAX DUES', 'CURRENT YEAR DETAILS', and 'MEASUREMENT DETAILS'. The 'MEASUREMENT DETAILS' tab is active. A large teal box contains 'Owner Information' with fields for Census No., Owner Name, Occupier, Local Address, and Postal Address. Below this is a table with columns: FLOORNO, ROOMNO, AREA, CONSTRUCTIONYEAR, FACTORF1, FACTORF2, FACTORF3, FACTORF4, GROSSPTAX, and DISCO. The table data is as follows:

FLOORNO	ROOMNO	AREA	CONSTRUCTIONYEAR	FACTORF1	FACTORF2	FACTORF3	FACTORF4	GROSSPTAX	DISCO
5	1	85.02	1928	1.6	0.5	0	1	0	0
6	1	77.76	1928	1.6	0.5	0	1	0	0
7	1	35.6	1928	1.6	0.5	0	1	0	0

A small navigation bar at the bottom of the teal box shows arrows for 'Go Back' and 'Go Forward'. To the right of the teal box is a white sidebar with a pink header 'Important Information' and a blue 'Property Tax Due' section. It features a cartoon illustration of a laptop with a speech bubble saying 'DO YOUR TAXES!!!' and a calendar showing 'APRIL *DUE APRIL 16th*'. Below this is a warning message: '⚠ Take part in Swachhta Sarvekshan and Last deadline of Advance Payment on prop'.

Figure 5.5: User-Measurement Details

5.1.6 Admin Login

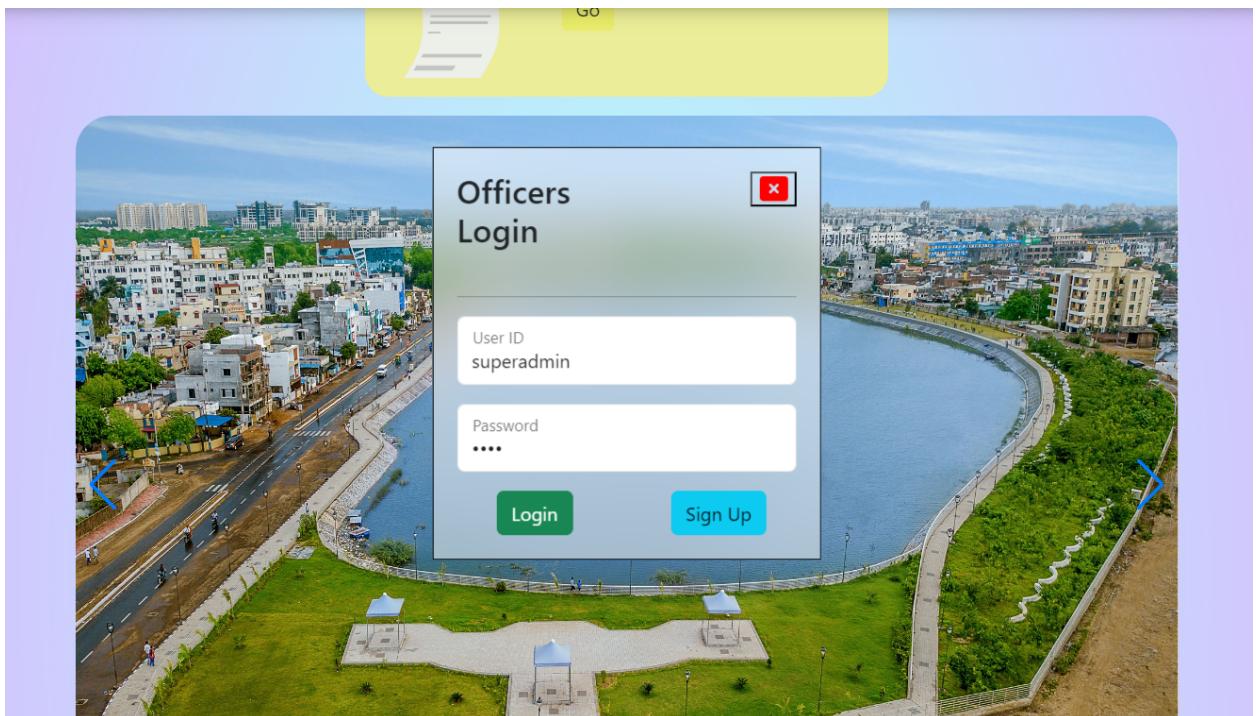


Figure 5.6: Admin Login

5.1.7 Admin Portal

VMC - Property Tax Portal | Home | About Us | Terms | 2 October 2023 | 11:17 am | Logout | Hello, ADMIN :ABC

Assign Role

Add Member

View Members

ASSESSMENT ALL CENSUS

Parameters Control
Edit factors used in calculations.

Aakarni Entry Portal
Insert new property details into Database.

<< Back to Home

YYYY

YYYY

USEFUL LINKS

- ADMINISTRATOR PANEL

Vadodara Municipal Corporation, Khanderao Market Building, Vadodara-390209

Get connected with us on social networks:

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Figure 5.7: Admin Portal

5.1.8 Admin- Bill Generation Portal

The screenshot shows the Admin-Bill Generation Portal interface. At the top, there is a logo for VMC - Citizen Services and navigation links for Home, About Us, and Terms. The date and time are shown as 10 October 2023 | 9:01 pm, and there is a Logout link.

Election ward wise Assesment

Select Ward :

Census No. wise Assesment

Select Ward :

Select financial year :
Ex : curr yr is 2023 then fy : 22-23

Important Information

i

Make sure to select correct ward and Year.
Before proceeding check system time.
Load All Factors to factors table for new Financial year's calculations.

Figure 5.8: Admin- Ward Wise Assessment

The screenshot shows the Admin-Bill Generation Portal interface. At the top, there is a logo for VMC - Citizen Services and navigation links for Home, About Us, and Terms. The date and time are shown as 10 October 2023 | 9:02 pm, and there is a Logout link.

Election ward wise Bill Closing - Dhruv & Vishal - 10th October, 2023

Select Ward :

Census No. wise Bill Closing

Select Ward :

Select financial year :
Ex : curr yr is 2023 then fy : 22-23

Important Information

i

Make sure to select correct ward and Year.
Before proceeding check system time.
Load All Factors to factors table for new Financial year's calculations.

Figure 5.9: Admin- Ward Wise Bill Closing Portal

The screenshot shows the Admin-Bill Generation Portal interface. At the top, there is a logo for VMC - Citizen Services and navigation links for Home, About Us, and Terms. The date and time are shown as 10 October 2023 | 9:02 pm, and there is a Logout link.

Election ward wise Closing Year End - Dhruv & Vishal - 10th October, 2023

Select Ward :

Census No. wise Closing Year End

Select Ward :

Select financial year :
Ex : curr yr is 2023 then fy : 22-23

Important Information

i

Make sure to select correct ward and Year.
Before proceeding check system time.
Load All Factors to factors table for new Financial year's calculations.

Figure 5.10: Admin- Ward Wise Bill Closing Year End Portal

5.1.9 Admin- Edit Factor Portal

The screenshot shows the 'Factors Table Edit' page of the VMC - Property Tax Portal. At the top, there is a logo of a tree and the text 'VMC - Property Tax Portal'. To the right, it shows the date '2 October 2023 | 11:18 am', a 'Logout' link, and a greeting 'Hello, ADMIN : Dhruv Varia'. Below the header, there is a decorative graphic of a person's head with various icons like gears, charts, and a hand. The main content area has a title 'Factors Table Edit' and a sub-section 'Select Table :'. It includes a dropdown menu set to 'SELECT', three buttons ('Show', 'Hide', 'Modify'), and a 'Reset' button. At the bottom of the page, there is a link '< < Back to Admin Panel'.

Factors Table Edit

Select Table :

SELECT

Show Hide Modify

Reset

< < Back to Admin Panel

YYYY

YYYY

USEFUL LINKS

- ADMINISTRATOR PANEL

CONTACT

Vadodara Municipal Corporation, Khanderao Market Building, Vadodara-390209

demoooooooooooooooooooooooo

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f t G @ m o

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Figure 5.11: Admin- Bill Generation Portal

5.1.10 Admin- Aakarni

VMC - Property Tax Portal Home About Us Terms 2 October 2023 | 11:19 am Logout Hello, ADMIN : Dhruv Varia

Akarni | Enter New Data

Occupier's Information :

Occupier's Name :	<input type="text"/>
Census Number :	<input type="text"/>
Number of Floor :	<input type="text"/>
Area (In Sq.mtr) :	<input type="text"/>

PREVIOUS NEXT

YYYY

VADODARA Smart City

YYYY

USEFUL LINKS

- ADMINISTRATOR PANEL

CONTACT

Vadodara Municipal Corporation, Khanderao Market Building, Vadodara-390209

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Figure 5.12: Admin- Aakarni Page 1

VMC - Property Tax Portal Home About Us Terms 2 October 2023 | 11:19 am Logout Hello, ADMIN : Dhruv Varia

Akarni | Enter New Data

Select Location Factor :

LOCATION ▾ WARD ▾

PREVIOUS NEXT

YYYY

VADODARA Smart City

YYYY

USEFUL LINKS

- ADMINISTRATOR PANEL

CONTACT

Vadodara Municipal Corporation, Khanderao Market Building, Vadodara-390209

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Figure 5.13: Admin- Aakarni Page 2

VMC - Property Tax Portal Home About Us Terms 2 October 2023 | 11:19 am Logout Hello, ADMIN : Dhruv Varia

Akarni | Enter New Data

Property Information : (Page : 1/2) :

High Rise Property
 Low Rise Property

Building height exceeds 18mtr shall be considered as High Rise Building.

Construction Date :

dd-mm-yyyy

YYYY YYYY USEFUL LINKS CONTACT

.....
• Vadodara Municipal Corporation, Khanderao Market Building, Vadodara-390209

demoooooooooooooooooooooooo

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Figure 5.14: Admin- Aakarni Page 3

The screenshot shows the 'Akarni | Enter New Data' page of the VMC - Property Tax Portal. At the top, there is a navigation bar with the logo 'VMC - Property Tax Portal', links for 'Home', 'About Us', 'Terms', the date '2 October 2023 | 11:19 am', 'Logout', and a greeting 'Hello, ADMIN : Dhruv Varia'. Below the navigation is a diagram illustrating data flow from a database to a computer monitor.

Property Information : (Page : 2/2) :

Form fields include:

- Property Type :
- Water Pipe - Size :
- Occupancy :
 - OWNER
 - TENENT

Buttons at the bottom: **PREVIOUS** (green), **Preview** (blue).

YYYY

YYYY

USEFUL LINKS

- [ADMINISTRATOR PANEL](#)

CONTACT

Vadodara Municipal Corporation, Khanderao Market Building, Vadodara-390209

Get connected with us on social networks: [f](#) [t](#) [G](#) [o](#) [m](#) [n](#)

demooooooooooooooooooooooooo

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Figure 5.15: Admin- Aakarni Page 4

5.1.11 Responsive Design(1)

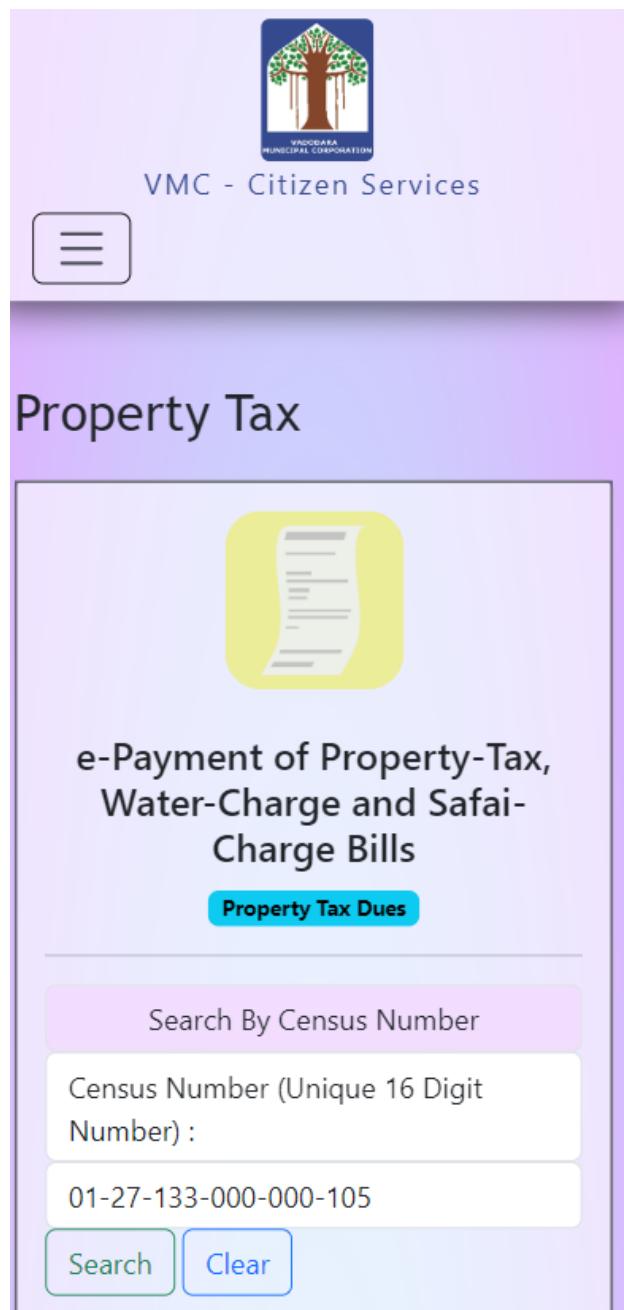


Figure 5.16: Responsive Design(1)

5.1.12 Responsive Design(2)

Owner Information	
Election Ward :	14
Census No :	01-27-133-000-000-105
Owner Name :	SHRI KAMLINIBEN MOTICHAND SHAH & Others
Occupier :	JAIN SWETAMBAR MURTI PUJAK T U TRUST
Local Address :	KALUPURA
Postal Address :	

Payment Info.	
Total Amount to Pay	₹ 7536

[Pay Online](#)

[PAID DETAILS](#) [TAX DUES](#)

[CURRENT YEAR DETAILS](#)

[MEASUREMENT DETAILS](#)

Figure 5.17: Responsive Design(2)

5.1.13 Sample Bill PDF

 વડોદરા મહાનગરપાલિકા મિલકાંતો ઓળખ નંબર 01-00001-105	સેન્સસ નંબર 01-27-133-000-000-105	બીલ નંબર 114030947	બીલની મુદત 2022-23	ઈલે. વોર્ડ 14	
કર/ચાર્જ ભરવાને પ્રથમ પાત્ર થણારનું નામ : SHRI KAMLINIBEN MOTICHAND SHAH And Others					
સરનામું : KALUPURA					
સૌંગવઠો કરનારનું નામ : JAIN SWETAMBAR MURTI PUJAK T U TRUST					
લાદા આકારકી પદ્ધતિ	ક્રમાંક	ક્રેટશ્વર આધારીત પદ્ધતિ	કુલ રકમ		
વિગત	રકમ (અ)	વિગત	પાછળી બાકી ચાલુ મંગણું (અ)	(અ+અ+અ)	
મહાનગરપાલિકા / ગ્રામ પદ્ધતા	સામાન્ય કર/મિલકાંત વેરા	0 સામાન્ય કર	900	600	1500
	નોટીસ ફી	0 નોટીસ ફી	0	3	3
	વોરેટ ફી/જાહેરાત ખર્ચ	0 વોરેટ ફી/જાહેરાત ખર્ચ	0	0	0
	વ્યાજ	0 વ્યાજ (સામાન્ય કર)	118	22	140
	શિક્ષણ ઉપકર	0 શિક્ષણ ઉપકર (સરચાર્જ)	240	120	360
	શિક્ષણ ઉપકર ઈંડ	0 શિક્ષણ ઉપકર (સરચાર્જ) ઈંડ	60	30	90
	ફાયર ટેક્સ	0 ફાયર ટેક્સ	0	0	0
	ફાયર ટેક્સ નોટીસ ફી	0 ફાયર ટેક્સ નોટીસ ફી	0	0	0
	પાણી કર/પાણી વેરો	0 પાણી ચાર્જ	0	0	0
		પાણી ચાર્જનું વ્યાજ	0	0	0
	પાણી કર	5850	3900	9750	
	પાણી કર નોટીસ ફી	0	20	20	
	પાણી કરનું વ્યાજ	766	144	910	
કંકરવની ટેક્સ/લાઇટ વેરો	0 કંકરવની અને સુચરેઝ ટેક્સ	300	150	450	
	કંકરવની અને સુચરેઝ ટેક્સ નોટીસ ફી	0	1	1	1
સ્પે.સેલેટરી સેસ/સકાઈ વેરો	કંકરવની અને સુચરેઝ ટેક્સનું વ્યાજ	36	6	42	
	સફાઈ ચાર્જ	5000	2500	7500	
	એન્ટ્યુયરમેન્ટ ઇમ્પ્રુવલેન્સ ચાર્જ	0	0	0	0
કુલ	0	કુલ	13270	7496	20766
રકમ શરૂઆતીમાં : Rupees Twenty Thousand Seven Hundred Sixty Six Only					
Full Payment	Bank Transaction ID : 0				
	CTS-Chq/DD Cheque No:000023, Dt. 28-Feb-23 of HDFC BANK				
પાવતી નંબર : 14530072	તારીખ 28-Feb-2023				નાણા લેનારની સહી

Note : This is computer generated receipt, hence signature is not necessary.
 Subject to actual payment received by the Vadodara Municipal Corporation.

Figure 5.18: Sample Bill PDF

Chapter 6

Test Cases

6.1 Residential (FLAT)

03-15-234-307-241-020

Residencial – Flat :

વડોદરા મહાનગરપાલિકા		ADVANCE RECEIPT			
વિકાસ નંબર	નિર્માણ નંબર	સેન્ટર નંબર	વિત્તન નંબર	વીચાન મુદ્રા	ઇંગ્લી વોડી
03-00001-020	03-15-234-307-241-020	403030188	2022-23	16	
કર/શરીર ભરાયેલ પદમ પાત્ર થાણાનું નામ : TRUPTI MANISH MEHTA & MANISH H MEHTA					
મસ્તાન્ગ : TOWER-C/FLAT NO-101 ADITYA ORBIT,BESIDE ADITYA HEIGHTS, NARAYAN VIDHYALAY ROAD					
લોગોનું : કલાંદારનું નામ : WAGHODIA-DABHOI RING ROAD					
વિગત	લાદ આધારી પથી	ક્રેડિટ આધારી પથી	પાસારી વાડી	આદ માટેણું (ટ)	કર વાધું
વિગત	રકમ (ટ)	વિગત	પાસારી વાડી	આદ માટેણું (ટ)	(ક+એ+બ)
સમાપ્ત ૫૨/બિલનં તેરા	૦	સમાપ્ત ૫૨	૦	910	910
નોટીસ ફી	૦	નોટીસ ફી	૦	૦	૦
ઓરટ ફી/જાહેરાત અર્થ	૦	ઓરટ ફી/જાહેરાત અર્થ	૦	૦	૦
દાયક	૦	દાયક (સંપત્તિ ૫૨)	૦	૦	૦
નિષ્ઠા ઉપક	૦	નિષ્ઠા ઉપક (મસ્તાન્ગ)	૦	101	101
નિષ્ઠા ઉપક કંડ	૦	નિષ્ઠા ઉપક (મસ્તાન્ગ) કંડ	૦	૦	૦
કારક ટૈક	૦	કારક ટૈક	૦	૦	૦
કારક ટૈક નોટીસ ફી	૦	કારક ટૈક નોટીસ ફી	૦	૦	૦
પાર્ટી રક/પાર્ટી એરો	૦	પાર્ટી રક	૦	૦	૦
	૦	પાર્ટી રકનું વાયા	૦	૦	૦
	૦	પાર્ટી રક	૧૦૮૦		1080
	૦	પાર્ટી રક નોટીસ ફી	૦	૦	૦
	૦	પાર્ટી રક વાયા	૦	૦	૦
કાંઈવાળી ટેક/લાઇટ તેરો	૦	કાંઈવાળી અને ખૂબીએ ટેક	૦	228	228
	૦	કાંઈવાળી અને ખૂબીએ ટેક નોટીસ ફી	૦	૦	૦
	૦	કાંઈવાળી અને ખૂબીએ ટેકનું વાયા	૦	૦	૦
સ્પેનેટરી સેસ/સાક તેરો	૦	સાક વાય	૦	500	500
	૦	એન્ફારેન્ટ માટ્યુરલ વાર્ફ	૦	૦	૦
કર	૦	કર	૦	2819	2819
રકમ રૂપાણી : Rupees Two Thousand Eight Hundred Nineteen Only					
Advance Payment		Bank Transaction ID : ૦			
GTS-Chq/DD Cheque No.135581, Dt. 15-Jul-22 of STATE BANK OF INDIA					
પાત્રની નંબર : 15530098	તારીખ : 16-Jul-2022				
આપુણ લેનાણની સહી					

censusward = 3, censusblock = 15, censusno = 234, censussubno = 307, censusbyno = 241, censusoccupier = 20 floor no = 5, room no = 1, area = 57.46,

----R tax details are = locfactor = 1.1 ,agefactor = 1, building type factor = 1, rate of tax = 16, base property tax = 1011, Discount Given = 0. Final After applying discount baseTax = 1011.296

_____>>> OTHER TAXES : grossptax = 1011.296, totalNetPtax = 1011.296, conservancy charge = 252.824, educes
charge resi = 101.1296, safai = 500, enivroment = 30, fire charge = 0, watertax = 1200

Discount : 10%
Basetax = 1011.296 , $1011.296 * 0.10 = 101.1296$, $1011.296 - 101.1296 = 910.1664$
Water = 1200, $1200 * 0.10 = 120$, $1200 - 120 = 1080$
Conservancy = 252.824, $252.824 * 0.10 = 25.2824$, $252.824 - 25.2824 = 227.5416$

Figure 6.1: Residential (FLAT)

6.2 Residential(Lakshmi Villas Palace)

Resi – Laxmi Vilas Palace

વડોદરા મહાનગરપાલિકા		ADVANCE RECEIPT			
મિલકતનો શેરીય નંબર	સેન્સસ નંબર	વીલ નંબર	વીલની મુદત	ઇટે. વોર્ડ	
05-00001-102	05-03-128-000-102	705008643	2022-23	13	
કર/ચાઈ ભરવાળે પ્રથમ પાત્ર થણારણ નામ : SHRIMANT MAHARAJA SAHEB					
સરનામું : THE LAXMI VILASH PALACE RAJMHEL ROAD VADODARA					
લોગોવાળી કરનારણ નામ : LAXMIVILAS PALACE O/I					
ભાડા આકારાની પથ્યતિ	કોન્ફરન્સ આપારીની પથ્યતિ	કોન્ફરન્સ આપારીની પથ્યતિ			
વિગત	રકમ (₹)	વિગત	આકારી ભાડી	ચાલુ માંગવું (₹)	
સામાન્ય કર/મિલકત વેરો	0	સામાન્ય કર	0	101604	
નોટીસ ફી	0	નોટીસ ફી	0	0	
વોર્ડ ફી/જાહેરત ખર્ચ	0	વોર્ડ ફી/જાહેરત ખર્ચ	0	0	
વ્યાજ	0	વ્યાજ (સામાન્ય કર)	0	0	
નિષ્પાણ ઉપકર	0	નિષ્પાણ ઉપકર (સરવાઈ)	0	16934	
નિષ્પાણ ઉપકર દંડ	0	નિષ્પાણ ઉપકર (સરવાઈ) દંડ	0	16934	
શ્વયર ટેક્સ	0	શ્વયર ટેક્સ	0	0	
શ્વયર ટેક્સ નોટીસ ફી	0	શ્વયર ટેક્સ નોટીસ ફી	0	0	
પાણી કર/પાણી વેરો	0	પાણી ચાઈ	0	0	
પાણી ચાઈ વ્યાજ	0	પાણી ચાઈ વ્યાજ	0	0	
પાણી કર	0	પાણી કર	30481	30481	
પાણી કર નોટીસ ફી	0	પાણી કર નોટીસ ફી	0	0	
પાણી કરનું વ્યાજ	0	પાણી કરનું વ્યાજ	0	0	
કન્નરલની ટેક્સ/લાઇટ વેરો	0	કન્નરલની અને સુધરેણ ટેક્સ	0	25401	
		કન્નરલની અને સુધરેણ ટેક્સ નોટીસ ફી	0	0	
		કન્નરલની અને સુધરેણ ટેક્સ વ્યાજ	0	0	
સ્પેસેન્ટરી સેસ/સફાઈ વેરો	0	સફાઈ વ્યાજ	750	750	
		એન્ટલાયરેનેન્ડ ઇન્ડ્યુન્મેન્ટ ચાંચ	0	0	
કુલ	0	કુલ	0	175170	175170

રૂપાંશુમાં : Rupees One Lakh Seventy Five Thousand One Hundred Seventy Only

censusward = 5,censusblock = 3, censusno = 128, censussubno = 0, censusbyno = 0, censusoccupier = 102 floor no = 2, room no = 1, area =2931.73,

----R tax details are = locfactor = 1.6 ,agefactor = 0.5, bulding type factor = *1.6, occu = *1, total = *1.28, rate of tax = 16, gross floor ptax = 60041.8304, net floor ptax = 60041.8304, gross property tax total = 60041.8304, Discount Given = 0, netptax total = 60041.8304

censusward = 5,censusblock = 3, censusno = 128, censussubno = 0, censusbyno = 0, censusoccupier = 102 floor no = 2, room no = 2, area =55.89,

----R tax details are = locfactor = 1.6 ,agefactor = 0.5, bulding type factor = *1.6, occu = *1, total = *1.28, rate of tax = 16, gross floor ptax = 1144.6272, net floor ptax = 1144.6272, gross property tax total = 61186.4576, Discount Given = 0, netptax total = 61186.4576

censusward = 5,censusblock = 3, censusno = 128, censussubno = 0, censusbyno = 0, censusoccupier = 102 floor no = 5, room no = 1, area =2524.72,

----R tax details are = locfactor = 1.6 ,agefactor = 0.5, bulding type factor = *1.6, occu = *1, total = *1.28, rate of tax = 16, gross floor ptax = 51706.2656, net floor ptax = 51706.2656, gross property tax total = 112892.7232, Discount Given = 0, netptax total = 112892.7232

----Total BaseTax Heads = gross property tax = 112892.7232, Discount Given = 0, netptax = 112892.7232

----Total BaseTax Heads = gross property tax = 112892.7232, Discount Given = 0, Govt Discount = 0, GD % = 0, netptax to be pay = 112892.7232

_____>>> OTHER TAXES : conservancy charge = 28223.1808, educcess charge nresi = 16933.90848, safai = 750, enivorment = 1063, fire charge = 0, watertax = 33867.81696

10 % dis = basetax = 1,01,603.4509, water = 30481.03526, conservancy = 25400.86272

Figure 6.2: Residential(Lakshmi Villas Palace)

6.3 Non-Residential

Non resi : 03-14-024-952-013-021

વડોદરા મહાલક્ષ્મીપાલિકા		ADVANCE RECEIPT								
મિલકટનો ઓળખ નંબર	સેન્ટેસ નંબર	બીલ નંબર	બીલની મદત	ઇલે. વૉર્ડ						
03-00001-021	03-14-024-952-013-021	416000332	2023-24	16						
કર/ચાર્જ ભરવાને પ્રકાશ પાત્ર કેનારણ નામ : OUS SHREE MAHALAXMI STEEL FURNITURE WORKS And Others										
સરનામું : 13 ANAND ESTATE OPP.YAMUNA MILL DABHOI ROAD										
ભોગવાટો કરનારણ નામ : O/O										
ભાડા આકારણી પદ્ધતિ		ક્રેડિટ આપાવીત પદ્ધતિ		ક્રેડિટ રૂપાંતર						
વિગત	રકમ (રૂ)	વિગત	પાકાંદી બાકી	ચાલુ માનવું (રૂ)	(ક્રેડિટ રૂપાંતર)					
સામાન્ય કર/મિલકન વેરા	0	સામાન્ય કર	0	7720	7720					
નોટીસ ફી	0	નોટીસ ફી	0	0	0					
વોરેટ ફી/જાહેરાત મદ્દે	0	વોરેટ ફી/જાહેરાત મદ્દે	0	0	0					
વ્યાજ	0	વ્યાજ (સંમાન્ય કર)	0	0	0					
શિક્ષણ ઉપકર	0	શિક્ષણ ઉપકર (સરચાર્જ)	0	2464	2464					
શિક્ષણ ઉપકર કંડ	0	શિક્ષણ ઉપકર (સરચાર્જ) કંડ	0	0	0					
ફાયર ટેલ્સ	0	ફાયર ટેલ્સ નોટીસ ફી	0	0	0					
ફાયર ટેલ્સ નોટીસ ફી	0	ફાયર ટેલ્સ નોટીસ ફી	0	0	0					
પાણી કર/પાણી વેરો	0	પાણી ચાર્જ	0	0	0					
		પાણી ચાર્જનું વ્યાજ	0	0	0					
		પાણી કર	0	1930	1930					
		પાણી કર નોટીસ ફી	0	0	0					
		પાણી કરનું વ્યાજ	0	0	0					
કંજરવન્સી ટેલ્સ/લાઇટ વેરો	0	કંજરવન્સી અને સુધેરેઝ ટેલ્સ	0	2702	2702					
		કંજરવન્સી અને સુધેરેઝ ટેલ્સ નોટીસ ફી	0	0	0					
		કંજરવન્સી અને સુધેરેઝ ટેલ્સનું વ્યાજ	0	0	0					
સ્પ.સેનેટરી સેસ/સફાઈ વેરો	0	સફાઈ ચાર્જ	0	2500	2500					
		ઘોંલવાયરેન્ટ એપ્લિકેશન ચાર્જ	0	350	350					
રકમ	0	રકમ	0	17666	17666					
રકમ શરૂઆતી : Rupees Seventeen Thousand Six Hundred Sixty Six Only										
Advance Payment	Bank Transaction ID : YHDF1914702390									
	CARD OF BILL DESK(NET-BANKING)									
પાવતી નંબર : 80011724	તારીખ 31-May-2023									
Note : This is computer generated receipt, hence signature is not necessary. Subject to actual payment received by the Vadodara Municipal Corporation.										
નાના લેનારણી સહી										

censusward = 3, censusblock = 14, censusno = 24, censussubno = 952, censusbyno = 13, censusoccupier = 21 floor no = 2, room no = 1, area = 170.41,

---N tax details are = locfactor = 0.9 ,agefactor = 1, usage type factor = *2, occu = *1, total = *1.8, rate of tax = 30, gross floor ptax = 9202.14, Discount Given = 1380.321, usage discount = 1380.321, floor discount = 0, net floor ptax = 7821.819, gross property tax total = 9202.14, netptax total = 7821.819

----Total BaseTax Heads = gross property tax = 9202.14, Discount Given = 1380.321, netptax = 7821.819

----Total BaseTax Heads = gross property tax = 9202.14, Discount Given = 1380.321, Govt Discount = 0, GD % = 0, netptax to be pay = 7821.819

_____>>> OTHER TAXES : conservancy charge = 2737.63665, educess charge nresi = 2346.5457, safai = 2500, enviorment = 350, fire charge = 0, watertax = 1955.45475

Figure 6.3: Non-Residential

6.4 State Government Property

State govt

વડોદરા મહાનગરપાલિકા		ADVANCE RECEIPT			
મિલકાંતનો ઓળખ નંબર	સેન્સસ નંબર	મિલ નંબર	વીલની મુદત	ઇલે. લોડ	
11-00001-109	11-13-060-051-003-109	611095852	2022-23	9	
કર/ચાજ ભરવાને પ્રથમ પાત્ર થનારણું નામ : EX. ENGINEER SHRI BARODA B & C DIVISION RAOPURA					
સરનામું : GOTRI					
સોગવટો કરનારણું નામ : CIVIL & SESSIONS JUDGE / STAFF QTRS NO. D1 / 301					
લાડા આકારલી પદ્ધતિ	ક્રીનકાળ આધારીત પદ્ધતિ	કુલ રકમ			
વિગત	રકમ (રૂ)	વિગત	પાછળી વાડી	ચાલુ માંગણું (રૂ)	(રૂ+વાડી)
મહાનગરપાલિકા / ગામ પંચાયત (સામાન્ય કર/મિલકાંત વેરા	0	સામાન્ય કર	0	1715
	નોટીસ ફી	0	નોટીસ ફી	0	0
	વોરટ ફી/જાહેરાત ઘર્યો	0	વોરટ ફી/જાહેરાત ઘર્યો	0	0
	વ્યાજ	0	વ્યાજ (સામાન્ય કર)	0	0
	શિક્ષણ ઉપકર	0	શિક્ષણ ઉપકર (કરચાજ)	0	0
	શિક્ષણ ઉપકર દંડ	0	શિક્ષણ ઉપકર (કરચાજ) દંડ	0	0
	ફાયર ટેક્સ	0	ફાયર ટેક્સ	0	133
	ફાયર ટેક્સ નોટીસ ફી	0	ફાયર ટેક્સ નોટીસ ફી	0	0
	પાણી કર/પાણી રેરો	0	પાણી ચાજ	0	0
			પાણી ચાજનું વ્યાજ	0	0
	પાણી કર	પાણી ચાજનું વ્યાજ	0	0	
	પાણી કર નોટીસ ફી	પાણી ચાજનું વ્યાજ	0	0	
	પાણી કરનું વ્યાજ	પાણી ચાજનું વ્યાજ	0	0	
કન્યારવનની ટેક્સ/લાઇટ વેરો	0	કન્યારવનની અને સુચરેઝ ટેક્સ	0	429	
		કન્યારવનની અને સુચરેઝ ટેક્સ નોટીસ ફી	0	0	
		કન્યારવનની અને સુચરેઝ ટેક્સનું વ્યાજ	0	0	
સ્પે.સેનેટરી સેસ/સફાઈ વેરો	0	સફાઈ ચાજ	750	750	
		એનલાયરમેન્ટ ઇમ્પ્રોવેન્ટ ચાજ	0	0	
કુલ	0	કુલ	0	3284	3284

censusward = 11, censusblock = 13, censusno = 60, censussubno = 51, censusbyno = 3, censusoccupier = 109 floor no = 7, room no = 9, area = 114.5,

----R tax details are = locfactor = 1.3 ,agefactor = 1, bulding type factor = *1, occu = *1, total = *1.3, rate of tax = 16, gross floor ptax = 2381.6, net floor ptax = 2381.6, gross property tax total = 2381.6, Discount Given = 0, netptax total = 2381.6

----Total BaseTax Heads = gross property tax = 2381.6, Discount Given = 0, netptax = 2381.6

----Total BaseTax Heads = gross property tax = 2381.6, Discount Given = 0, Govt Discount = 476.32, GD % = 20, netptax to be pay = 1905.28

_____>>> OTHER TAXES : conservancy charge = 476.32, educess charge nresi = 0, safai = 750, enviorment = 175, fire charge = 133.3696, watertax = 285.792

Basetax 10% = 1714.15

Water 10 % = 256.5

Conservancy 10% = 428.68

Figure 6.4: State Government Property

Chapter 7

Conclusion

- Many find it challenging to find time in their hectic schedules to visit government offices. We are developing a website that will serve as a platform for online tax payments, allow users to take advantage of any reductions straight from the website, and facilitate communication between the government and users/individuals.
- As a result, assist the sponsors in identifying the occasions where they might promote their goods or services. The online tax module for VMC needs to be updated in order to cut costs and the perceived barrier between the public and government. Taxes are without a doubt the most strategically significant source of state income, particularly for local governments. Several adjustments have been made to tax collection campaigns and practices to make it easier for customers to pay their municipal taxes.
- The implementation of an electronic tax system, or online tax, is one of these advancements. Information technology might be used to advocate taxes and, in this case, increase taxpayer compliance. Therefore, this web portal will affect thousands of people.

Chapter 8

Future Work

- In-Depth Analysis and System Optimisation: We are committed to carrying out in-depth analysis and system optimisation. To ensure the system's robustness and reliability, this will necessitate thorough testing using a wider variety of test cases. Any potential bottlenecks or performance problems will be located, and they will be effectively addressed. Our objective is to make using the platform for users seamless and effective.
- Enhanced User Tools: As part of our plan, additional tools will be added to help citizens pay their taxes more easily and securely. These tools might include attributes like user-friendly dashboards, tailored tax reports, and immediate notifications. We strive to improve user interfaces and convenience features to make paying taxes easier and more convenient.
- Implementation of a Chat Bot: A Chat Bot feature is would be implemented. This chatbot will act as a virtual assistant for users, directing them through the portal's tax payment process. It will also be able to answer queries about user accounts, payment histories, and other tax-related queries. The Chat Bot will be developed to improve user engagement and support.
- Fortification of security: It is crucial to ensure the safety of the system and user data. We are committed to constructing a robust and resilient system that is impervious to security risks. This will entail performing routine security audits, updates, and the application of best practises for protecting sensitive data. To protect both the system and user data, we are committed to upholding the highest standards of security.

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