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A Database Management System Mini Project Report on

“Waste Management System”

Submitted in Partial fulfillment of the Requirements for the V Semester of the Degree of

Bachelor of Engineering
In
Computer Science & Engineering
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CERTIFICATE

This is to certify that the Database Management System Project work entitled “Waste Management System” has been carried out by ABHISHEK KUMAR (1CR19CS006) and AMAN KUMAR (1CR19CS012) bonafide students of CMR Institute of Technology in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of the Visvesvaraya Technological University, Belgaum during the year 2021-2022. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. This DBMS Project Report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

Signature of Guide

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Name of the examiners

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- 2.

Signature with date

ABSTRACT

Waste Management System is a system which maintains the information about the amount of waste generated by each region. The tremendous increase in the population of the country has led to improper management of waste in cities. This is very difficult to organize manually. Maintenance of all this information manually is a very complex task.

Owing to the advancement of technology, organization of a Waste Management System becomes much simple. The Waste Management System has been designed to computerize and automate the operations performed over the information collected from particular regions. The computerization of this data helps in many instances of its maintenance and operations. It reduces the workload as most of the operations get simplified and organised.

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CHAPTER 1

INTRODUCTION

This chapter gives an over view about the aim, objectives, background and operation environment of the system.

1.1 PROJECT AIMS AND OBJECTIVES

The project aims and objectives that will be achieved after completion of this project are discussed in this subchapter. The aims and objectives are so follows:

- Tracking the amount of waste generated in each region
- Organised methods for collection and disposal of biodegradable and non bio-degradable wastes efficiently.
- Maintenance of a completely robust and efficient database to track all the information on waste generation and disposal
- Managers of dumps and recycling factories can publish their possibilities or needs in acquiring a certain amount of waste for storing or acquiring.
- A grievance system for people to submit any kinds of suggestions/problems regarding the management system of the locality.

1.2 BACKGROUND OF PROJECT

This project aims at development of a Waste Management System that facilitates the residents of a particular region to dispose wastes generates by them and the waste management administrators to modify the backend databases in a user-friendly manner.

This project includes the following functions:

- Create new database and add new record
- Display record
- User SignUp and LogIn
- Admin LogIn
- Adding Vehicle Driver's and Helper's name, contact and area assigned.
- View all the user and other details

CHAPTER 2

SYSTEM REQUIREMENTS

2.1 SOFTWARE AND HARDWARE REQUIREMENTS

2.1.1 SOFTWARE REQUIREMENTS

- Operating system: Windows 10
- Programming Languages Used: Php for backend and frontend connection, HTML, CSS, for frontend
- Database: MySQL for backend
- Compiler: Visual Code Studio, MySQL Workbench

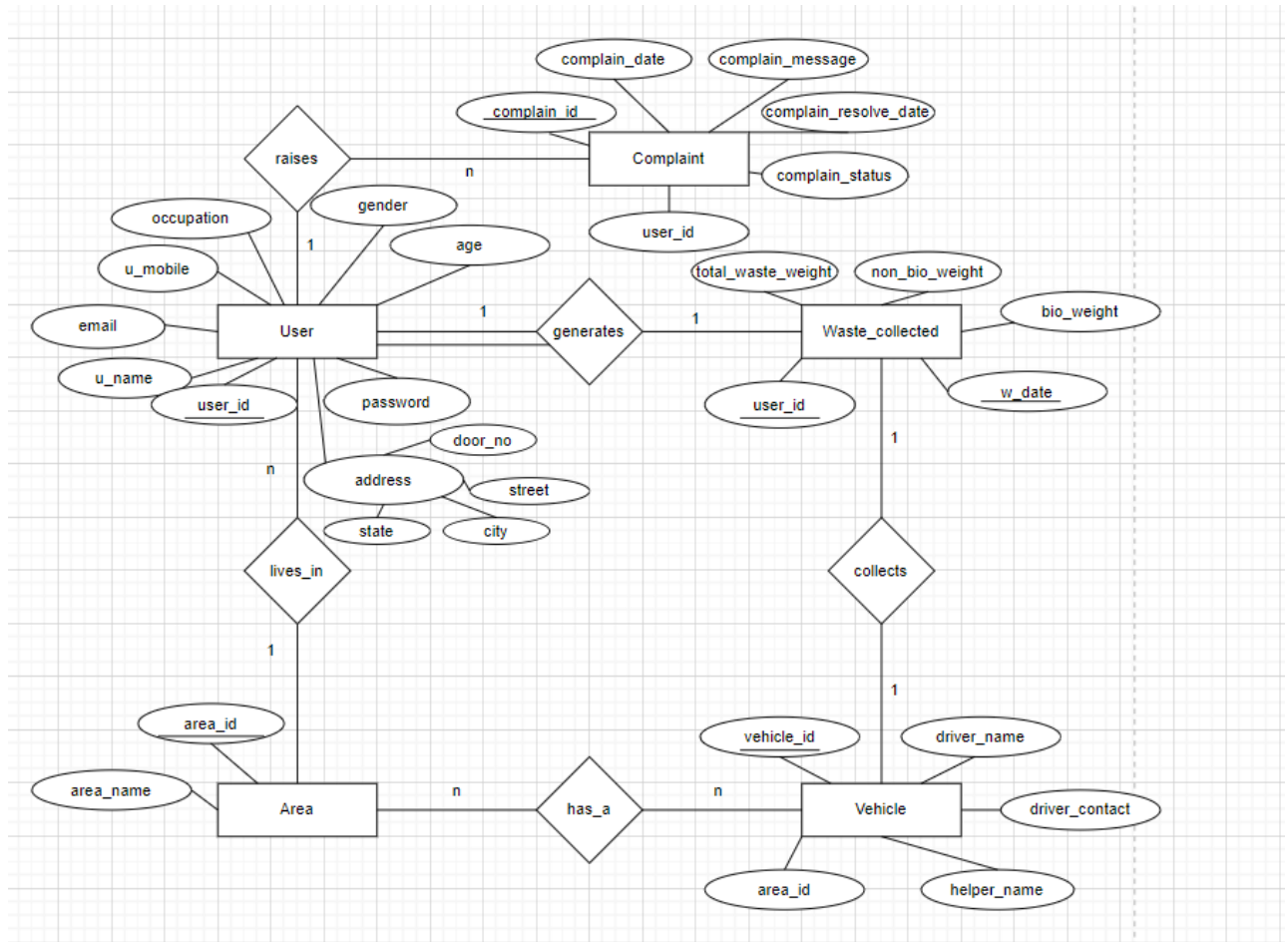
2.1.2 HARDWARE REQUIREMENTS

- CPU: Intel i5 processor
- RAM: 8GB
- HDD: 1TB
- Keyboard, mouse, 18'' color monitor

CHAPTER 3

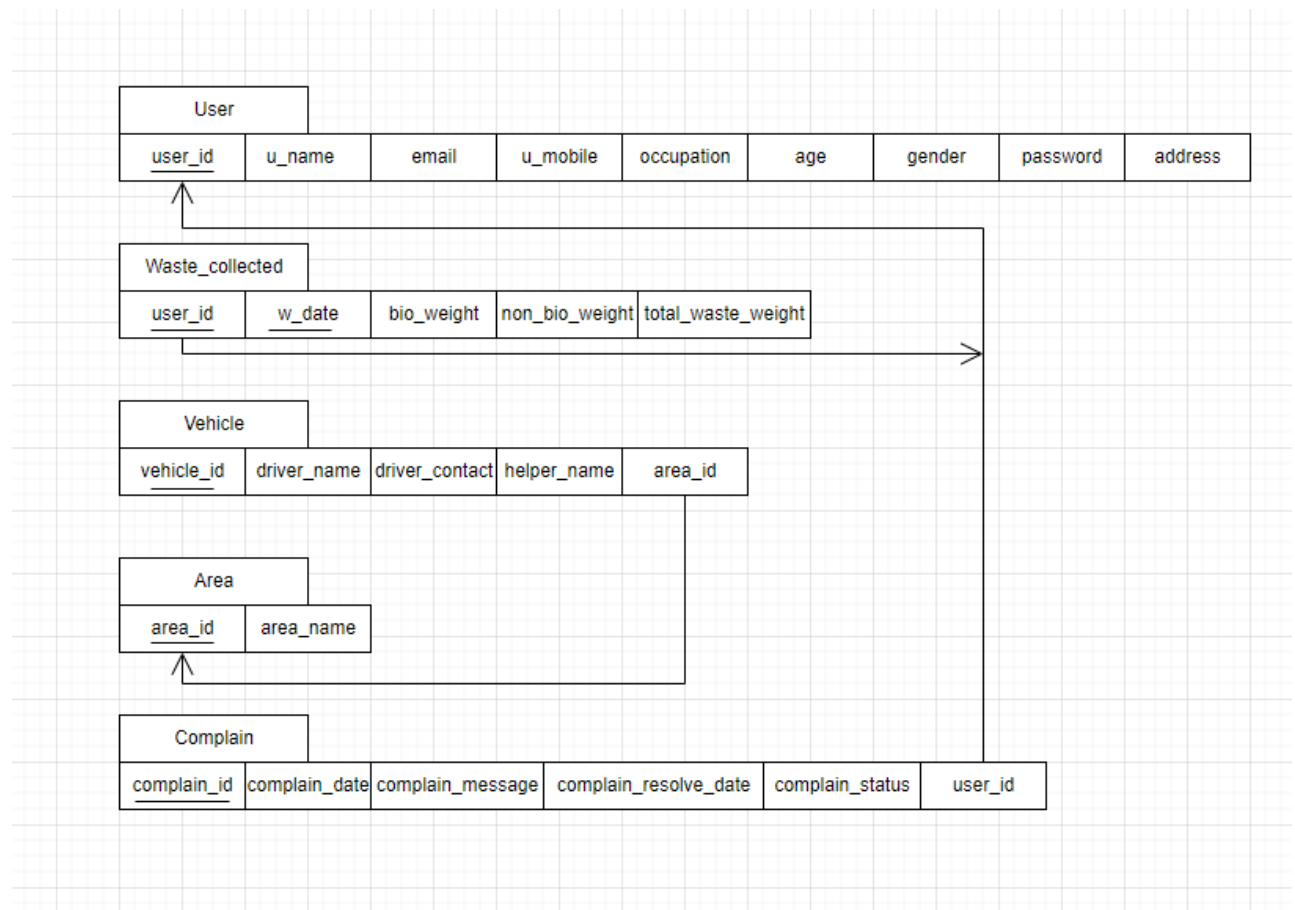
DESIGN

3.1 E-R Diagram:



3.1 ER Diagram

3.2 SCHEMA:



3.2 Schema

CHAPTER 4

IMPLEMENTATION

4.1 LOGIN PAGE

```
<?php

include 'config.php';

session_start();

error_reporting(0);

if (isset($_SESSION['u_name'])) {
    header("Location: dash.php");
}

if(isset($_POST['submit'])) {
    $email_id = $_POST['email_id'];
    $password = md5($_POST['password']);
    echo $password;

    $sql = "SELECT * FROM user WHERE email_id='$email_id' AND
password='$password'";
    $result = mysqli_query($conn, $sql);
    if ($result->num_rows > 0) {
        $row = mysqli_fetch_assoc($result);
        $_SESSION['u_name'] = $row['u_name'];
        $_SESSION['user_id'] = $row['user_id'];
        header("Location: dash.php");
    }else {
        echo "<script>alert('Oops! Email Or Password Is Wrong')</script>";
    }
}

?>

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
<link rel="stylesheet" href="login.css">
<title>LOGIN</title>
</head>
<body>
  <form action="" method="POST">
    <div class="container">
      <h1>User Log In</h1>
      <div class="box">
        <i class="fa fa-envelope"></i>
        <input type="email" required name="email_id" placeholder="Enter
Your Email" value="<?php echo $email_id; ?>">
      </div>
      <div class="box">
        <i class="fa fa-key"></i>
        <input type="password" required name="password"
placeholder="Enter Your Password" value="<?php echo $_POST['password'];?>">
      </div>
      <button name="submit" class="btn">Sign In</button>
      <a href="register.php" target="_blank" class="btn">Sign Up</a>
    </div>
  </form>
</body>
</html>
```

4.2 USER DASHBOARD

```
<?php

session_start();

if (!isset($_SESSION['u_name'])) {
    header("Location: login.php");
}

?>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="dash.css">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/5.15.3/css/all.min.css"/>
    <title>Home</title>
</head>
<body>
<div class="wrapper">
    <input type="checkbox" id="btn" hidden>
    <label for="btn" class="menu-btn">
        <i class="fas fa-bars"></i>
        <i class="fas fa-times"></i>
    </label>
    <nav id="sidebar">
        <div class="title">
            MENU
        </div>
        <ul class="list-items">
            <li><a href="dash.php"><i class="fas fa-home"></i>Home</a></li>
            <li><a href="accdetails.php"><i class="fas fa-user"></i>Account
Details</a></li>
            <li><a href="complaints.php"><i class="fas fa-address-
book"></i>Complaints</a></li>
            <li><a href="vd.php"><i class="fas fa-truck"></i>Vehicle
Driver</a></li>
            <li><a href="waste.php"><i class="fas fa-dumpster"></i>Waste
Stats</a></li>
```

```
<li><a href="contact.php"><i class="fas fa-envelope"></i>Contact
Us</a></li>
<li><a href="logout.php"><i class="fas fa-sign-out-alt"></i>Log
Out</a></li>
<div class="icons">
  <a href="#"><i class="fab fa-facebook-f"></i></a>
  <a href="#"><i class="fab fa-twitter"></i></a>
  <a href="#"><i class="fab fa-github"></i></a>
  <a href="#"><i class="fab fa-youtube"></i></a>
</div>
</ul>
</nav>
</div>
<div class="content">
  <div class="header">
    <?php echo "<h1>Welcome " . $_SESSION['u_name']. "!</h1>"; ?>
  </div>
</div>
</div>
</body>
</html>
```

CHAPTER 5

DISCUSSION and SCREENSHOTS

These are the frontend screenshots



5.1 Dashboard



5.2 Admin Login



A screenshot of a web browser displaying the 'User Log In' page. The page features a central graphic of a globe surrounded by three green recycling arrows. Overlaid on this graphic is a login form with the title 'User Log In'. The form includes a text input field for 'try@cmr', a password field with three dots, and two buttons labeled 'Sign In' and 'Sign Up'.

5.3 User Login



A screenshot of a web browser displaying the 'Add Waste Details' page. The page features the same globe and recycling arrows graphic as the login page. Overlaid on this is a form titled 'Add Waste Details'. The form contains several input fields: 'User Id' with a placeholder 'Enter user id', 'Collection Date' with a placeholder 'dd-mm-yyyy' and a calendar icon, 'Weight of Biodegradable Waste' with a placeholder 'Enter bio waste', 'Weight of Non-Biodegradable Waste' with a placeholder 'Enter non-bio waste', and 'Total Waste Weight' with a placeholder 'Enter total waste weight'. At the bottom of the form is a blue button labeled 'Add Waste'.

5.4 Waste Details

The 'Add Driver Details' form is displayed on a dark background with a large, glowing green recycling symbol in the center. The form fields are overlaid on the symbol. The fields are: 'Enter vehicle no.', 'Driver Name: Enter driver name', 'Driver Contact: Enter driver contact', 'Driver Helper: Enter driver helper', and 'Driver Area: Enter driver area'. A blue 'Add Driver' button is at the bottom.

Add Driver Details

Enter vehicle no.

Driver Name: Enter driver name

Driver Contact: Enter driver contact

Driver Helper: Enter driver helper

Driver Area: Enter driver area

Add Driver

5.5 Driver Details

The 'Register Complaint' form is displayed on a dark background with a large, glowing green recycling symbol in the center. The form fields are overlaid on the symbol. The fields are: 'Add=mm-yyyy' with a calendar icon, and 'Enter Your Complaint'. A blue 'Submit' button is at the bottom.

Register Complaint

Add=mm-yyyy

Enter Your Complaint

Submit

5.6 Register Complaint



Resolve Complaint

Complain id:
Enter complain id

Resolve Date:
dd-mm-yyyy

Complain Status:
Enter complain status

Add States

5.7 Resolve Complaint



User Id	Complain Id	Complain Date	Complain	Resolve Date	Status
22	4	2022-02-03	garbage colector not coming	2022-03-13	Resolved
22	5	2022-02-02	some	2022-02-24	Resolve
22	6	2022-02-04	try	0000-00-00	
22	7	2022-02-18	sadas	0000-00-00	
22	8	2022-03-04	asdasda	0000-00-00	
22	9	2022-02-17	asdasdasd	0000-00-00	
22	10	2022-02-10	asdasdasd	0000-00-00	
22	11	2022-02-19	asdasdasd	0000-00-00	

5.8 Complain Table

CHAPTER 6

CONCLUSION & FUTURE SCOPE

The proposed idea for waste management is completely automated system which enables users and waste management officials to monitor the amount of waste generated from each household and track the vehicles that transports the waste from each locality to destination.

In future, Concept of green-points can be implemented that would encourage the involvement of the residents or the end users making the idea successful and helping to achieve joined efforts for the waste management and hence fulfilling the idea of Swachh Bharath.

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