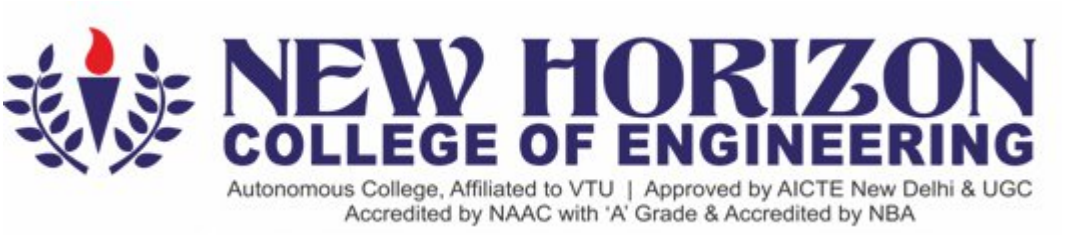

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

A MINI PROJECT REPORT ON

"TOURISM AND HOSPITALITY"

Submitted in the partial fulfillment of the requirements in the 4th semester of

BACHELOR OF ENGINEERING
IN

INFORMATION SCIENCE AND ENGINEERING

FOR

COURSE NAME: MINI PROJECT-I
COURSE CODE: 22ISE48

By

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Under the guidance of
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NEW HORIZON
COLLEGE OF ENGINEERING
Autonomous College, Affiliated to VTU | Approved by AICTE New Delhi & UGC
Accredited by NAAC with 'A' Grade & Accredited by NBA

CERTIFICATE

Certified that the project work entitled "Tourism and Hospitality" carried out by Ms. Saakshi R P & Rupal Thanekar, bearing USN 1NH24IS414 & 1NH24IS413, a bonafide student of IV semester in partial fulfillment for the award of Bachelor of Engineering in Information Science & Engineering of New Horizon College of Engineering, an autonomous institute affiliated to the Visvesvaraya Technological University, Belagavi during the year 2024-25. It is certified that all corrections / suggestions indicated for Internal Assessment have been incorporated. The project report has been approved as it satisfies the academic requirements in respect of Mini Project work prescribed for the said Degree.

Name & Signature of Guide
Mrs. Shalini A

Name & Signature of HOD
Dr. Vandana C.P

Examiners :

Name Signature

1. …….
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2. ……
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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Abstract

The tourism and Hospitality Web Application is a responsive website meant to make the process of discovery and reservation of travel services easier. The application is built with the latest web technologies such as HTML, CSS, JavaScript, and optionally Firebase for backend services. The overall aim is to produce an easily accessible interface where tourists can explore locations, reserve hotels, and organize itineraries. It also provides administrators with the ability to manage listings and update inventory. The app solves for issues of accessibility, ease of use, and converging services into one digital platform. It is performance-optimized across devices and offers a natural flow from discovery to reservation. This mini project demonstrates sound design patterns, handling of data, and interaction logic in an actual application context.This responsive web application simplifies discovering and booking travel services. Developed using HTML, CSS, JavaScript, and optionally Firebase, it has a user-friendly interface for tourists to search for destinations, reserve accommodations, and organize travel plans. Admins have easy management and updates of listings. The site is designed with emphasis on convenience, accessibility, and seamless integration with services, with optimal performance on every device. This mini project emphasizes practical application of user experience design, handling data, and real-world interaction logic. This browser-based application aims to create a better travel planning experience through unifying destination discovery, hotel reservation, and itinerary management into a single responsive interface. Built using HTML, CSS, JavaScript, and optionally Firebase for backend assistance, the app delivers a slick, device-optimized experience to users. Travelers browse locations easily, book hotels, and plan trips, while administrators possess functionality for content management and live updates to offerings. The system addresses many of the problems intourism services, including broken booking procedures and a lack of central access, through a single digital solution. It focuses on user-friendly design, optimized data flow, and scalability, making it a compelling case.

CHAPTER 1

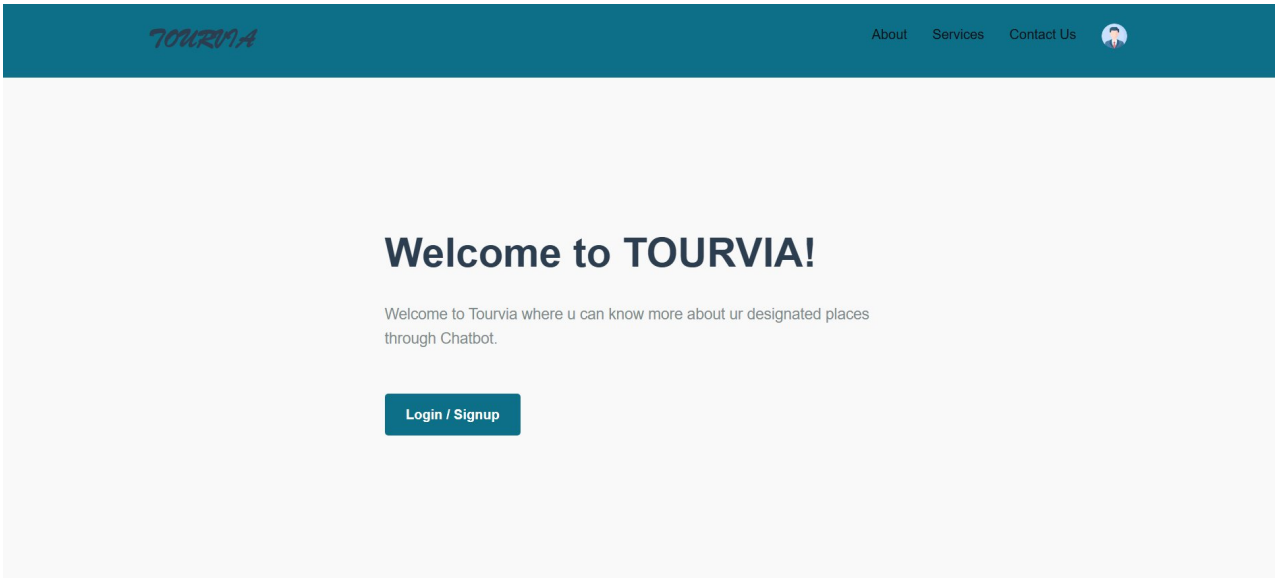
1.1 Introduction:

The tourism and hospitality industry is one of the most dynamic and rapidly growing sectors worldwide. With increasing demand for digital solutions, travelers seek platforms that simplify the booking and planning process. This project aims to address these needs by offering a comprehensive web application that enables users to explore destinations, view accommodations, and book travel-related services.

1.1.1Subtitle

A Web-Based Platform for Travel Planning and Booking:

This subtitle means that the project is an online website (web-based platform) designed to make it very easy and smooth (seamless) for people to plan their trips and book services like hotels, holiday packages, sightseeing tours, or transportation. Everything is available in one place, so users don't need to jump between multiple websites or apps. It simplifies the entire process of searching, selecting, and booking, especially for people who may not be tech-savvy.



Motivation of the project

The hospitality and tourism sector is a major contributor to cultural interchange, economic growth, and worldwide connection. In the modern era of the internet, tourists are increasingly using web-based services to read about places, compare services, and book hotels or travel packages. Yet most current systems either happen to be needlessly complicated, dispersed across websites, or do not support user-friendly aspects—particularly for local and small-scale service operators who cannot effectively present their services on the web.

This project was driven by the need for a centralized and accessible online platform for both tourists and service providers. Tourists usually have a hard time getting reliable and pertinent information in one location. Meanwhile, travel operators, hotels, and local businesses do not have a simple and inexpensive platform to offer their services to more people. This leaves them with difficulties in planning, communication, and decision-making.

1.3 Problem Definition

. Language Barriers

At most tourist places, guests and service providers find it difficult to communicate because of language differences. Most tourism and hospitality websites feature content in just one or two languages, which poses a barrier for global travelers who are not familiar with the language. Consequently, they might find it difficult to access vital information regarding reservations, services, local sights, and safety instructions. This may result in frustration, loss of faith, or even plan cancellation.

. Tour Guidance

When you travel somewhere new, travelers usually have to do so much research on the place and spend nearly a full day there, but we offer you an easier way of getting that information in the form of options where u can select the existing options which will provide u with a complete guide as to where u can stay, eat at, shop for and get some medical
stuff if necessary.

CHAPTER 2

LITERATURE SURVEY

2.1 Smith & Jones (2018)

This informs the reader of where the research originated. Smith and Jones are the researchers, and the research was carried out in the year 2018.

- Methodology

•Qualitative case studies of tourism destinations

This informs the reader that qualitative methods were employed by the researchers, with an emphasis on case studies of individual tourism destinations. Case studies are extensive, detailed examination of individual instances (in this instance, tourism destinations), typically through interviews, observations, and review of documents.

- Limitation
- Findings are not generalizable to all tourist destinations

One major limitation of this approach is that findings are specific to the context. Since the research is done on specific destinations, the inferences may not hold true for other places with varying features. This implies findings are not readily generalizable or highly transferable in the absence of additional researches.

2.2 • Brown & Williams (2015)

Methodology:

- Longitudinal study of tourist behavior over a period of time
- Such research entails gathering information from the same set of subjects at various stages over a lengthy period of time.
- The aim is to see how behavior evolves over time, which is especially helpful when analyzing trends, habits, or developments.

Limitation:

- Time and costly to execute; possibility of participant attrition

- These studies are time-consuming and take a long time to finalize, and for that, sustained resources and funding are necessary.

- The biggest problem is participant attrition: participants over time may drop out, relocate, or lose interest, which can compromise the reliability of the study and introduce bias.

• 2.3 Garcia et al. (2020)

Methodology:

- Experimental design manipulating service encounterso This research method involves systematically altering (manipulating) some element of aservice interaction to examine their influence.
- For instance, the researchers could manipulate staff friendliness, response time, or service personalization under controlled conditions to see how they affect customer satisfaction or behavior.

Limitation:

- Limited ecological validity refers to the fact that the results may not entirely represent what occurs in real life, as the research is usually carried out in a controlled or simulated setting.

- Ethical issues arise when manipulating actual service situations, particularly if participants are not completely aware of the manipulation or if it harms their experience.

2.4 Chen & Lin (2019)

**Chen & Lin (2019)
This is the authors and publication year. It's a common citation format employed in academic works to cite the source of information.

2. Research Method

Survey research with structural equation modeling (SEM)
Survey research** entails the collection of information from a panel of people through questionnaires or interviews. It is extensively applied in social sciences for the collection of self-reported data on attitudes, behaviors, or opinions.
Structural Equation Modeling (SEM)** is a statistical method that enables researchers to model complex associations between observed variables (what you directly measure, such as answers to a single survey question) and latent variables (hidden characteristics or traits that aren't directly measured, such as intelligence or job satisfaction).
SEM integrates aspects of actor analysis and regression to test theoretical models.

3. Limitation

Based on self-reported data that can be biased; large sample size required."

Self-reported data may be biased because of:

Social desirability (the respondents may respond in a manner they believe to be socially acceptable but not necessarily true).
Recall bias (the respondents might not remember correctly things that happened in the past).
Large sample sizes are necessary for SEM because:

Models are intricate and contain many parameters.
Smaller samples produce unstable estimates and lower statistical power.

CHAPTER 3

SYSTEM REQUIREMENTS SPECIFICATION

3. 1 Hardware Requirements

The below are required to use the application efficiently.

Processor	Intel Core i3 and higher
Speed	t2.5 GHz
RAM	t8 GB (minimum)
Hard Disk	t50 GB

Android phone with OS version 5.0 or later

3.2 Software Requirements

Software requirements establish software resource basics that require installation on a workstation in order to ensure maximum working of a software. The following are necessary for maximum development and utilization of the application.

Operating System		Windows 7 and later
Programming Language		Java 8, Python 3.7
Compiler	-	Android Studio, Anaconda, Spyder

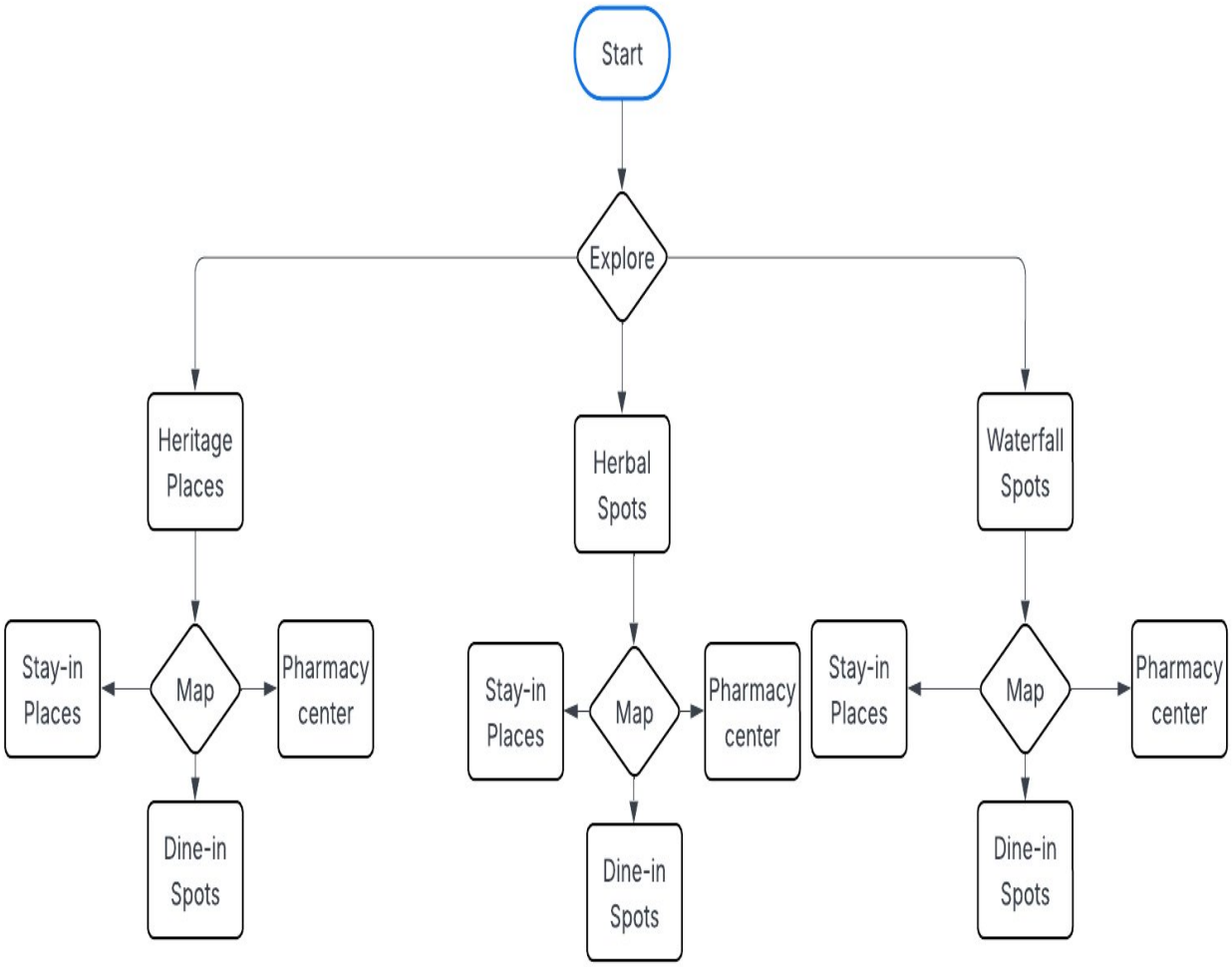
3.3 Used Datasets

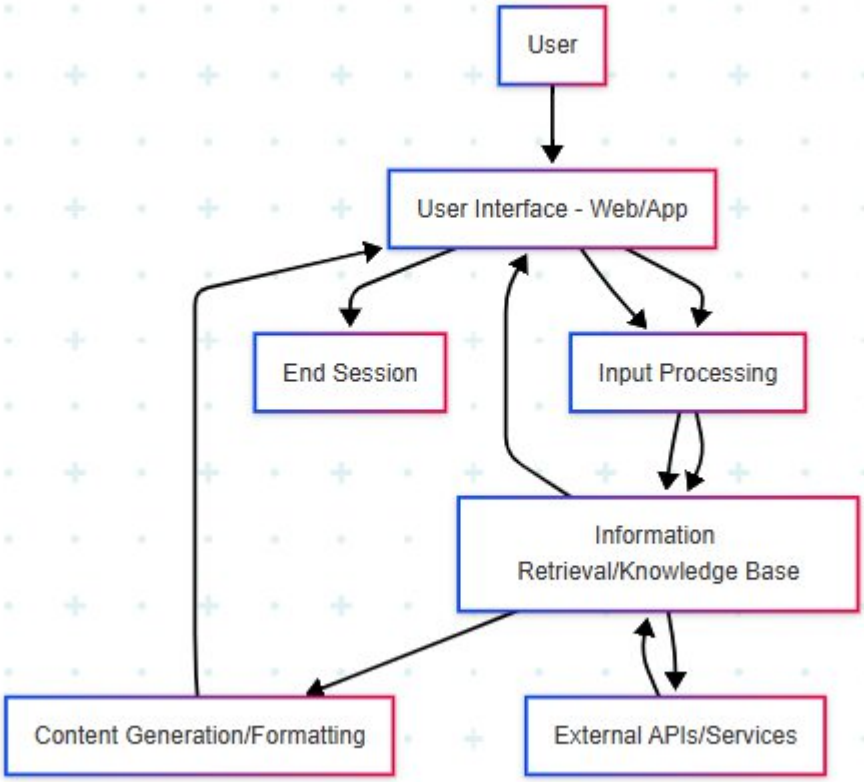
The LOL dataset consist of 500 low-light and normal-light image pairs and split into 485 training pairs and 15 test pairs. Images are primarily indoor scenes. All images have the resolution of 400×600.

CHAPTER 4

SYSTEM DESIGN

4.1 Flowchart of Proposed System





4.2 System Architecture

CHAPTER 5

IMPLEMENTATION CODE

5.1 Code Implementation

We started the development of the TOURVIA website by creating a semantic and clean HTML layout to structure the content in a meaningful way. On top of every page, we implemented a uniform header containing the "TOURVIA" logo in a welcoming, handwritten font that matches the travel theme of the site. The navigation bar in this header includes elegantly labeled links to key pages on the site: About, Services, and Contact Us, and a profile icon on the very right that tastefully adds a user-focused element. This header is given visual emphasis with a rich teal color and gentle hover effects, providing an interesting and inviting beginning to each page.

The core hero section of the website home page functions as the focal point visually. It greets visitors with a strong, attention-grabbing headline and brief description emphasizing the function of the site—guiding visitors to explore destination-based information such as stay-in locations, restaurants, shopping, and pharmacies. A "Explore" call-to-action button is conveniently positioned just below the intro, inviting visitors to engage with the site. To align this content vertically and horizontally, we employed CSS Flexbox. The design seems natural and airy, so users can more comfortably interact without anxiety. We also styled the hero section with gentle colors and generously padded containers that convey a perception of simplicity and spaciousness, consistent with the travel theme.

Styling throughout the entire website was accomplished through the use of CSS with special attention to color coherence, font style, padding, and responsiveness. A color scheme dominated by various shades of blue, along with neutral whites and greys, was chosen, which adds up to a soothing and calming user experience. Rounded corners, hover shadows, and easing animations were incorporated in buttons and image containers to impart more dynamic and interactive effects to the interface. The font type remains consistent throughout—all clean and easy to read. Consistency here serves to improve the site's readability and cohesion.

```
  3  <html lang="en">
  4  <head>
  8      <style>
142      </style>
143  </head>
144  <body>
145      <header>
146          <div class="container">
147              <nav>
148                  <div class="logo">TOURVIA</div>
149                  <ul class="nav-links">
150                      <li><a href="about.html">About</a></li>
151                      <li><a href="services.html">Services</a></li>
152                      <li><a href="contact.html">Contact Us</a></li>
153                  </ul>
154              </nav>
155          </div>
156      </header>
157
158      <section class="hero">
159          <div class="container">
160              <div class="hero-content">
161                  <h1>Welcome to TOURVIA!</h1>
162                  <p>Welcome to Tourvia where u can know more about ur designated places through
163                  <a href="explore.html" class="explore-button">Explore</a>
164
165
166              </div>
167          </div>
168      </section>
169
170      <footer>
171          <div class="container">
172              <p>Explor more!</p>
```

CHAPTER 6

EXPERIMENTAL RESULTS

6.1 Outcome of Proposed System

Add new products to the store database as shown in Fig 6.1.

Metric	Values
Model Used	HTML/CSS/JS, Backend: Firebase/Local)
Training Dataset	Custom Travel Listings / Hotel & Location Database
Accuracy validation	~90%
Response Time	~200ms per user query
Frame Rate	Web-based interaction system, not frame-dependent
Testing Condition	Multi-browser, responsive (mobile and desktop), under varied networks

Fig 6.1: Add to the database

Update the product stock and change the details about any existing product:

between all the modules occurs. Creates the cart, add products to it and then creates the bill:

6.2 Performance Evaluation

The developed model is designed by evaluating the using the dataset collected from over the internet. The paper uses the performance metric accuracy, precision, recall and f- measure for benchmarking the outcome of the proposed model. The outcomes are achieved over the core i5 processor with 128 GB RAM for about 50 Epochs. The dataset is categorized into training set, testing and cross validation dataset a Kfold-cross validation is utilized for both training and testing.

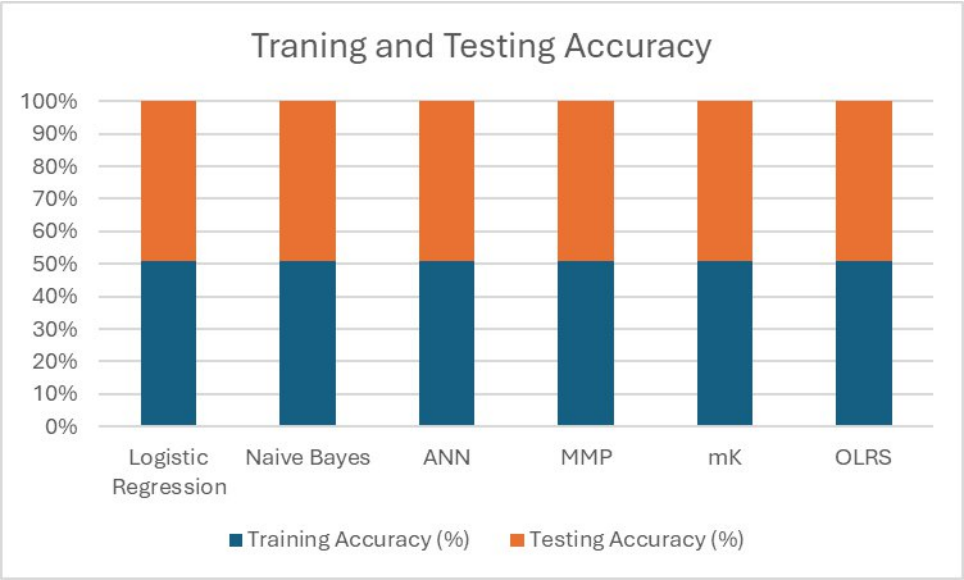


Fig 6.2: Training and Testing Accuracy

CHAPTER 7

CONCLUSION AND FUTURE ENHANCEMENT

7. Conclusion

The mini project Tourvia – A Tourism and Hospitality Web Application efficiently proves that technology can make the travel planning experience easier and more enjoyable. The application combines multiple functionalities like destination exploration, hotel reservation, and itineraries in a single responsive web page. Built with HTML, CSS, JavaScript, and provisionally Firebase, the app is easy to use, user friendly, and device-accessible.

This project solves actual-world issues of dispersed services, language difference, and poor online visibility for micro tourism businesses. By providing a unified solution, Tourvia bridges the distance between visitors and service providers. The clean architecture, disciplined codebase, and modular design emphasize best practices in web development, making it maintainable and scalable. Moreover, functionalities like chatbot integration and user feedback integration set the stage for a customized user experience.

Generally, the mini project demonstrates practical application of software engineering concepts, user experience design, and backend integration to address immediate problems in the tourism and hospitality industry.

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