Overview

- Objective
- *Technologies*
- *Architecture*
- *Codes*
- *Output*
- *References*
- *Future Work*
- *Conclusion*

Objective

- **User Management:** Secure account creation, management, and deletion with authentication and authorization.
- **Expense Recording:** Easy and flexible expense entry with details like amount, date, category, and description.
- **Categorization & Tagging:** Customizable categories and tags for personalized expense tracking.
- **Data Visualization:** Charts and graphs to visualize spending patterns along with filtering and sorting options.
- **Budget Management:** Set budgets by category, track progress, and receive notifications for potential overspending.
- **Reporting & Analytics:** Generate reports, gain insights, and receive recommendations for financial improvement.
- **Responsive Design:** Ensures accessibility across various devices.
- **Data Security & Privacy:** Prioritizes user data protection through robust security measures and compliance with regulations.

Technologies

Frontend

HTML
CSS
JavaScript
jQuery

Backend

PHP

Database

MySQL

Server

XAMPP

Architecture

Frontend

- User Interface:
    Login Page: Form for users to log in.
    Register Page: Form for users to create an account.
- User Registration:
    Capture user details and send them to the backend for registration.
    Display success or error messages based on the backend response.
- User Login:
    Capture login credentials and send them to the backend for authentication.
    Store user information on successful login and redirect to the dashboard.
- Add Expense:
    Capture expense details and send them to the backend to be stored.
- Display Expenses:
    Request the user's expenses from the backend and display them.

Backend(PHP)

- Database Configuration:
    Establish a connection to the MySQL database.
- User Registration:
    Accept user details (name, email, password).
    Hash the password and store the user details in the database.
- User Login:
    Accept login credentials (email, password).
    Verify the credentials and return user information if valid.
- Add Expense:
    Accept expense details (user ID, amount, category, description).
    Store the expense details in the database.
- Retrieve Expenses:
    Fetch and return the list of expenses for a specific user.
- Database: MySQL

CODES

```php
<?php
session_start();
error_reporting(0);
include('includes/dbconnection.php');
?>


<div id="sidebar-collapse" class="col-sm-3 col-lg-2 sidebar">
        <div class="profile-sidebar">
            <div class="profile-userpic">
                <img src="https://static.vecteezy.com/system/resources/previews/012/906/644/original/expenses-icon-style-vector.jpg" class="img-responsive" alt="">
            </div>
            <div class="profile-usertitle">
                <?php
$uid=$_SESSION['detsuid'];
$ret=mysqli_query($con,"select FullName from tbluser where ID='$uid'");
$row=mysqli_fetch_array($ret);
$name=$row['FullName'];

?>
                <div class="profile-usertitle-name"><?php echo $name; ?></div>
                <div class="profile-usertitle-status"><span class="indicator label-success"></span>Online</div>
            </div>
            <div class="clear"></div>
        </div>
        <div class="divider"></div>

        <ul class="nav menu">
            <li class="active"><a href="dashboard.php"><em class="fa fa-dashboard"> </em> Dashboard</a></li>



            <li class="parent "><a data-toggle="collapse" href="#sub-item-1">
                <em class="fa fa-navicon"> </em>Expenses <span data-toggle="collapse" href="#sub-item-1" class="icon pull-right"><em class="fa fa-plus"></em></span>
                </a>
                <ul class="children collapse" id="sub-item-1">
                    <li><a class="" href="add-expense.php">
                        <span class="fa fa-arrow-right"> </span> Add Expenses
```
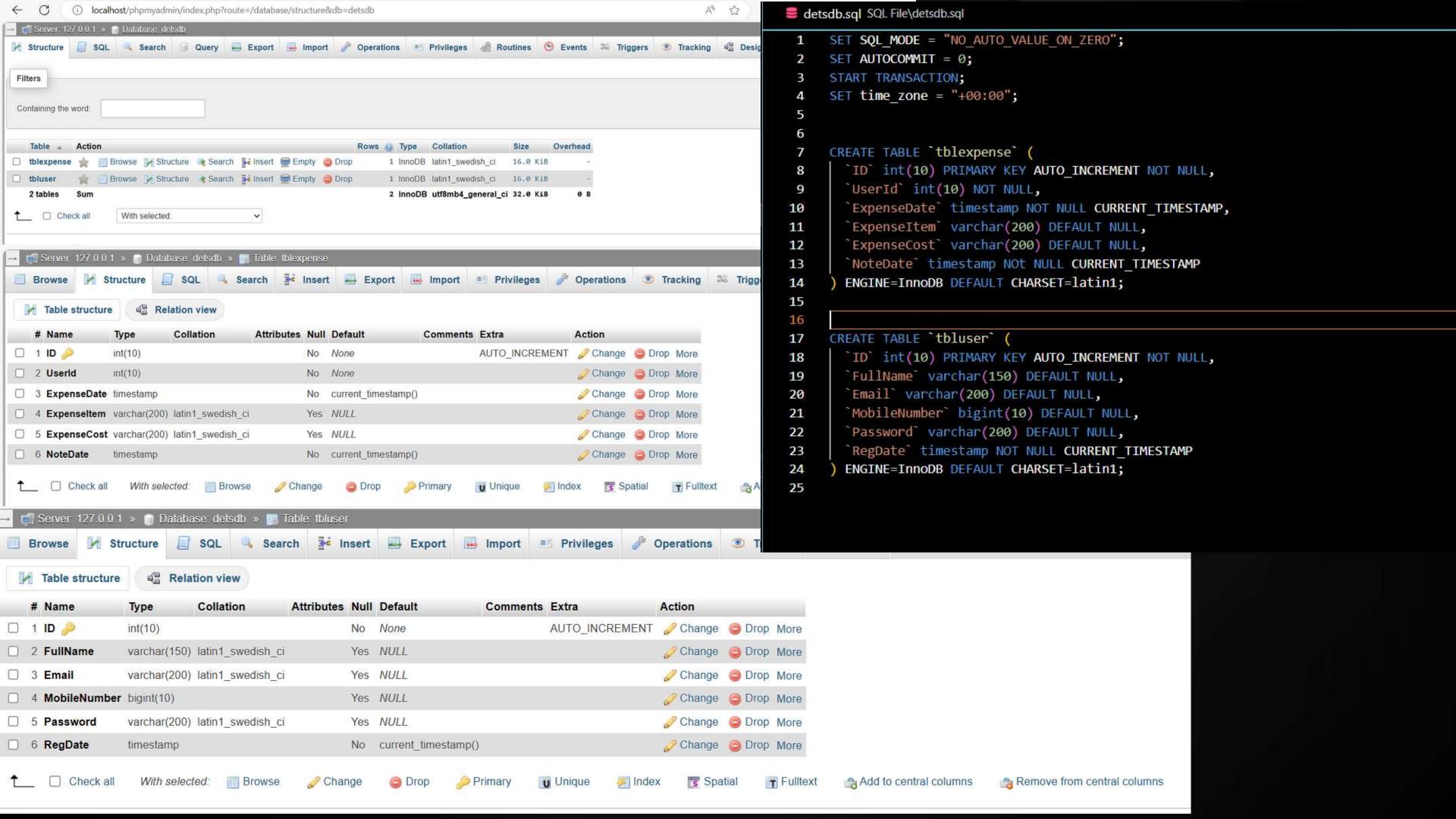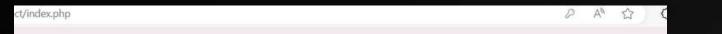
```php
<?php
session_start();
error_reporting(0);
include('includes/dbconnection.php');
if(isset($_POST['submit']))
  {
    $fname=$_POST['name'];
    $mobno=$_POST['mobilenumber'];
    $email=$_POST['email'];
    $password=md5($_POST['password']);

    $ret=mysqli_query($con, "select Email from tbluser where Email='$email' ");
    $result=mysqli_fetch_array($ret);
    if($result>0){
$msg="This email  associated with another account";
    }
    else{
    $query=mysqli_query($con, "insert into tbluser(FullName, MobileNumber, Email,  Password) value('$fname', '$mobno', '$email', '$password' )");
    if ($query) {
    $msg="You have successfully registered";
    }
    else
      {
       $msg="Something Went Wrong. Please try again";
      }
  }
}
?>
```

```html
            <div class="panel-body">
                <form role="form" action="" method="post" id="" name="signup" onsubmit="return checkpass();">
                    <p style="font-size:16px; color:red" align="center"> <?php if($msg){
        echo $msg;
    }  ?> </p>
                    <fieldset>
                        <div class="form-group">
                            <input class="form-control" placeholder="Full Name" name="name" type="text" required="true">
                        </div>
                        <div class="form-group">
                            <input class="form-control" placeholder="E-mail" name="email" type="email" required="true">
                        </div>
                        <div class="form-group">
                            <input type="text" class="form-control" id="mobilenumber" name="mobilenumber" placeholder="Mobile Number" maxlength=
                        </div>
                        <div class="form-group">
                            <input class="form-control" placeholder="Password" name="password" type="password" value="" required="true">
                        </div>
                        <div class="form-group">
                            <input type="password" class="form-control" id="repeatpassword" name="repeatpassword" placeholder="Repeat Password"
                        </div>
                        <div class="checkbox">…
                        </div>
                    </fieldset>
                </form>
            </div>
```

```php
<?php
session_start();
error_reporting(0);
include('includes/dbconnection.php');
if (strlen($_SESSION['detsuid']==0)) {
  header('location:logout.php');
  } else{

if(isset($_POST['submit']))
  {
    $userid=$_SESSION['detsuid'];
    $dateexpense=$_POST['dateexpense'];
    $item=$_POST['item'];
    $costitem=$_POST['costitem'];
    $query=mysqli_query($con, "insert into tblexpense(UserId,ExpenseDate,ExpenseItem,ExpenseCost) value('$userid','$dateexpense','$item','$costitem'
if($query){
echo "<script>alert('Expense has been added');</script>";
echo "<script>window.location.href='manage-expense.php'</script>";
} else {
echo "<script>alert('Something went wrong. Please try again');</script>";
}
}
?>
```

```html
<div class="col-md-12">

        <form role="form" method="post" action="">
            <div class="form-group">
                <label>Date of Expense</label>
                <input class="form-control" type="date" value="" name="dateexpense" required="true">
            </div>
            <div class="form-group">
                <label>Item</label>
                <input type="text" class="form-control" name="item" value="" required="true">
            </div>


            <div class="form-group">
                <label>Cost of Item</label>
                <input class="form-control" type="text" value="" required="true" name="costitem">
            </div>


            <div class="form-group has-success">
                <button type="submit" class="btn btn-primary" name="submit">Add</button>
            </div>


        </div>
    </form>
</div>
```

Server: 127.0.0.1 » **Database: detsdb**

Structure | SQL | Search | Query | Export | Import | Operations | Privileges | Routines | Events | Triggers | Tracking | Desig

Filters

Containing the word: [   ]

	Table ▲	Action							Rows	Type	Collation	Size	Overhead
☐	tblexpense	★	Browse	Structure	Search	Insert	Empty	Drop	1	InnoDB	latin1_swedish_ci	16.0 KiB	-
☐	tbluser	★	Browse	Structure	Search	Insert	Empty	Drop	1	InnoDB	latin1_swedish_ci	16.0 KiB	-
	2 tables	Sum							2	InnoDB	utf8mb4_general_ci	32.0 KiB	0 B

↑ ☐ Check all   With selected: [▾]

Server: 127.0.0.1 » **Database: detsdb** » **Table: tblexpense**

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Tracking | Trigg

Table structure | Relation view

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
☐	1	ID 🔑	int(10)			No	None		AUTO_INCREMENT	Change	Drop	More
☐	2	UserId	int(10)			No	None			Change	Drop	More
☐	3	ExpenseDate	timestamp			No	current_timestamp()			Change	Drop	More
☐	4	ExpenseItem	varchar(200)	latin1_swedish_ci		Yes	NULL			Change	Drop	More
☐	5	ExpenseCost	varchar(200)	latin1_swedish_ci		Yes	NULL			Change	Drop	More
☐	6	NoteDate	timestamp			No	current_timestamp()			Change	Drop	More

↑ ☐ Check all   With selected: Browse Change Drop Primary Unique Index Spatial Fulltext A

Server: 127.0.0.1 » **Database: detsdb** » **Table: tbluser**

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | T

Table structure | Relation view

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
☐	1	ID 🔑	int(10)			No	None		AUTO_INCREMENT	Change	Drop	More
☐	2	FullName	varchar(150)	latin1_swedish_ci		Yes	NULL			Change	Drop	More
☐	3	Email	varchar(200)	latin1_swedish_ci		Yes	NULL			Change	Drop	More
☐	4	MobileNumber	bigint(10)			Yes	NULL			Change	Drop	More
☐	5	Password	varchar(200)	latin1_swedish_ci		Yes	NULL			Change	Drop	More
☐	6	RegDate	timestamp			No	current_timestamp()			Change	Drop	More

↑ ☐ Check all   With selected: Browse Change Drop Primary Unique Index Spatial Fulltext Add to central columns Remove from central columns

detsdb.sql SQL File\detsdb.sql

```sql
1   SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
2   SET AUTOCOMMIT = 0;
3   START TRANSACTION;
4   SET time_zone = "+00:00";
5
6
7   CREATE TABLE `tblexpense` (
8     `ID` int(10) PRIMARY KEY AUTO_INCREMENT NOT NULL,
9     `UserId` int(10) NOT NULL,
10    `ExpenseDate` timestamp NOT NULL CURRENT_TIMESTAMP,
11    `ExpenseItem` varchar(200) DEFAULT NULL,
12    `ExpenseCost` varchar(200) DEFAULT NULL,
13    `NoteDate` timestamp NOT NULL CURRENT_TIMESTAMP
14  ) ENGINE=InnoDB DEFAULT CHARSET=latin1;
15
16
17  CREATE TABLE `tbluser` (
18    `ID` int(10) PRIMARY KEY AUTO_INCREMENT NOT NULL,
19    `FullName` varchar(150) DEFAULT NULL,
20    `Email` varchar(200) DEFAULT NULL,
21    `MobileNumber` bigint(10) DEFAULT NULL,
22    `Password` varchar(200) DEFAULT NULL,
23    `RegDate` timestamp NOT NULL CURRENT_TIMESTAMP
24  ) ENGINE=InnoDB DEFAULT CHARSET=latin1;
25
```

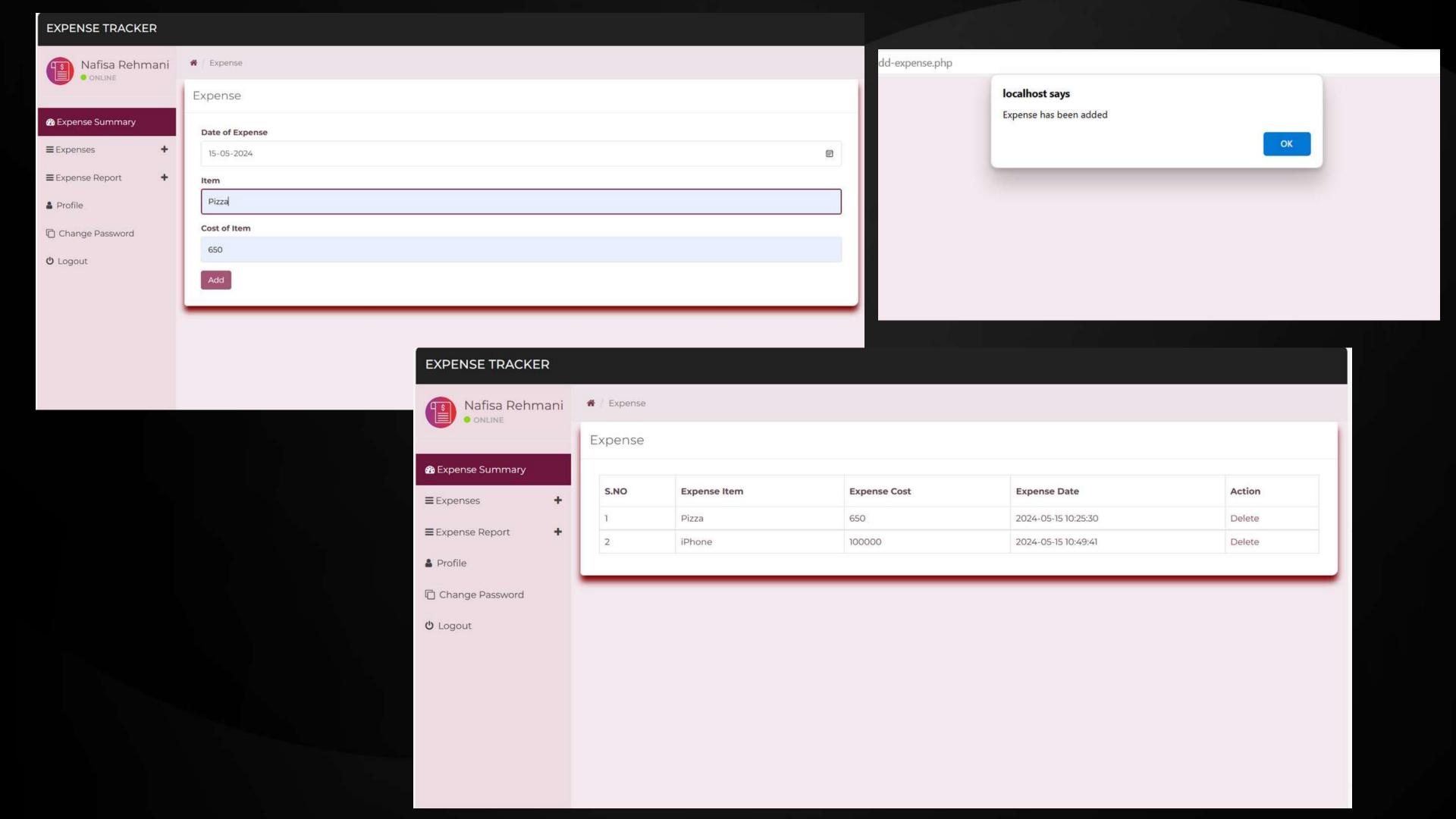# References

ChatGPT
GitHub
Scribd.com
Bard.ai
PhpGurukul
SourceCodster.com
NevonProjects.com
Geeksforgeeks.org
Web.dev
getbootstrap.com
Flaticon.com
icons.getbootstrap.com

Future Work

- Implement JWT for secure user authentication.
- Add password reset functionality.
- Use HTTPS for secure data transmission.
- Make the design responsive using frameworks like Bootstrap or Material-UI.
- Add a dark mode option.
- Improve UI/UX for forms and navigation.
- Send email/SMS notifications for budget limits.
- Implement in-app notifications for reminders.

- Manage expenses in multiple currencies.
- Integrate currency conversion APIs.
- Offer data backup to cloud services.
- Enable data synchronization across devices.
- Develop native mobile apps using React Native or Flutter.
- Implement push notifications.
- Support multiple languages
- Sync with bank transaction data.

Conclusion

The Expense Tracker app empowers users to manage finances. It offers features like expense recording, budgeting, and data visualization to help users understand their spending habits and make informed financial decisions. Security and user-friendliness are key aspects of the application.

THANK YOU