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Department of Computer Science and Engineering
B. Tech. CSE - 5th Semester - Minor
Aug – Dec 2023
UE21CS351AX Database
Management (DBMS)

Project Report

Laundry Management TEAM #: WASHING-TON

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PROJECT DESCRIPTION

Project Overview:

The Hostel Laundry Management System is a user-friendly web application that simplifies the laundry process for students and enhances the efficiency of laundry management within the hostel. It provides a centralized platform for students to submit laundry requests, track the status of their laundry bags and clothes, and for the laundry manager to manage all laundry-related tasks.

Purpose of the Project:

The purpose of the Hostel Laundry Management System is to streamline and automate the laundry operations within a hostel. This system aims to provide an efficient way for students to submit laundry requests, manage their laundry bags and clothes, and for the laundry manager to efficiently handle and track laundry services.

Scope of the Project:

The scope of this project includes the development of a web-based application that allows students to request laundry services, monitor the status of their laundry, and enables the laundry manager to manage laundry orders, assign tasks to laundry staff, and maintain records of laundry operations.

Major Project Functionalities

- Student Registration: Students can create accounts and log in to the system.
- Laundry Request Submission: Students can submit laundry requests, specifying the contents of their laundry bag.
- Bag and Clothes Management: Students can add, remove, and manage their clothes to laundry bag.
- Laundry Manager Dashboard: Laundry managers have access to a dashboard to view and manage laundry requests.
- Laundry Status Tracking: Students can track the status of their laundry, i.e., whether it's in progress, completed, or ready for pickup.
- Notifications: Both students and laundry managers receive notifications about the status of laundry requests and tasks.

SYSTEM FEATURES & FUNCTION REQUIREMENTS

System Feature 1: Student Registration

Description: Students should be able to create accounts with their hostel details.

Functional Requirements:

Collect student information (name, contact, room number, etc.).

Authenticate and verify student accounts.

System Feature 2: Laundry Request Submission

Description: Students should be able to submit laundry requests.

Functional Requirements:

Create a laundry request with details of items to be laundered.

Specify pickup and delivery preferences.

System Feature 3: Bag and Clothes Management

Description: Students should be able to manage their laundry bags and clothes.

Functional Requirements:

Add, edit, and delete laundry bags.

Add, edit, and delete clothes items within bags.

View and update the contents of each laundry bag.

System Feature 4: Laundry Manager Dashboard

Description: Laundry managers should have access to a dashboard for managing laundry requests and tasks.

managing launary requests and

Functional Requirements:

View a list of incoming laundry requests.

Monitor the status of laundry requests and tasks.

System Feature 5: Laundry Status Tracking

Description: Students should be able to track the status of their laundry requests.

Functional Requirements:

Receive notifications when laundry is ready for pickup or completed.

View the real-Name status of their laundry requests.

System Feature 6: Notifications

Description: Both students and laundry managers should receive notifications

regarding laundry requests and tasks.

Functional Requirements:

Send email or push notifications for order updates. Notify laundry

managers of new laundry requests.

External Interface Requirements

User Interfaces

- Login
- Sign up
- Booking
- Status/Comment
- Logout

Hardware Interfaces

The system shall run on Microsoft Windows based system or mac .OS

Software Interfaces

The system shall interface with Access database.

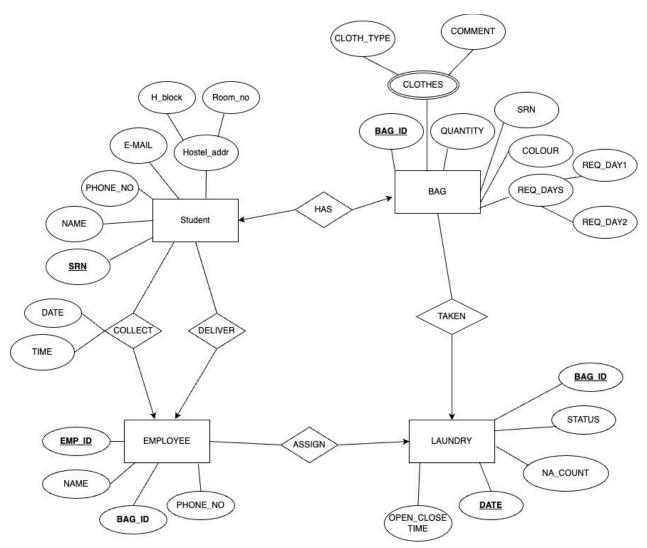
Communications Interfaces

Web browsers are the interfaces to communicate with the application.

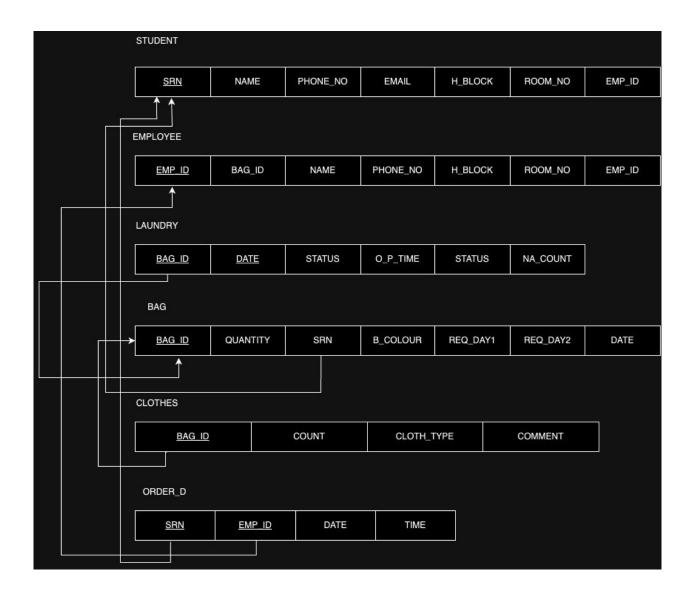
Supported bowsers:

- Google Chrome
- Firefox
- Microsoft Edge
- Brave

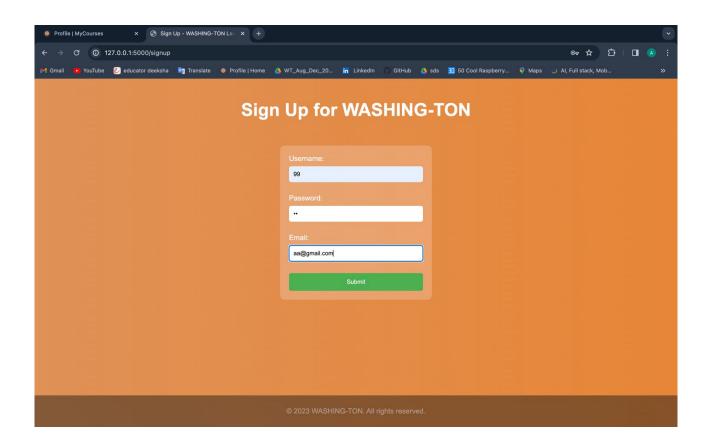
E-R DIAGRAM

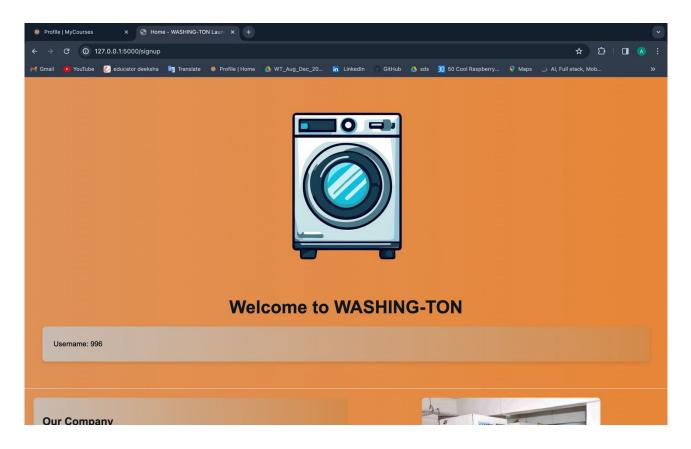


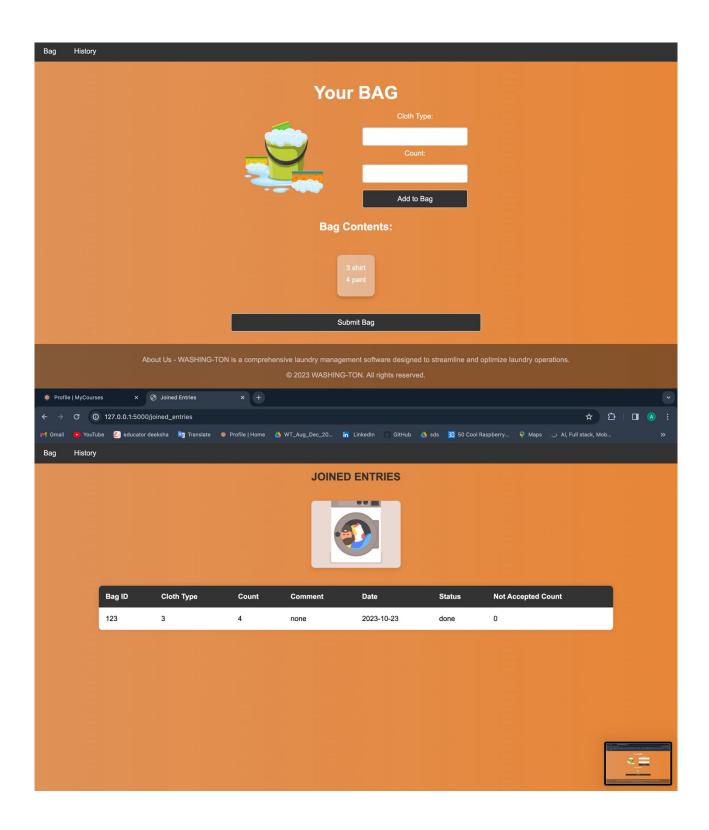
Relational-schema:

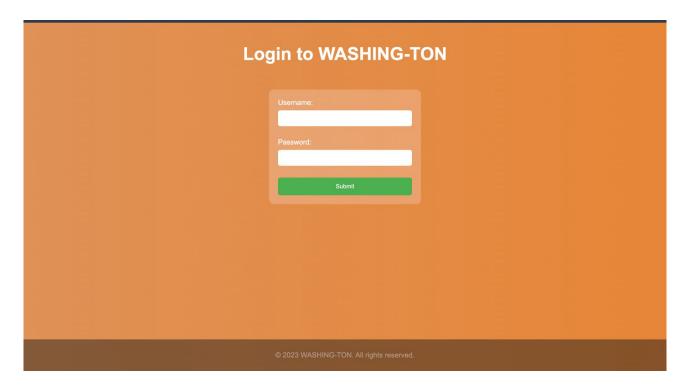


APPLICATION:









DDL/DML/TRIGGER/PROCEDURE:

UE21CS351AX DBMS

LAUNDRY MANAGEMENT



UE21CS351AX DBMS

LAUNDRY MANAGEMENT

```
7 rows in set (0.05 sec)
mysql> show laundry;
ERROR 1804 (42808): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'laundry' at line 1 mysql> desclaundry;
  | Field | Type
                                                                     | Null | Key | Default | Extra
     6 rows in set (0.00 sec)
 [mysql> desc bag;
   | Field | Type
                                                                   | Null | Key | Default | Extra |
     PRI
 6 rows in set (0.01 sec)
 mysql> show tables;
   | Tables_in_laundry |
     bag
bag_user
clothes
employee
laundry
login_cred
student
 7 rows in set (0.06 sec)
 mysql> desc laundry;
  | Field | Type
                                                                    | Null | Key | Default | Extra |
     bag_id | int | date | date | date | control | date 
 6 rows in set (0.01 sec)
 mysql> GRANT ALL PRIVILEGES ON laundry.* TO 'student'@'localhost' IDENTIFIED BY '123';
ERROR 1864 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'IDENTIFIED BY '123' at lir
mysql> FLUSH PRIVILEGES;
Query OK, @ rows affected (0.01 sec)
 Query OK, 0 rows affected (0.01 sec)
123 | 2023-10-23 | accepted | 3 | pending |
 1 row in set (0.00 sec)
|mysql> select * from bag;
|Empty set (0.00 sec)
 mysql> desc bag;
  | Field | Type
                                                                   | Null | Key | Default | Extra |
     | bag_id | int | NO | quantity | int | YES | B_colour | varchar(10) | YES | req_1 | varchar(25) | YES | req_2 | varchar(14) | NO | varchar(14) | NO |
 6 rows in set (0.01 sec)
  | Field | Type
                                                                          | Null | Key | Default | Extra |
     cbag_id | int | NO
cloth_type | varchar(20) | YES
count | int | YES
comment | varchar(100) | YES
                                                                                              | PRI |
  4 rows in set (0.01 sec)
CREATE TRIGGER after_laundry_update
AFTER UPDATE ON laundry
FOGE EACH ROW
BEGIN
IF NEW.o_status = 'complete' THEN
INSERT INTO clothes (cbag_id, cloth_type, count, comment)
SELECT bag_id, 'default_cloth_type', 1, 'Default comment'
FROM laundry WHERE bag_id = NEW.bag_id;
END IF;
END;
END;
 mysql> delimiter ;
mysql> select * from laundry
> ;
ERROR 4931 (HY900): The client was disconnected by the server because of inactivity. See wait_timeout and interactive_timeout for configuring this behavior.
No connection. Trying to reconnect...
Connection id: 280
Current database: laundry
```

UE21CS351AX DBMS

LAUNDRY MANAGEMENT

mysql> delimiter ;
mysql> select * from laundry - >; ERROR 4031 (HY000): The client was disconnected by the server because of inactivity. See wait_timeout and interactive_timeout for configuring this behavior. No connection id: 280 Current database: laundry 1 row in set (0.03 sec) [mysql> desc student [-> ; | Field | Null | Key | Default | Extra | Type 6 rows in set (0.01 sec) mysql> ALTER TABLE student | -> MODIFY COLUMN phone VARCHAR(15); 1 row in set (0.00 sec) mysql> show tables; | Tables_in_laundry | bag_user clothes employee laundry login_cred student 7 rows in set (0.00 sec) [mysql> desc bag; | Field | Type | Null | Key | Default | Extra | mysql> desc bag; | Null | Key | Default | Extra | 6 rows in set (0.01 sec) f rows imysql> desc clothes; i Type | Null | Key | Default | Extra | 4 rows in set (0.00 sec) mysql> select * from clothes; | cbag_id | cloth_type | count | comment | 1 row in set (0.00 sec) | Field | Type | | Null | Key | Default | Extra | 6 rows in set (0.00 sec) |mysql> show tables;
ERROR 4831 (HY808): The client was disconnected by the server because of inactivity. See wait_timeout and interactive_timeout for configuring this behavior.
No connection. Trying to reconnect...
Connection id: 311
Current database: laundry | Tables_in_laundry | 7 rows in set (0.02 sec)

Database access by python (code):

```
from flask import Flask, render_template, request, redirect
import mysql.connector import datetime from datetime
import date us=None bag id=None
app = Flask(__name__)
mydb = mysql.connector.connect(
host="localhost",
user="student", password="123",
database="laundry"
@app.route('/') def
@app.route('/login', methods=['GET', 'POST'])
def login():
                if request.method == 'POST':
       username = request.form['username']
                us=username
print(us)
       password = request.form['password']
mycursor = mydb.cursor()
       mycursor.execute(f"SELECT * FROM login_cred WHERE username = '{username}' and
password = '{password}'")
student details = mycursor.fetchall()
student_details:
return render_template('login.html')
render_template('login.html')
```

```
@app.route('/signup', methods=['GET', 'POST']) def
signup():
   if request.method == 'POST':
       username = request.form['username']
password = request.form['password']
mycursor = mydb.cursor()
                                mycursor.execute(sql, val)
val = (username, email, password)
      mycursor.execute(f"SELECT * FROM login cred WHERE username = '{username}' and
       student details = mycursor.fetchall()
return render template('home.html', student=student details[0])
return render_template('signup.html')
@app.route('/redirect_login', methods=['GET', 'POST']) def
redirect login():
   return redirect('/login')
@app.route('/redirect signup', methods=['GET', 'POST']) def
redirect signup():
   return redirect('/signup')
@app.route('/home') def
home():
      return render template('home.html')
      return render_template('home.html') # Update to the appropriate template for
   return render template('home.html')
= []
@app.route('/bag') def
baggy():
   return render template('bag add.html', bag=bag)
```

```
@app.route('/add to bag', methods=['POST']) def
add to bag():
   cloth type = request.form.get('cloth type')
count = request.form.get('count')
   bag.append({'cloth_type': cloth_type, 'count': count})
   return render template('bag add.html', bag=bag)
@app.route('/submit bag', methods=['POST']) def
submit bag():
print(us)
   mycursor = mydb.cursor()
srn value = int(us)
   mycursor.execute(f"SELECT bag_id FROM bag_user WHERE SRN = '{srn_value}'")
bag id result = mycursor.fetchone() bag id=bag id result mydb.commit()
    flag=check status(bag id result)
print(bag id result)
mycursor = mydb.cursor()
op time=2
mycursor.execute(sql, val)
                                myc = mydb.cursor()
na count) VALUES (%s, %s, %s, %s, %s, %s)"
       values = (bag_id_result[0], date.today(), i_status, o_p_time, o_status, na_count)
       myc.execute(sql, values)
               bag.clear()
mydb.commit()
bag=bag)
```

```
def check status(bag id):
mycursor = mydb.cursor()
   mycursor.execute(f'SELECT o status FROM laundry WHERE bag id = {int(bag id[0])}')
result = mycursor.fetchone()
result:
return 1
return 0
mydb.cursor(dictionary=True)
```

```
@app.route('/joined entries') def
joined entries():
mycursor = mydb.cursor()
    mycursor.execute(f"SELECT bag id FROM bag user WHERE SRN = '{srn value}'")
bag id result = mycursor.fetchone() bag id = bag id result
mydb.commit()
query = """
    mycursor.execute(query, (bag_id[0],))  # Pass bag_id as a parameter
entries = mycursor.fetchall()
     return render template('joined history.html',
entries=entries)
```

```
app.run(debug=True)
```

employee side:

```
from flask import Flask, render template, request
import mysql.connector from datetime import date
app = Flask(__name__)
# MySQL configuration mydb =
mysql.connector.connect(
host="localhost",
user="employee",
password="111",
database="laundry"
@app.route('/') def
    cursor = mydb.cursor()
cursor.execute("SELECT * FROM laundry") data
    return render_template('home.html', data=data)
@app.route('/clothes count') def
clothes_count():
    mycursor = mydb.cursor()
```

```
results = mycursor.fetchall()
   return render_template('clothes_count.html', results=results)
mycursor = mydb.cursor()
@app.route('/update status', methods=['GET', 'POST'])
bag id = request.form['bag id']
o_status = request.form['o_status']
mycrsor = mydb.cursor()
      update sql = "CALL update status and clothes v2(%s, %s)"
@app.route('/add student', methods=['GET', 'POST']) def
add student():
srn = request.form['srn']
name = request.form['name']
phone = request.form['phone']
email = request.form['email']
room number = request.form['room number']
      mycursor.execute(insert sql, (srn, name, phone, email, hostel block,
```