AIRDEN AROMA

A PROJECT REPORT
submitted by

ANEENA JOSEPH
KTE18MCA012

To

The APJ Abdul Kalam Technological University
in partial fulfillment of the requirements for the award of the Degree
Of

Master of Computer Applications

Department of Computer Applications
RAJIV GANDHI INSTITUTE OF TECHNOLOGY
(Government Engineering College)
KOTTAYAM - 686 501, KERALA

June 2021

DECLARATION

I undersigned hereby declare that the project report ”AIRDEN AROMA” , submitted for partial fulfillment of the requirements for the award of degree of Master of Computer Applications of the APJ Abdul Kalam Technological University, Kerala is a bonafide work done by me under supervision of Prof. Jane George. This submission represents my ideas in my own words and where ideas or words of others have been included, I have adequately and accurately cited and referenced the original sources. I also declare that I have adhered to ethics of academic honesty and integrity and have not misrepresented or fabricated any data or idea or fact or source in my submission. I understand that any violation of the above will be a cause for disciplinary action by the institute and/or the University and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been obtained. This report has not been previously formed the basis for the award of any degree, diploma or similar title of any other University.

PAMPADY

June 12, 2021 ANEENA JOSEPH

DEPARTMENT OF COMPUTER APPLICATIONS

RAJIV GANDHI INSTITUTE OF TECHNOLOGY

KOTTAYAM

CERTIFICATE

This is to certify that the report entitled **'AIRDEN AROMA'** submitted by **Ms. ANEENA JOSEPH (Register No: KTE18MCA012)** to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of **Master of Computer Applications** is a bonafide record of the project work carried out by her under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

Internal Supervisor **External Supervisor**

Internal Examiner **HEAD OF THE DEPARTMENT**

Inmakes
Infotech Pvt. Ltd.

11/06/2021

INTERNSHIP CERTIFICATE

This is to certify that **Aneena Joseph** (Registration No : KTE18MCA012) student of **Rajiv Gandhi Institute of Technology,Kottyam** worked as a **Junior Python Developer** (Trainee)from 08-03-21 to 10-06-21 at **Inmakes Infotech Pvt. Ltd.**

During these 3 months, she has worked tremendously well. She remains continually updated with technologies available in the market and took interest in the development of strategies for her project " **Airden Aroma"(Virtual Shop Management)** .

During her working period, we found she was a sincere, honest, hardworking and dedicated employee with a professional attitude and very good job knowledge.

Her work reflects her thoroughness in understanding and implementing her knowledge of programing language. Apart from these, she has also successfully completed her assigned projects and ensured that important deadlines were met.

We Team Inmakes wish her all the Success in her future endeavors!!

For
Inmakes Infotech Pvt.Ltd.
Abhilash Balakrishnan
HR Department

HR MANAGER
Inmakes Infotech Pvt. Ltd.
Trivandrum - 695 582

Inmakes Infotech Private Limited
TVPM - 695 582
Kazhakuttom

04713550194
mail@inmakes.com
www.inmakes.com
Inmakes Infotech Pvt. Ltd.
Opp. Technopark
Trivandrum 695582

ACKNOWLEDGEMENT

The project on **AIRDEN AROMA** wouldn't have been a success if it wasn't for the support and guidance from various sources throughout the development. I use this opportunity to show gratitude towards everyone who have had impact on the project directly or indirectly.

First of all, I thank God almighty for His grace and blessings for without his unforeseen guidance this would have remained in dreams.

I express my deep sense of gratitude to **Dr. Jalaja M.J** ,Principal, Rajiv Gandhi Institute of Technology, Kottayam, for providing the ambiance for carrying out the work of this project.

I am very much thankful to **Prof. John C John**, Associate Professor and Head of the Department, Department of Computer Applications for providing permission, valuable guidance, keen interest and availing all required facilities for undertaking the project in a systematic way.

I acknowledge with thanks the kind of patronage, loving inspiration and timely guidance, which i have received from my staff advisor **Mr. Shalu Murali** Assistant Professor, Department of Computer Applications.

I also express deep and sincere gratitude to **Ms. Jane George**, Assistant Professor, Department of Computer Applications, whose guidance, encouragement, suggestion and very constructive criticism have contributed immensely to the evolution of my ideas on the project.

ABSTRACT

Airden aroma can empower customers to make faster purchasing decisions without needing to visit a physical and very expensive showroom. Virtual showroom management has the modules involved in the development of the proposed website. The website that developed in html,css,javascript as front end and Python jango and mysql as database back end. The admin panel including modules that are product management, user management, offer management and category management. Here the product management helps to manage the products, that are available in virtual showroom. User management module helps to manage the users of virtual showroom. The offer management, manage the offers provided by virtual showroom. And, the products are maintained through category, it is done by category management.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER 1

INTRODUCTION

1.1 Need For The Project

This project focused on creating an application to perform online business in a better manner with minimal manual work. Which provide a facility to design and develop the online shopping , based on their requirements by the client. In the current era of modern industrial world, more emphasis is given for the implementation of modern technology and advanced research in the area of online shopping. Because existing system, not suit for every business and have security concerns assosiated with centralized data, the company thinks to extend the system with online interactions.

1.2 Outline Of The Report

The Requirement analysis and Specification is included in chapter 2.It contain provides a model of system information, function and behavior. System modeling is described in chapter 3. It contain module description and data flow diagram. Chapter 4 has the review of overall system design. It show the table design and screenshots of the proposed system. Testing methods and system testing reports are included in chapter 5. System implementation and implementation methods are discussed in chapter 6. The conclusion and future scope of the project is summarized in chapter 7.

1.3 Motivation

As the need and requirement of the products grows, the companay needs a software, for accessing the products anywhere at anytime to customers. By automating the system, customers can easily access products, such as perfumes, diffusers and aroma oils. It allows for the consolidation of customer data and the basis for deep insights. And it allows geographically dispersed teams to collaborate effectively.

1.4 Scope Of The Project

This system is designed to generate online shopping, there by customers can access products at anytime. Customers can view products clearly with available offers. It also provide discount coupons. And customers can view trending products, newly collection of products, just through the website. Customers can choose any type of payment mode.

CHAPTER 2

REQUIREMENT ANALYSIS AND SPECIFICATION

2.1 System Study

System study is the process of gathering or interpreting data or facts diagnosing the problem and using this information for the improvement of the system. In the development of the software, structured analysis was followed by graphical tools like DFD or SYSTEM FLOW diagram are used to construct data transformation model of the system.They provide necessary information about input data,its processing and output data.The requirements analysis involve study of the existing system,its advantages and disadvantages.It also involve the use of effective methods to overcome these problems while developing new system

2.1.1 Existing System

The existing system is a physical store, where the products such as diffuser, perfumes, oils are display physically. Customers can purchase products aafter reaching the shop. Staff-over-reliance may diminsh customer loyalty through a bad experience. It require initial time and productivity cost of implementation. It also requires a process-driven sales organization. And there exist security concerns assossiated with centralized data.

2.1.2 Proposed System

The proposed system is a Airden Aroma. It aims to overcome the drawbacks of the existing system. Here, it allows for the consolidation of customer data and the basis for deep insights. It speeds-up the sales conversion process. It increases staff productivity, lowering time-cost. It allows geographically dispersed teams to collaborate effectively. Improves customer experience by allowing personalization and improved query resolution

2.2 System specification

2.2.1 Specification for development

2.2.1.1 Hardware Specification

- Processor : Intel i3
- Primary memory : 2 GB
- Hard Disk : 40 GB

2.2.1.2 Software Specification

- Front End Tool : Python 3.6
- Back End Tool : Mysql
- Operating System : Windows
- Web Browsers : Google Chrome
- Framework : Django

2.2.2 Specification For Implementation

2.2.2.1 Hardware Specification

- Processor : Intel i3
- Primary memory : 2 GB
- Hard Disk : 40 GB

2.2.2.2 Software Specification

- Front End Tool : Python 3.6
- Back End Tool : Mysql
- Operating System : Windows
- Web Browsers : Google Chrome
- Framework : Django

2.3 Software Tools

2.3.1 Python

Python 3.6 used in this project. Python is an interpreted, high-level, general-purpose programming language. Created by Guido van Rossum and first released in 1991, Python has a design philosophy that emphasizes code readability, notably using significant whitespace. Python was conceived in the late 1980s by Guido van Rossum at Centrum Wiskunde Informatica (CWI) in the Netherlands as a successor to the ABC language (itself inspired by SETL), capable of exception handling and interfacing with the Amoeba operating system.Python is a multi-paradigm programming language. Object-oriented programming and structured programming are fully supported, and

many of its features support functional programming and aspect-oriented programming (including by meta programming and meta objects (magic methods)). Many other paradigms are supported via extensions, including design by contract and logic programming.

Python 2.7 is the last major release in the 2.x series, as the Python maintainers have shifted the focus of their new feature development efforts to the Python 3.x series. This means that while Python 2 continues to receive bug fixes, and to be updated to build correctly on new hardware and versions of supported operated systems, there will be no new full feature releases for the language or standard library.

2.3.2 Mysql

MySQL is a source relational (RDBMS); in July 2013, it was the world's second most widely used RDBMS, and the most widely used opensource client–server model RDBMS. It is named after co-founder Michael Widenius's daughter, MySQL acronym stands for Structured Query Language. The MYSQL development project has made its source code available under the terms of the GNU General Public License. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation. For proprietary use, several paid editions are available, and offer additional functionality. LAMP is an acronym for "Linux, Apache, MySQL, Perl/PHP/Python." Free-software-open source projects that require a full-featured database management system often use MySQL. Applications that use the MySQL database include: TYPO3, MODx, Joomla, WordPress , phpBB, MyBB, Drupal and other software. On all platforms except Windows, MySQL ships with no GUI tools to administer MySQL databases or manage data contained within the databases. Users may use the included command line tools, or install MySQL workbench via a separate download. Many third party GUI tools are also available. MySQL

is offered fewer than two different editions: the open source MySQL Community Server and the proprietary Enterprise Server. MySQL Enterprise Server is differentiated by a series of proprietary extensions which install as server plugins, but otherwise shares the version numbering system and is built from the same code base.

2.3.3 Django

Django is a free and open-source web framework, written in Python, which follows the model-view-template (MVT) architectural pattern. It is maintained by the Django Software Foundation (DSF), an independent organization.

Django's primary goal is to ease the creation of complex, database-driven websites. Django emphasizes reusability and "pluggability" of components, less code, low coupling, rapid development, and the principle of don't repeat yourself. Python is used throughout, even for settings files and data models. Django also provides an optional administrative create, read, update and delete interface that is generated dynamically through introspection and configured via admin models.

Django was created in the fall of 2003, when the web programmers at the Lawrence Journal-World newspaper, Adrian Holovaty and Simon Willison, began using Python to build applications. It was released publicly under a BSD license in July 2005. Django's configuration system allows third party code to be plugged into a regular project, provided that it follows the reusable appconventions. More than 2500 packagesare available to extend the framework's original behavior, providing solutions to issues the original tool didn't tackle: registration, search, API provision and consumption, CMS, etc.

Django may also be run in conjunction with Jython on any Java EE application server such as GlassFish or JBoss. In this case django-jython must be installed in order

to provideJDBC drivers for database connectivity, which also can provide functionality to compile Django in to a .war suitable for deployment. Django is a free and open source web application framework written in Python. A framework is nothing more than a collection of modules that make development easier. They are grouped together, and allow you to create applications or websites from an existing source, instead of from scratch.

2.3.4 HTML

Hypertext Markup Language (HTML), the languages of the World Wide Web (WWW), allows users to produces Web pages that include text, graphics and pointer to other Web pages (Hyperlinks).

HTML is not a programming language but it is an application of ISO Standard 8879, SGML (Standard Generalized Markup Language), but specialized to hypertext and adapted to the web. The idea behind Hypertext is that instead of reading text in rigid linear structure, we can easily jump from one point to another point. A markup language is simply a series of elements, each delimited with special characters that define how text or other items enclosed within the elements should be displayed. Hyperlinks are underlined or emphasized works that load to other documents or some portions of the same document.

CHAPTER 3

SYSTEM MODELLING

3.1 Introduction

System modeling is the inter disciplinary study of the model to conceptualize and construct in business and IT development.

A common type of systems modeling is function modeling,with specific techniques such as the Data Flow Diagram.These models can be extended using functional decomposition,and can be linked to requirements models for further systems partition.
.

3.2 Module Description

Airden Aroma has admin module, and it have nine functional modules. They are,

3.2.1 Product Management

Product management is a process that focuses on bringing a new product to market or developing an existing one. It starts with an idea of a product that a customer will interact with and ends with the evaluation of the product's success.You may need to clear all products transients to immediately see results on frontend after changing product settings. Alternatively you can just update each product individually to clear its transients.

3.2.2 User Management

User Role and Permission is a powerful user management system: You can create role, customize permission under a department/designation or without department and assign your users underneath your created role or permission. Each Signup Admin user manage own user.

3.2.3 Offer Management

Offer management platform is a designated software that helps marketers manage, distribute, secure, and track digital offers. With a dedicated offer management software, you get to control your offers throughout their entire lifecycle.

3.2.4 Category Management

This extension helps to modify the category in a quick way. Drag drop feature to sort the columns. You can enable and disable the columns. It allows you to edit the multiple categories at one time. You do not need to open the particular category page. It saves time when managing the category

3.2.5 Blog Management

It is the application to track all activities of a blogger or a site admin. With this app, you can track blog/site current states, seo checklist, social media campaigns, earnings through blog/site, todo, link building campaign, site sales. Its great innovative product for bloggers and site managers.

3.2.6 Coupon Management

This is used to create and manage gift coupons in the same way you would manage standard discount coupons. Some of stores impress their customers through

grant a discount for that, there are some different ways to apply discount over product. Consider, you want to add some codes in your sore for specific products or maybe you've added some coupon in your shop and now you want to change some fields. You have to edit them one by one and apply your change and save them. Yes, that is so boring action.

3.2.7 New Collection

The admin wants to show some important products in attractive way. New collection is used for that purpose. We can add the product in the new collection list. It will show in the front end in attractive way. It will help them to improve their business.

3.2.8 Todays deals

The admin wants to show the current offers in an attractive way in front of end users. They want to show the validity. The offers is a main part in the business. It will give them a profit in their sales.

3.2.9 Story management

The user can add stories about their used products. It is shown in the front end only after the admin accept it. The user can add stories for a specific product.

3.3 Data Flow Diagrams

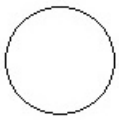
A data flow diagram is a graphical technique that depicts information flow and transforms that are applied as data move from input to output. The DFD is used to represent increasing information flow and functional details. A level 0 DFD also called a fundamental system model represents the entire software elements as a single bible with input and output indicated by incoming and outgoing arrows respectively.

Data flow diagrams are the pictorial way of showing the flow of data into, around and out of the system. The users can understand them easily and there is no way to misinterpretation than textual description. With a dataflow diagram, users are able to visualize how the system will operate, what the system will accomplish and how the system will be implemented.

A data flow diagram illustrates the processes, data stores, and external entities in a business or other system and the connecting data flows. The four components of a data flow diagram (DFD) are:

- External Entities/Terminators/Sources/Sinks: Represented by a square
- Processes: Represented by a circle
- Data Flows: Represented by an arrow.
- Data Source: Represented by two parallel lines, connected by a vertical line.

A data flow diagram illustrates the processes, data stores, and external entities in a business or other system and the connecting data flows. The four components of a data flow diagram (DFD) are:

Symbol	Meaning
Process 	Single Process : A circle is used to represent the entire system.
Data Flow 	Data Flow : An arrow is used to represent the flow of data between the process and external entities.
External Entity 	External Entity : A square or rectangle represents any person or organization that sends data to or receives data from the system.
Data Store 	Data Store : An open rectangle represents the location where the data is stored. It could be a filing cabinet, harddisk.

3.3.1 Context Level

Fig. 3.1. Level - 0

3.3.2 Level 1

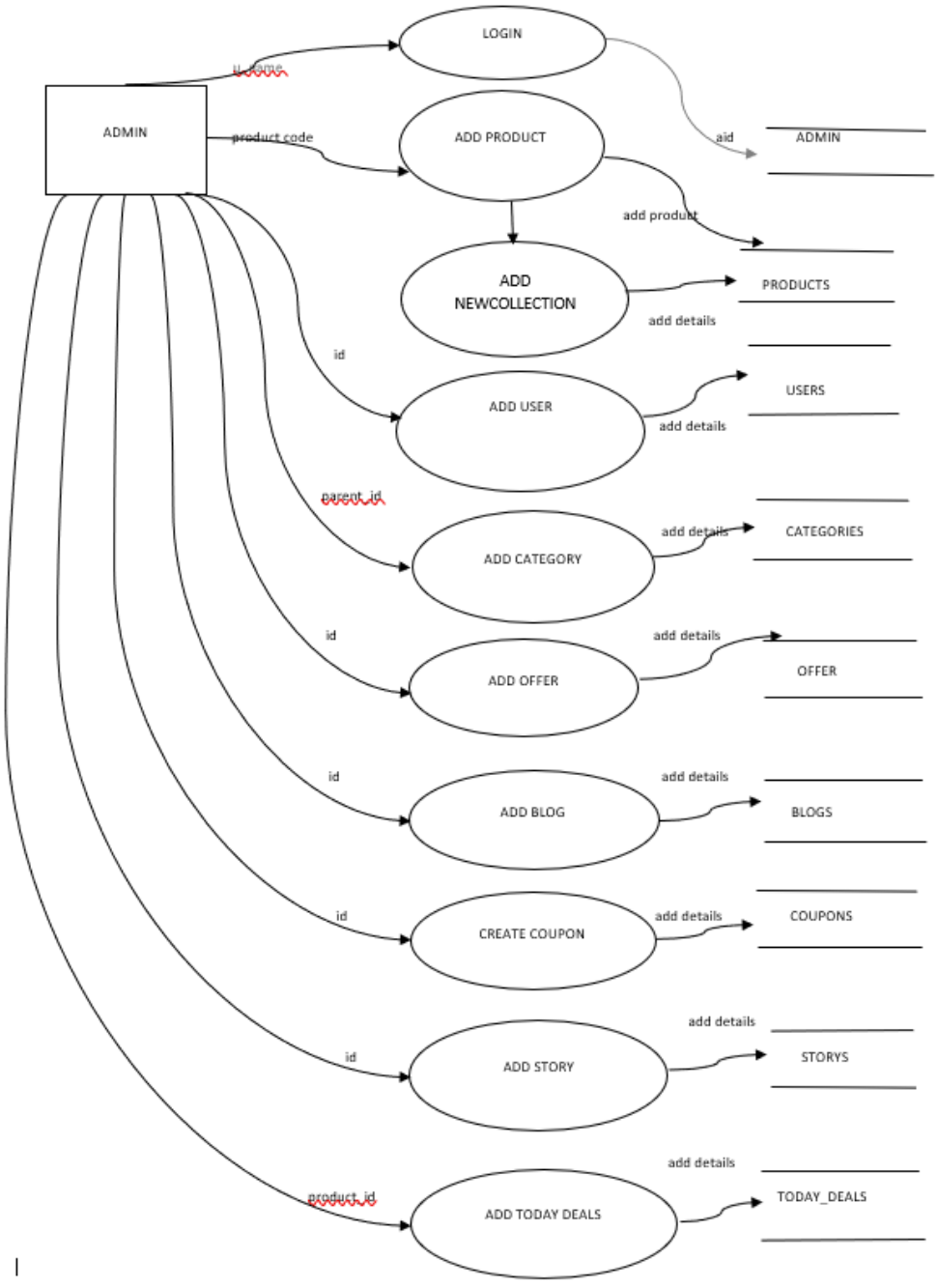


Fig. 3.2. Level - 1

CHAPTER 4

SYSTEM DESIGN

4.1 Introduction

Database design is the organisation of data according to a database model. The designer determines what data must be stored and how the data elements interrelate. With this information, they can begin to fit the data to the database model.

- Determining data to be stored : This process is one which is generally considered part of requirements analysis, and requires skill on the part of the database designer to elicit the needed information from those with the domain knowledge.
- Determining data relationships : Once a database designer is aware of the data which is to be stored within the database, they must then determine where dependency is within the data.
- Logically structuring data :Arrange the data into a logical structure which can then be mapped into the storage objects supported by the database management system.
- Normalization : Normalization is a systematic way of ensuring that a database structure is suitable for general-purpose querying and free of certain undesirable characteristics—insertion, update, and deletion anomalies that could lead to loss of data integrity.

4.2 Database Design

4.2.1 Tables

Table 4.1. Login

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
Username	Integer	PRIMARY KEY	Name
Password	Varchar	NOT NULL	Password
type	Varchar	NOT NULL	type

Table 4.2. Product

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
id	bigint(5)	primary key	id
category id	bigint(5)	primary key	category id
name	varchar(20)	not null	name
product code	varchar(5)	not null	product code
description	text	null	description
short description	text	null	short description
features	text	null	features
discount	double	null	discount
image	varchar(100)	null	image
banner	varchar(100)	null	banner image
mob image	varchar(100)	null	mobile image
image alt	varchar(100)	null	alternate
seo title	varchar(100)	null	seo title
meta code	text	null	features
status	tinyint(4)	null	status
featured	tinyint(4)	null	features
featured order	smallint(6)	null	featured order
order	smallint(6)	null	order
newcollection	smallint(6)	null	newcollection
trending	smallint(6))	null	trending
created at	timestamp	null	date of creation
updated at	timestamp	null	date of updation

Table 4.3. Product gallery

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
id	bigint(20)	primarykey	id
product id	bigint(20)	foreign key	product id
order	smallint(6)	not null	order
status	tinyint(4)	not null	status
created at	timestamp	null	date of creation
updated at	timestamp	null	date of updation

Table 4.4. Product attribute

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
id	int(10)	primarykey	id
product id	bigint(20)	foreign key	product id
attribute value id	int(10)	notnull	attribute value
created at	timestamp	null	date of creation
updated at	timestamp	null	date of updation

Table 4.5. Product reviews

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
id	bigint(20)	primarykey	id
product id	bigint(20)	foreign key	product id
user id	bigint(20)	null	user id
rating	mediumint(9)	notnull	rating
name	varchar(100)	null	name
email	varchar(80)	null	email

Table 4.6. Product values

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
id	bigint(20)	primarykey	id
product id	bigint(20)	foreign key	product id
sku	varchar(80)	null	stock keeping unit
quantity	int(11)	notnull	quantity
stock	int(11)	notnull	stock
price	double(10,2)	null	price
final price	double(10,2)	null	final price

Table 4.7. Users

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
id	bigint(20)	primarykey	id
user group id	bigint(20)	not null	product id
name	varchar(80)	null	name
email	varchar(80)	null	email
phone	varchar(80)	null	phone
email verified at	timestamp	null	date of email verification
password	varchar(80)	notnull	password
profile image	varchar(150)	null	profile image
url	varchar(80)	null	url
status	tinyint(4)		status
remeber token	varchar(100)	null	stock
created at	timestamp	null	date of creation

Table 4.8. User groups

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
id	bigint(20)	primarykey	id
name	varchar(80)	notnull	name
status	tinyint(4)	notnull	status
created at	timestamp	null	date of creation
updated at	timestamp	null	date of updation

Table 4.9. Categories

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
id	bigint(20)	primary key	id
parent id	bigint(20)	null	parent id
name	varchar(120)	not null	name
urlslug	varchar(150)	null	url
featured	tinyint(4)	notnull	image
order	smallint(6)	notnull	banner image
created at	timestamp	null	date of creation
updated at	timestamp	null	date of updation

Table 4.10. Offer management

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
id	bigint	primary key	id
title	Varchar	not null	title
description	longtext	not null	description
status	tinyint	not nullL	status
created at	timestamp	null	date of creation
updated at	timestamp	null	date of updation

Table 4.11. Blogs

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
id	bigint	primary key	id
subtitle	text	null	subtitle
title features	text	null	title features
name	varchar	notnull	name
detail	text	notnull	details
features	text	null	features
urlslug	varchar	null	url
subcontent	mediumtext	null	subcontent
blog categories	text	null	categories of blog
create time	varchar	notnull	time of creation
image	varchar	null	image
mob image	varchar	null	mobille image
banner	varchar	null	banner
image alt	varchar	null	image alt
created by	varchar	notnull	created peson
created at	timestamp	null	date of creation
updated at	timestamp	null	date of updation
deleted at	timestamp	null	date of deletion

Table 4.12. Blog galleries

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
id	bigint	primary key	id
blog id	bigint	notnull	blog id
name	varchar	null	name
image	varchar	null	image
image alt	varchar	null	alternate of image
order	smallint	notnull	order
status	tinyint	notnull	status
created at	timestamp	null	date of creation
updated at	timestamp	null	date of updation

Table 4.13. Blog comments

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
id	bigint	primary key	id
blog id	bigint	notnull	blog id
user id	bigint	notnull	user id
ip	varchar	notnull	ip address
comments	text	notnull	comments
name	varchar	null	name
email	varchar	null	email
status	tinyint	notnull	status
created at	timestamp	null	date of creation
updated at	timestamp	null	date of updation
deleted at	timestamp	null	date of deletion

Table 4.14. Coupons

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
id	bigint	primary key	id
title	varchar	null	title
description	text	null	description
type	smallint	notnull	type
coupon code	varchar	notnull	coupon code
expiry date	datetime	notnull	date of expiry
discount percentage	double	notnull	percentage of discount
image	varchar	null	image
status	tinyint	notnull	status
created at	timestamp	null	date of creation
updated at	timestamp	null	date of updation

Table 4.15. Storys

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
id	bigint	primary key	id
subtitle	text	null	subtitle
title features	text	null	title features
name	varchar	notnull	name
detail	text	notnull	details
features	text	null	features
urlslug	varchar	null	url
subcontent	mediumtext	null	subcontent
story categories	text	null	categories of story
create time	varchar	notnull	time of creation
image	varchar	null	image
mob image	varchar	null	mobille image
banner	varchar	null	banner
image alt	varchar	null	image alt
created by	varchar	notnull	created peson
created at	timestamp	null	date of creation
updated at	timestamp	null	date of updation
deleted at	timestamp	null	date of deletion

Table 4.16. Story galleries

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
id	bigint	primary key	id
story id	bigint	notnull	story id
name	varchar	null	name
image	varchar	null	image
image alt	varchar	null	alternate of image
order	smallint	notnull	order
status	tinyint	notnull	status
created at	timestamp	null	date of creation
updated at	timestamp	null	date of updation

Table 4.17. Story comments

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
id	bigint	primary key	id
story id	bigint	notnull	story id
user id	bigint	notnull	user id
ip	varchar	notnull	ip address
comments	text	notnull	comments
name	varchar	null	name
email	varchar	null	email
status	tinyint	notnull	status
created at	timestamp	null	date of creation
updated at	timestamp	null	date of updation
deleted at	timestamp	null	date of deletion

Table 4.18. Today deals

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
id	bigint	primary key	id
category id	bigint	notnull	category id
product id	bigint	notnull	product id
startdate	datetime	notnull	start date
enddate	datetime	notnull	end date
status	smallimt	notnull	status
order	smallint	notnull	order
created at	timestamp	null	date of creation
updated at	timestamp	null	date of updation

4.3 User-Interface Design

4.3.1 The UI screen shots of system

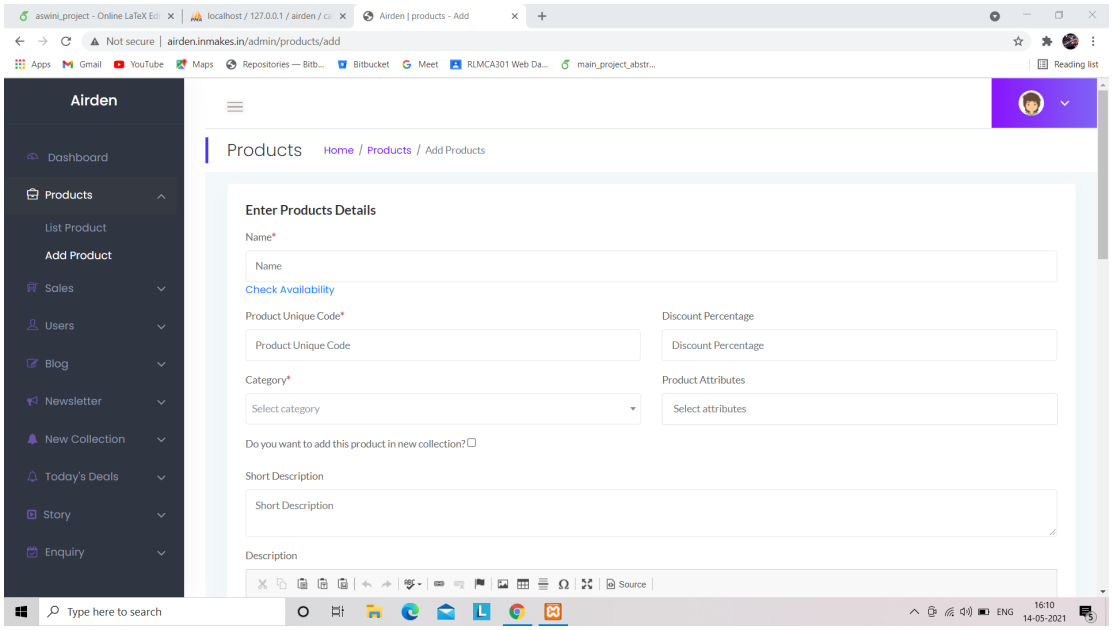


Fig. 4.1. ADD PRODUCT

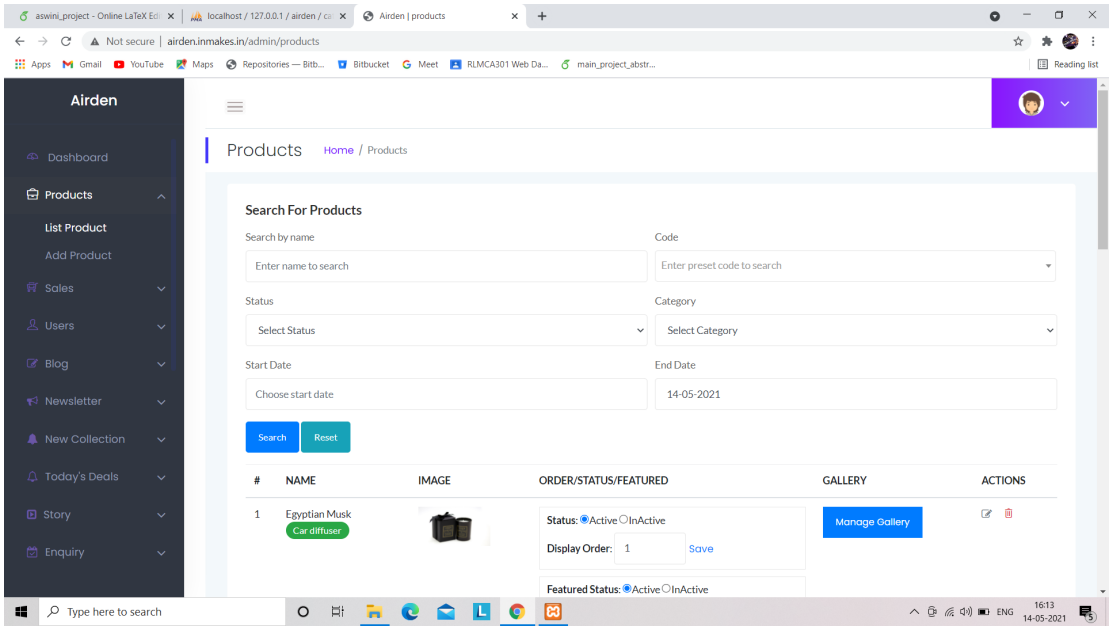


Fig. 4.2. LIST PRODUCT

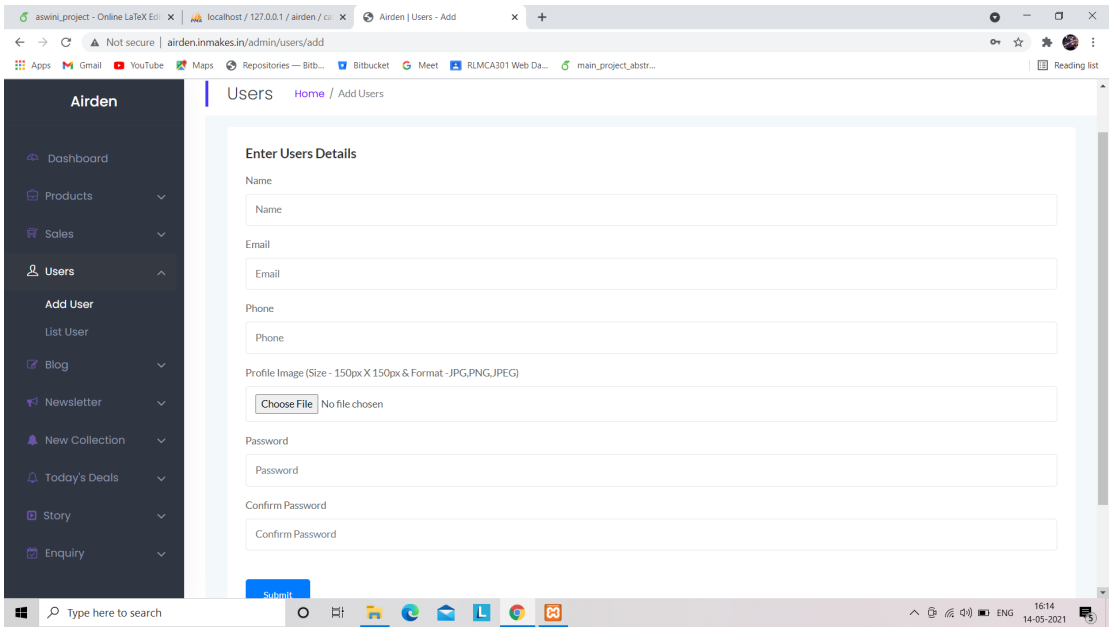


Fig. 4.3. ADD USER

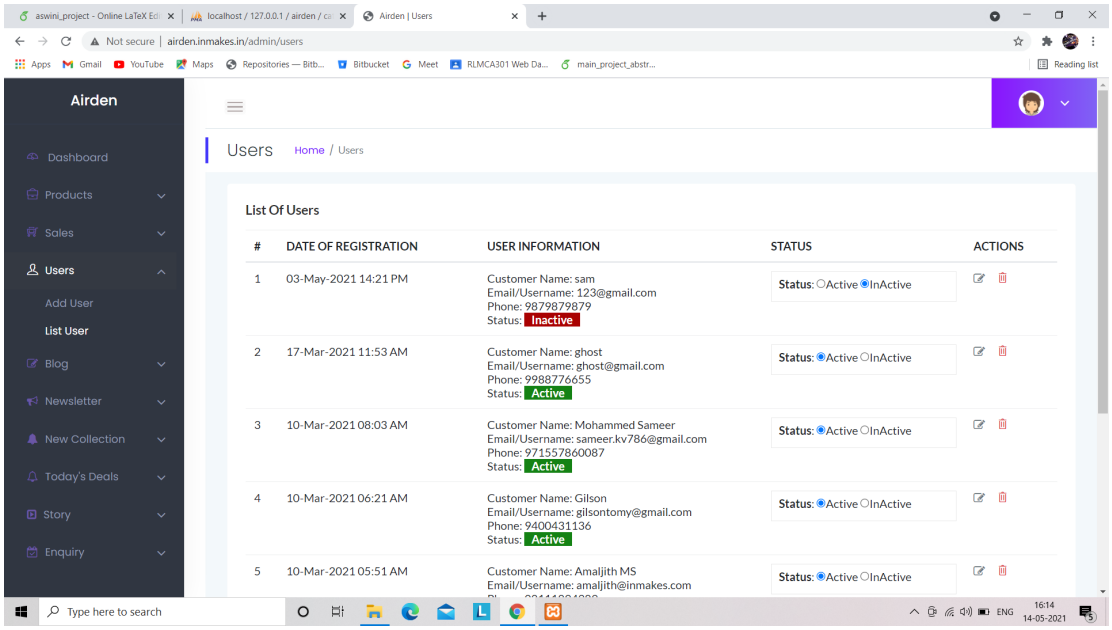


Fig. 4.4. LIST USER

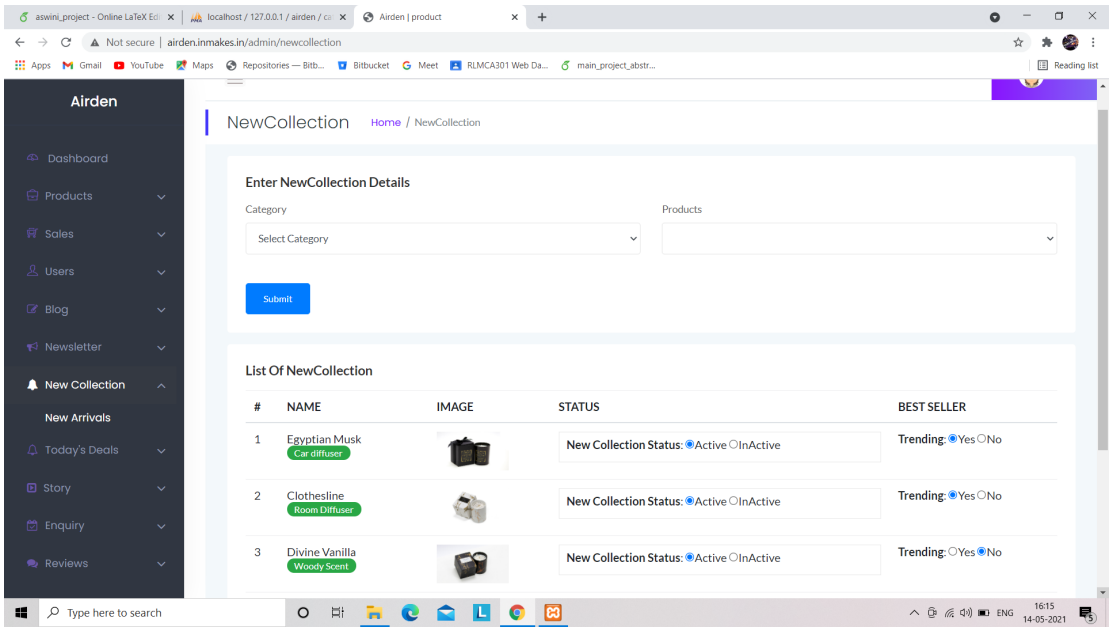


Fig. 4.5. NEWCOLLECTION

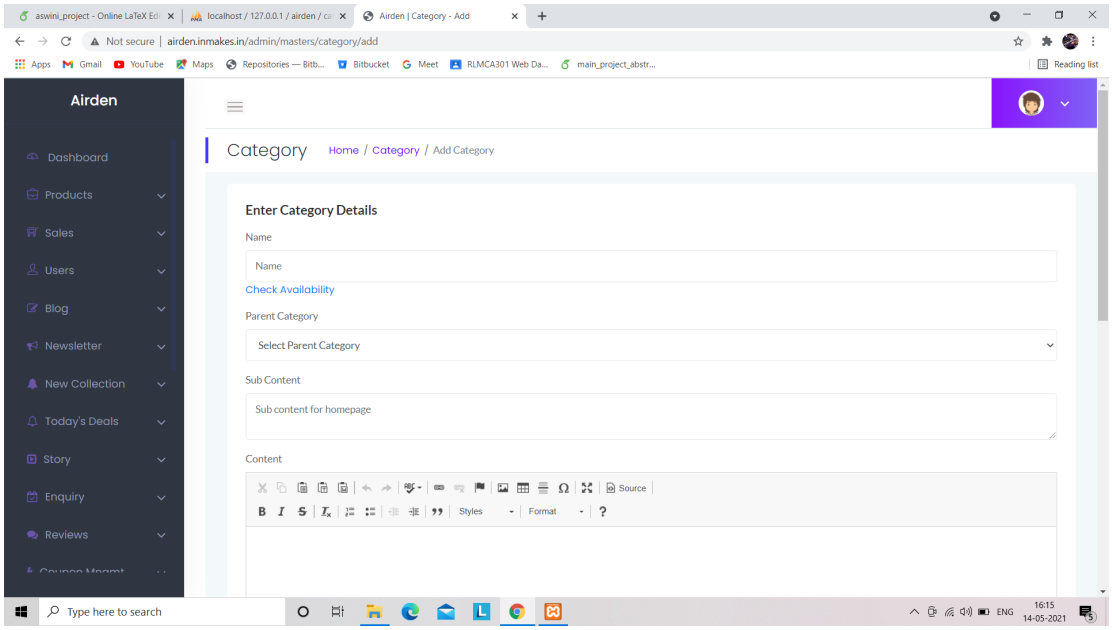


Fig. 4.6. ADD CATEGORY

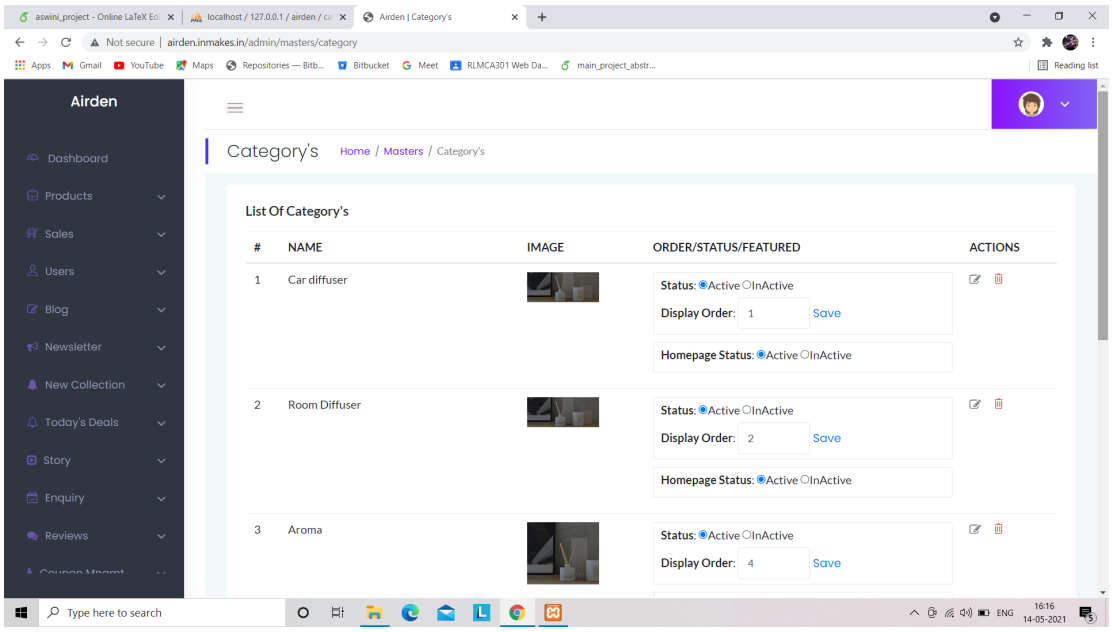


Fig. 4.7. LIST CATEGORY

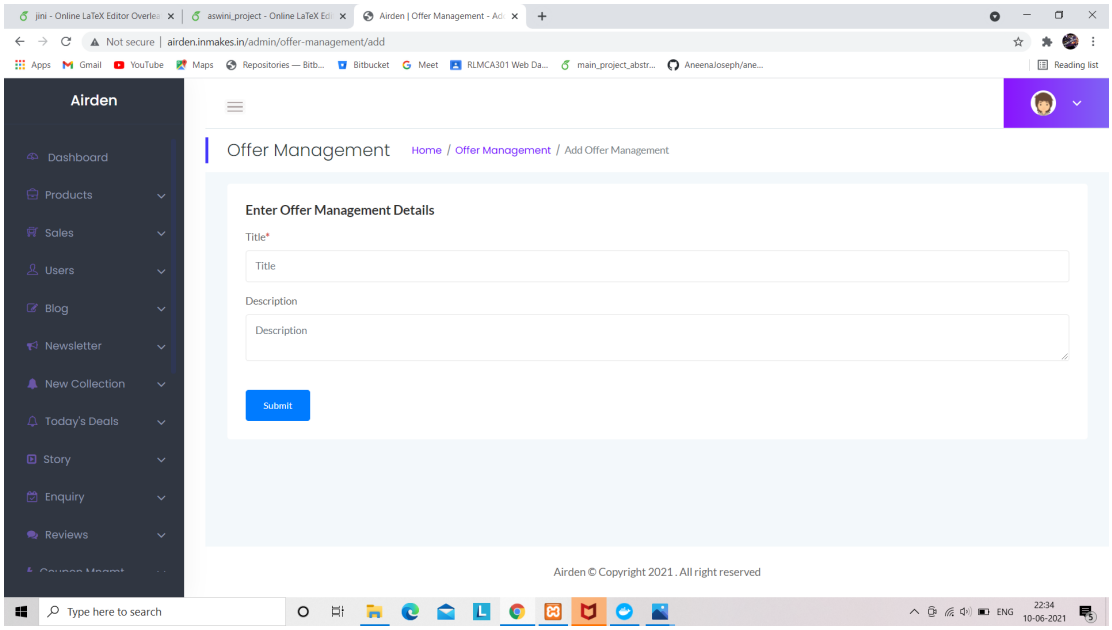


Fig. 4.8. ADD OFFER

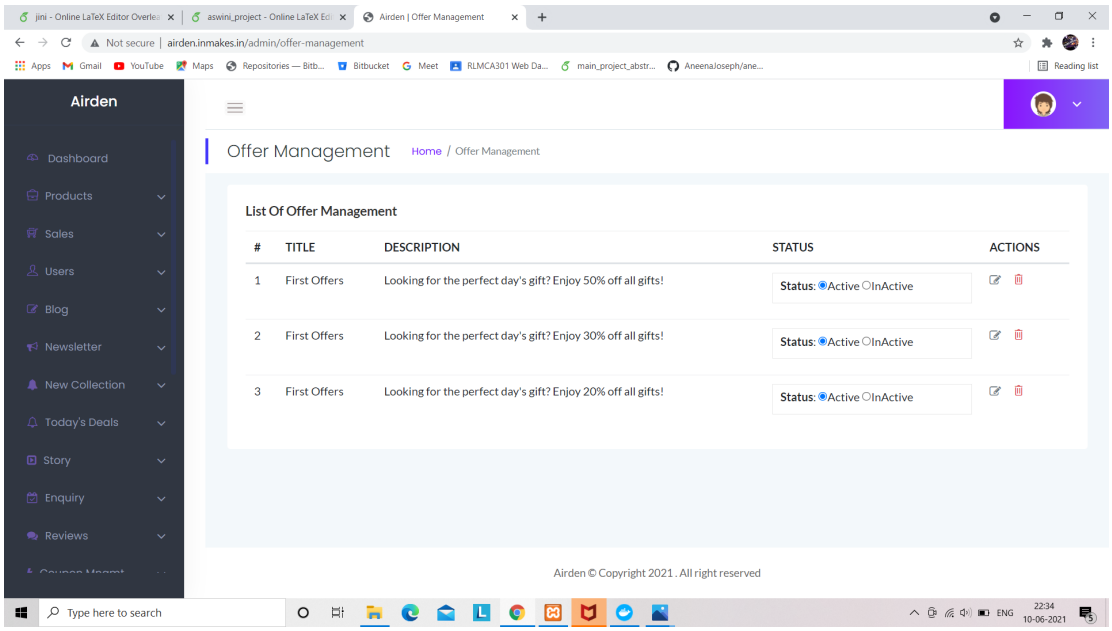


Fig. 4.9. LIST OFFER

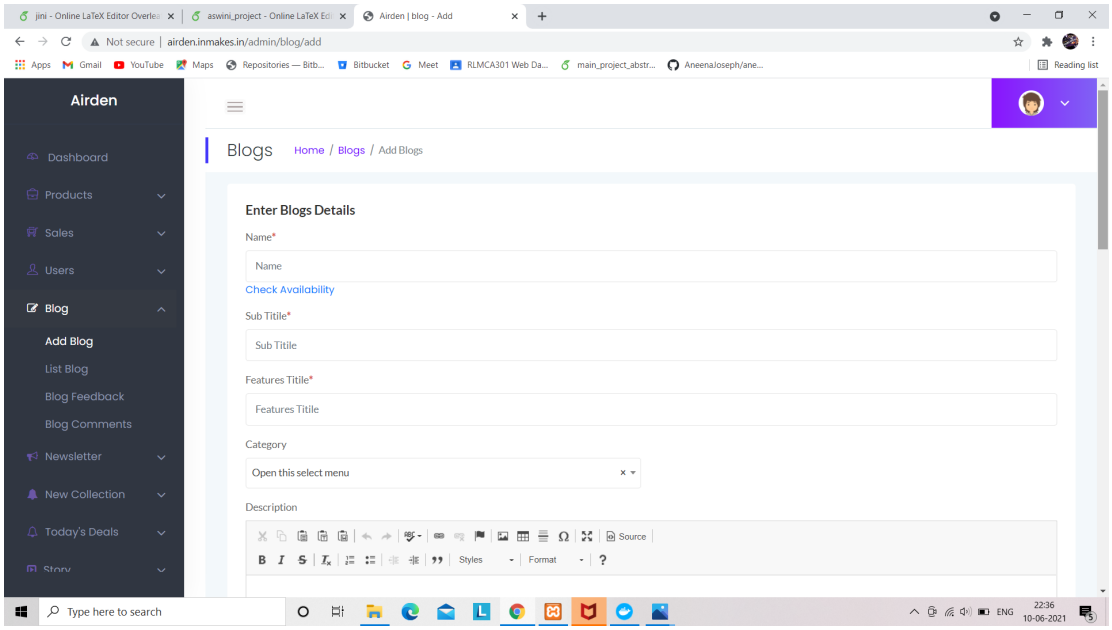


Fig. 4.10. ADD BLOG

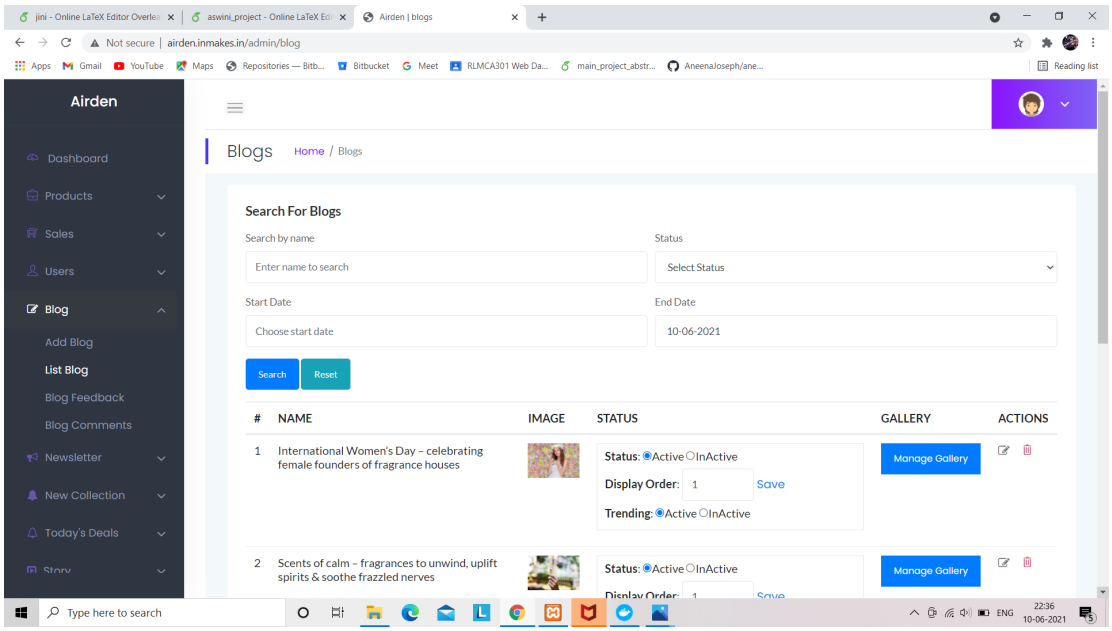


Fig. 4.11. LIST BLOG

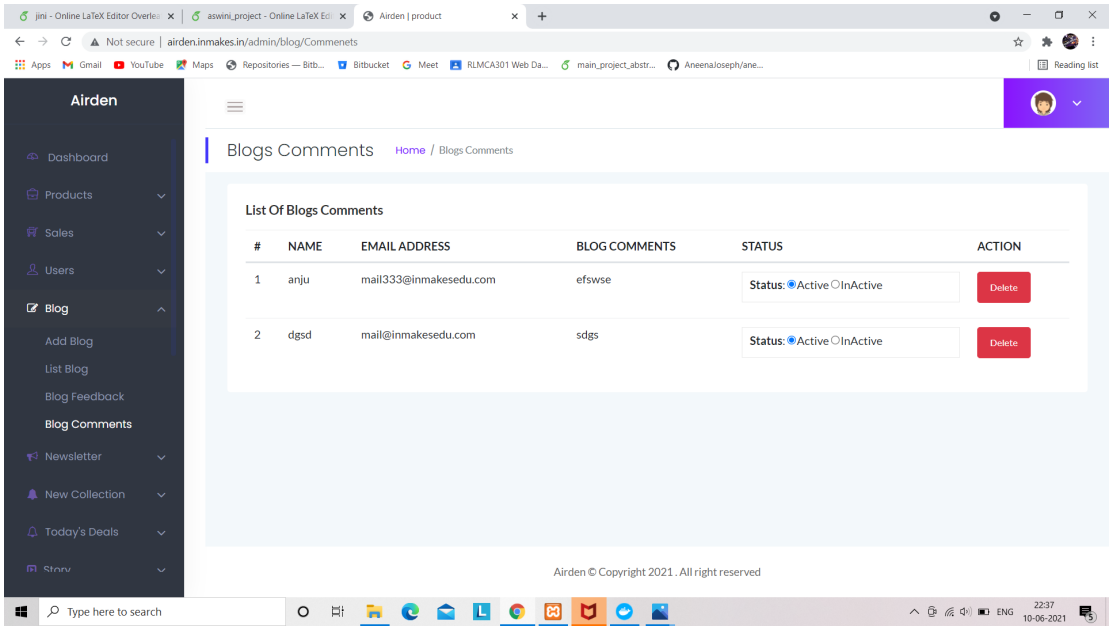


Fig. 4.12. BLOG COMMENTS

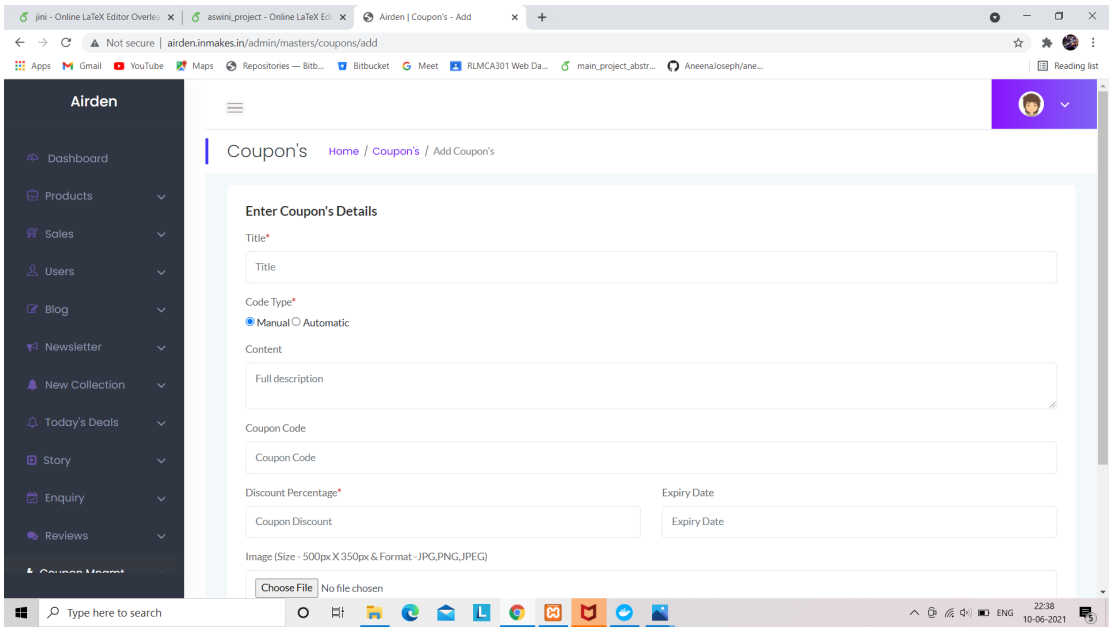


Fig. 4.13. ADD COUPON

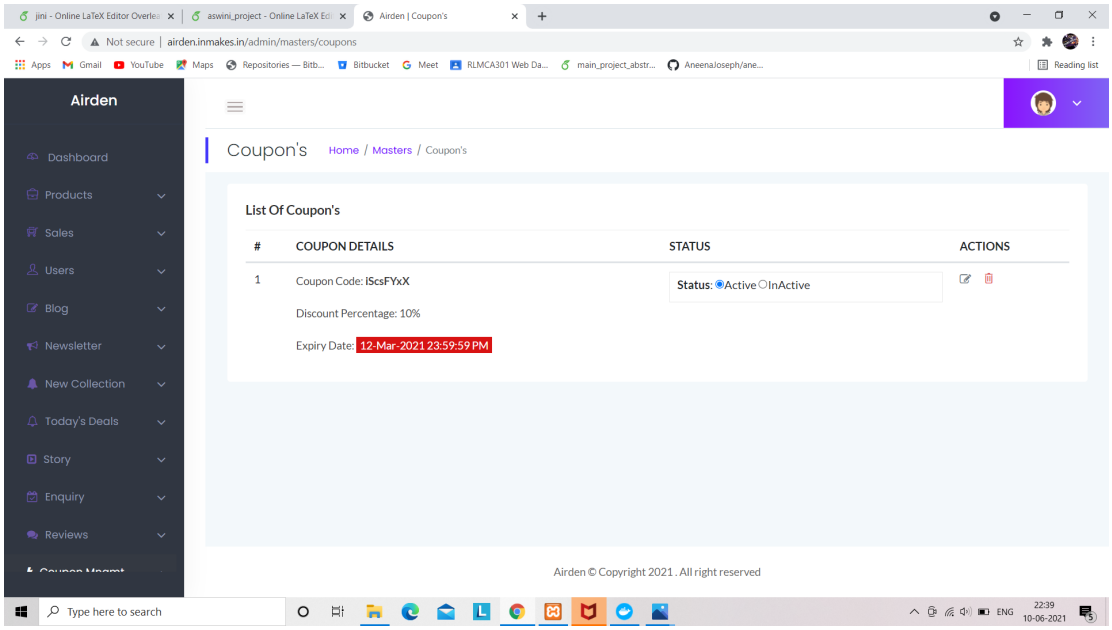


Fig. 4.14. LIST COUPON

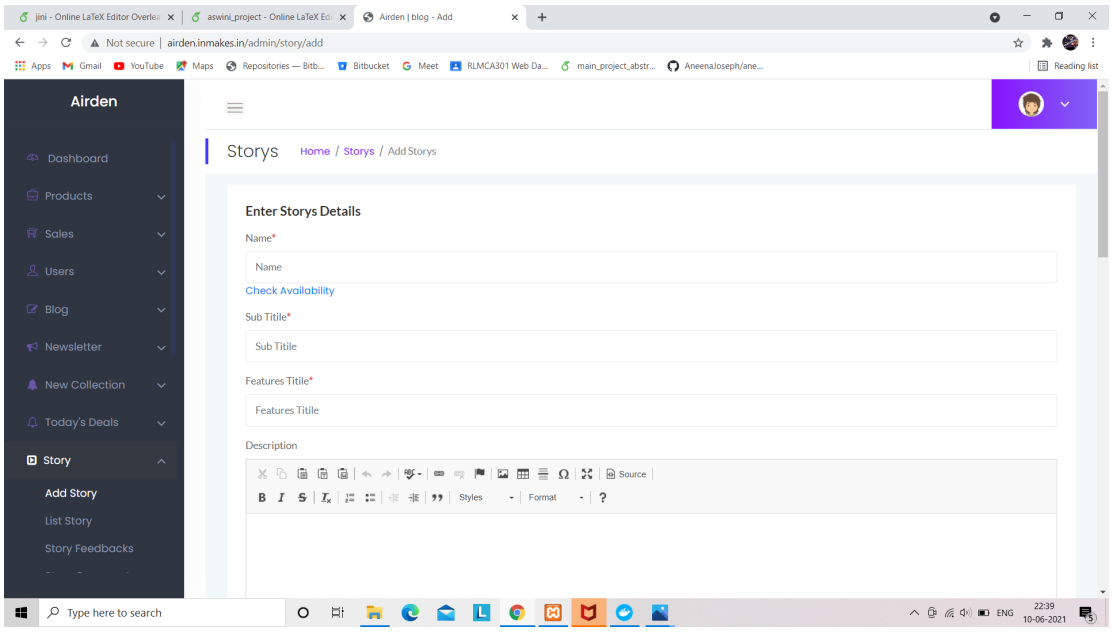


Fig. 4.15. ADD STORY

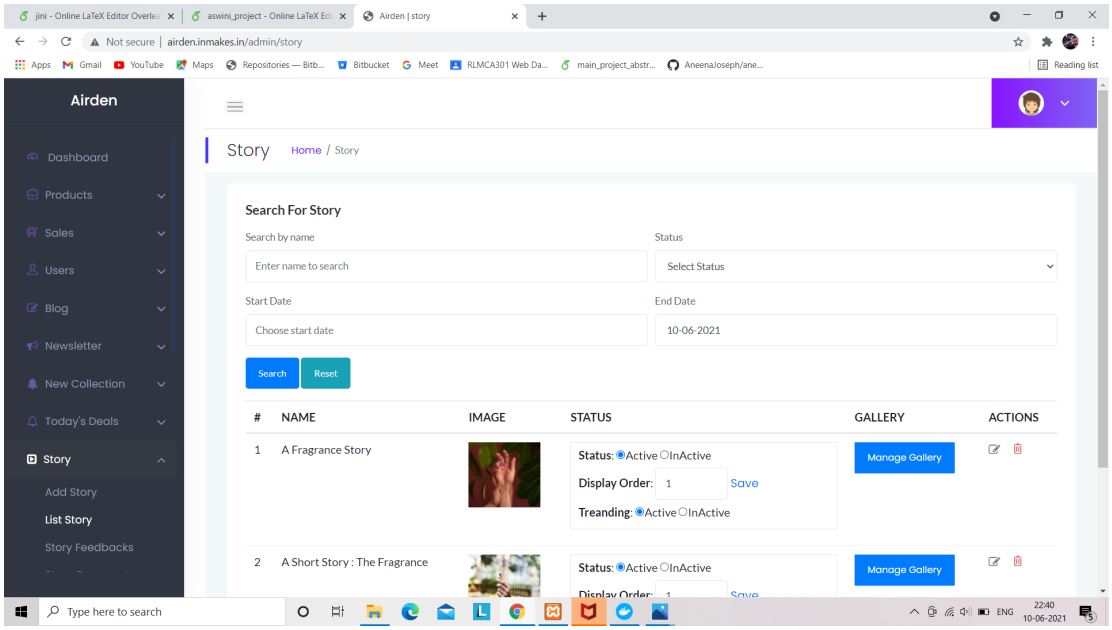


Fig. 4.16. LIST STORY

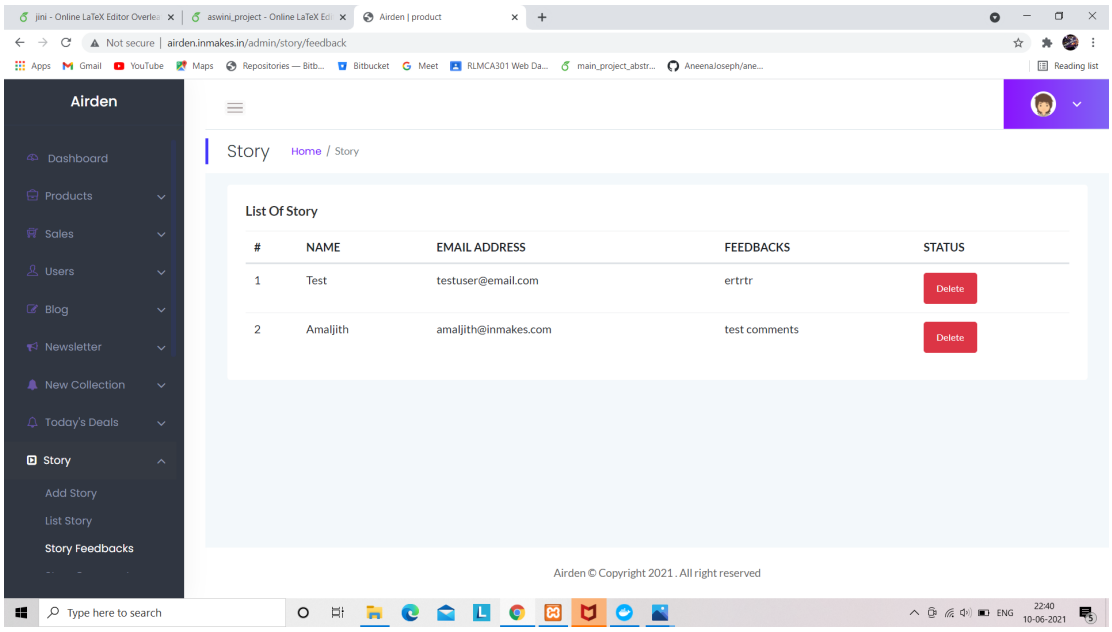


Fig. 4.17. STORY FEEDBACK

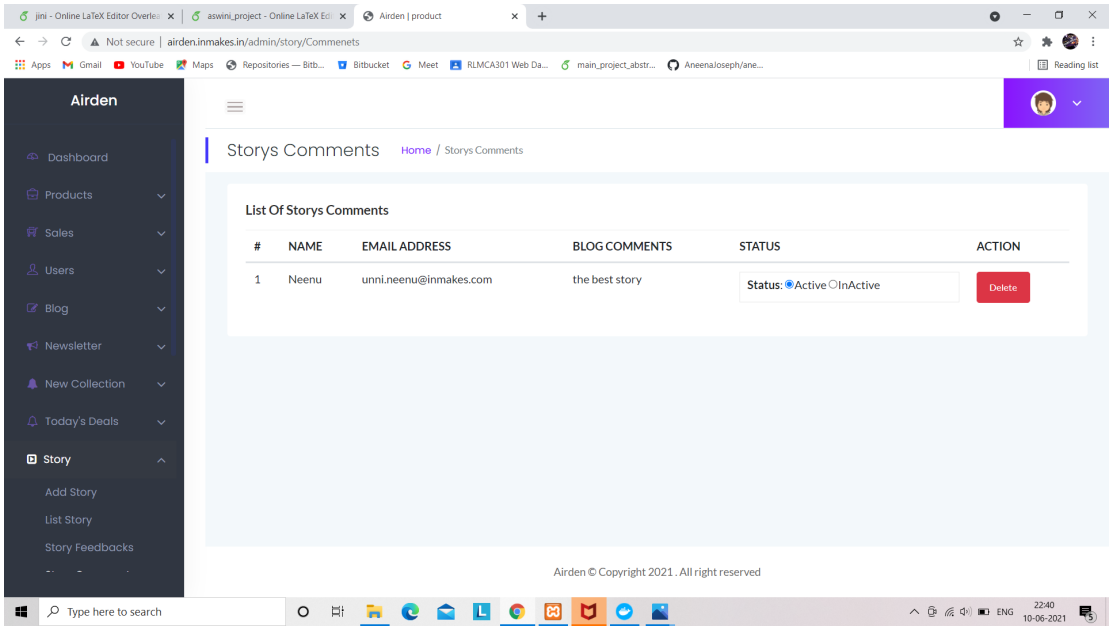


Fig. 4.18. STORY COMMENT

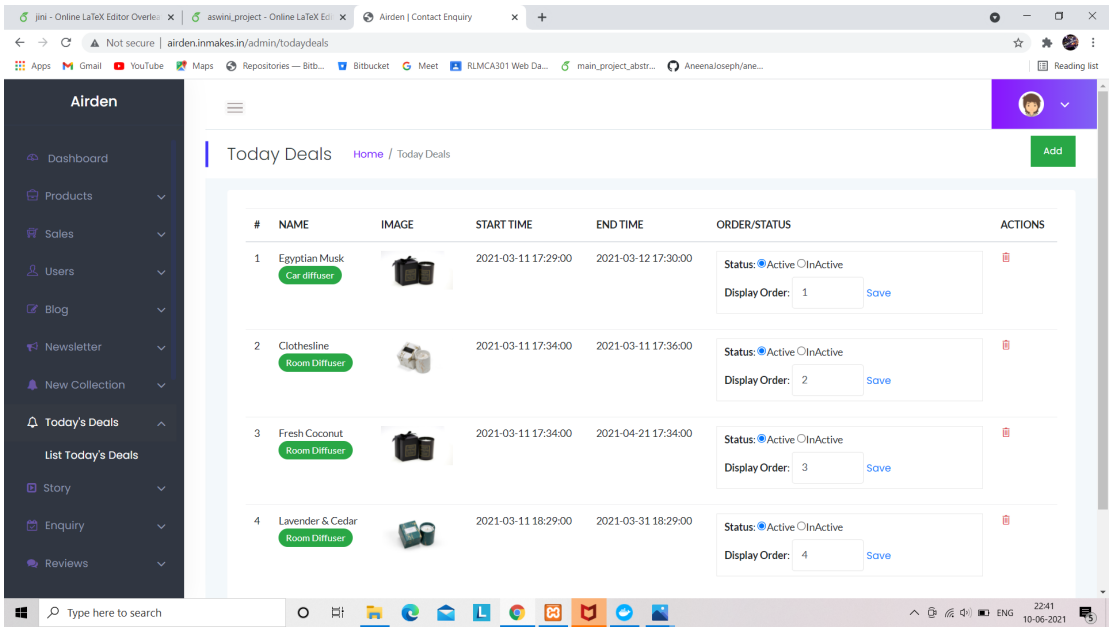


Fig. 4.19. TODAY DEALS

CHAPTER 5

SYSTEM TESTING

5.1 Introduction

System testing is an expensive but critical process that can take as much as 50 percent of budget for program development,the common view of testing hold by users that is performed to prove that there is no error in the program.However,this virtually impossible since 19 analysis cannot prove that software is free and clear to errors.Testing is the process of excecuting a program with explicit intension of finding errors.If testing is conducted successfully,it will uncover in the software as the secondary benefits.

5.1.1 Unit testing

Unit Testing of software applications is done during the development (coding) of an application. The objective of Unit Testing is to isolate a section of code and verify its correctness. In procedural programming, a unit may be an individual function or procedure. Under the unit testing,

- Writes a section of code in the application just to test the function.
- Create Test Cases
- Review/Rework
- Baseline

- Execute Test Cases.

5.1.2 Integration Testing

Data can be lost across any interface, one module can have an adverse effect on another, sub functions when combined, may not produce the desired major functions. Integration testing is a systematic testing to discover errors associated within the interface. The objective is to take unit tested modules and build a program structure. All the modules are combined and tested as a whole. Here the Server module and Client module options are integrated and tested. This testing provides the assurance that the application is well integrated functional unit with smooth transition of data.The developer of each program unit identifies and documents the unit's interfaces for the following unit operations:

- External inquiry (responding to queries from terminals for information)
- External input (managing transaction data entered for processing)
- External filing (obtaining, updating, or creating transactions on computer files)
- Internal filing (passing or receiving information from other logical processing units)
- External display (sending messages to terminals)
- External output (providing the results of processing to some output device or unit)

5.1.3 User acceptance Testing

UAT is a type of testing performed by the Client to certify the system with respect to the requirements that was agreed upon. User acceptance of a system is the

key factor for the success of any system. The system under consideration is tested for user acceptance by constantly keeping in touch with the system users at time of developing and making changes whenever required.User mainly focusses on

- User Interfaces : A first-time user of the web- application should see the log-in page when he/she opens the application. If the user has not registered, he/she should be able to do that on the log-in page.

  If the user is not a first-time user he/she should be able to see the login page. Once given the credentials he/she should navigate only to the corresponding work allocated to a particular person and to perform the allowed actions on the work assigned to them.

- Communication Interfaces : The communication between the different parts of the system is important since they depend on each other. However, in what way the communication is achieved is also important for the system.

5.2 Test Driven Development

TDD can be defined as a programming practice that instructs developers to write new code only if an automated test has failed. This avoids duplication of code. TDD means "Test Driven Development". The primary goal of TDD is to make the code clearer, simple and bug-free.

Test-Driven Development starts with designing and developing tests for every small functionality of an application. In TDD approach, first, the test is developed which specifies and validates what the code will do.

In the normal Testing process, we first generate the code and then test. Tests might fail since tests are developed even before the development. In order to pass the

test, the development team has to develop and refactors the code. Refactoring a code means changing some code without affecting its behavior.

Benefits of TDD:

- Much less debug time
- Code proven to meet requirements
- Tests become Safety Net
- Near zero defects
- Shorter development cycles

5.3 Test Cases

Table 5.1. Login

Name of Control	**Validation**	**Inputs**	**Response**
Textbox(Email)	only registered email allowed	aneena123@gmail.com	success
	required	anu@gmail	Invalid entry
Textbox(Password)	Must match with stored password	Suc@123	success
	required	suc12	Invalid entry

Table 5.2. Product

Name of Control	Validation	Inputs	Response
Textbox(Name)	only new products allowed	collmist sleepnight	success Invalid entry
Textbox(Product unique code)	Only numbers allowed	001 df4	success Invalid entry
Textbox(Stock)	Only numbers allowed	6 ds	success Invalid entry
Textbox(Desktop Image)	only 280X410 size and JPG, PNG and JPEG formats allowed		success Invalid entry

Table 5.3. User

Name of Control	**Validation**	**Inputs**	**Response**
Textbox(Name)	only Alphabets allowed	sam sam@gmail	success Invalid entry
Textbox(Email)	email@domain.com	sam@gmail.com samgmail.com	success Invalid entry
Textbox(Phone)	Only numbers allowed	1234567892 sam8765543	success Invalid entry
Textbox(Password)	Must match with stored password required	Sam@1995 sam12	success Invalid entry

Table 5.4. Blogs

Name of Control	Validation	Inputs	Response
Textbox(Name)	only new names allowed	International mother's Day – celebrating female founders of fragrance houses International Women's Day – celebrating female founders of fragrance houses	success Invalid entry
Textbox(Category)	mix of cahracters and numbers allowed	cat2 cde	success Invalid entry
Textbox(Desktop Image)	only 280X410 size and JPG, PNG and JPEG formats allowed		success Invalid entry

Table 5.5. Today deals

Name of Control	Validation	Inputs	Response
Textbox(Start date)	only datetime format allowed	2021-03-12 17:30:00 12-03-2021	success Invalid entry
Textbox(End date)	only datetime format allowed	2021-03-01 17:30:00 01-03-2021	success Invalid entry

Table 5.6. Story

Name of Control	Validation	Inputs	Response
Textbox(Name)	only new names allowed	An aroma story A Fragrance Story	success Invalid entry
Textbox(Desktop Image)	only 280X410 size and JPG, PNG and JPEG formats allowed		success Invalid entry

Table 5.7. Coupons

Name of Control	Validation	Inputs	Response
Textbox(Title)	Only alphabetic characters allowed	newcoupon @gmail	success Invalid entry
Textbox(Expiry date)	Only date format allowed	12-03-2021 2021-03-12	success Invalid entry
Textbox(Image)	Only 500X350 px and JPG, PNG and JPEG formats allowed		success Invalid entry

Table 5.8. Categories

Name of Control	Validation	Inputs	Response
Textbox(Name)	Only available products allowed	woody scent freshrose	success Invalid entry
Textbox(Listing page banner)	Only 1250X545 px and JPG, PNG and JPEG formats allowed		success Invalid entry

CHAPTER 6

SYSTEM IMPLEMENTATION

6.1 Implementation Method

Implementation is the stage in the project where the theoretical design is turned into a working system and is giving confidence on the new system for the users that it will work efficiently and effectively. It involves careful planning, investigation of the current system and its constraints on implementation, design of methods to achieve the change over, an evaluation of change over methods. Apart from planning major task of preparing the implementation are education and training of users.

The steps undertaken in a normal software implementation process:

- Prepare the infrastructure
- Perform final verification
- Implement new process and procedures
- Monitor the solution

In this manner the planning of implementation carried out thus it is a great success. Now the system is ready for deployment and supposed to be used in near future. I maintain a clear communication with my technical head throughout the project that brings out the project, error free while on the implementation part.

6.2 Implementation Plan

The implementation process begins with preparing a plan for the implementation of the system. According to this plan, the activities are to be carried out, discussions made regarding the equipment and resources and the additional equipment has to be acquired to implement the new system.In network backup system no additional resources are needed. Implementation is the final and the most important phase. The most critical stage in achieving a successful new system is giving the users confidence that the new system will work and be effective. The system can be implemented only after thorough testing is done and if it is found to be working according to the specification. This method also offers the greatest security since the old system can take over if the errors are found or inability to handle certain type of transactions while using the new system. The implementation process consist of the following steps:

- Decide the type of Website (Static/Dynamic) : The Airden Aroma is a dynamic Website.
- Choose a Hosting Server
- Select appropriate Web Hosting Plan : Shared hosting - share the physical server with other website owners is preferred. The company will have their own separate account (secured with login credentials). Shared hosting is very affordable because the cost of operating the server is shared between the company and the other website owners.
- Change DNS (Domain Name Servers) Address
- Upload Website

CHAPTER 7

CONCLUSION AND FUTURE SCOPE

The project named " Airden Aroma" is a web application. This project is developed using PYTHON. As it is very flexible with user friendly screens, the user interaction of the existing site can be made very easy. Any number of users can use this application together. Error correction and enhancement can be made easily. This application is feasible for modification that may arrive in future. I believe the application will remain good for reasonable period of time. Once again i thank those who helped us to make this project successful one.

This application is developed in such a way that any further enhancement can be done with ease. Planning to add more functionalities.

REFERENCES

[1] DFD https://ieeexplore.ieee.org/document/5687483

[2] Django,https://www.tutorialspoint.com/django/index.html,14 Mar 2020

[3] Python,https://www.w3schools.com/python,28 Feb 2020

[4] Regular RamaKrishnan,Johness Gehrke ,Database Management Systems,Third Edition,Tata McGraw Hill,pp 20-100 ,2002

[5] Robert C Martin,Agile Software Development,"Principles Patterns and practices",first Edition , Prentice Hall Imprint,Pearson Education,pp 20-100,year 2002