

Entrepreneurship



Assessments # 01

Submitted By

QASIM ALI (20P-0070)

Arbab Abdul Basit (20P-0097)

Submitted to: Rabia Zia

Section: BSCS-8A

**DEPARTMENT OF COMPUTER SCIENCE
FAST NATIONAL UNIVERSITY OF COMPUTER
AND EMERGING SCIENCES, PESHAWAR**

Smart Tour System

Business Overview

Business Name & Concept Statement:

PakTourSmart – A smart tour recommendation system for Pakistan that leverages a hybrid approach (collaborative filtering + content-based filtering) to provide personalized travel recommendations based on user preferences, past experiences, and real-time data.

Industry Overview:

The travel and tourism industry in Pakistan is rapidly growing, with an increasing number of domestic and international tourists exploring the country's diverse landscapes, cultural heritage, and adventure destinations. Key trends include digital transformation in tourism, increased smartphone penetration, and a rising demand for personalized travel experiences. Market potential is high due to government efforts to promote tourism, particularly in northern areas and historical sites.

Segmentation & Target Market:

Our primary target market includes domestic and international tourists looking for tailored travel recommendations. The segmentation includes:

- **Adventure Travelers:** Those interested in hiking, trekking, and nature exploration.
- **Cultural & Heritage Enthusiasts:** Visitors interested in historical and cultural sites.
- **Families & Leisure Travelers:** People seeking convenient and family-friendly destinations.
- **Budget Travelers & Backpackers:** Those looking for cost-effective travel options.

Unique Selling Proposition (USP):

Our system provides **AI-driven personalized recommendations**, real-time weather and safety updates, **user-generated content reviews**, and integration with booking services, making it a one-stop solution for travelers in Pakistan.

Business Objectives:

- **Short-term Goals:** Develop a prototype and launch a beta version within six months, onboard at least 500 active users, and establish partnerships with local travel agencies.

- **Long-term Goals:** Scale to 50,000+ users in three years, integrate AI-driven itinerary planning, and expand services to international markets.

Problem & Solution

Identify a Problem:

Tourists in Pakistan often struggle with **lack of tailored recommendations, outdated travel information, and difficulty in planning trips**. Current platforms lack personalization, leading to inefficient and unsatisfactory travel experiences.

Proposed Solution:

PakTourSmart utilizes a **hybrid recommendation system** (AI-powered collaborative + content-based filtering) to provide customized travel suggestions. Users receive **dynamic travel recommendations** based on:

- Personal interests
- Budget and preferences
- Live weather and safety conditions
- Crowd density analysis

Market Need & Justification:

- **Pakistan's tourism sector grew by 300%** in recent years, yet lacks digital transformation.
- **80% of travelers rely on online recommendations**, but existing platforms do not cater to local needs effectively.
- **Competitor Analysis:** Current tour apps (e.g., Google Maps, TripAdvisor) offer generic recommendations, not AI-driven personalized plans.

Customer Pain Points:

- Lack of personalized travel plans
- Difficulty in finding updated, accurate information

- Safety concerns due to lack of real-time updates
- Unavailability of integrated transport & accommodation booking

Product or Service Description

What Are You Offering?

PakTourSmart is a **mobile and web-based platform** offering personalized tour recommendations. Features include:

- **AI-powered itinerary planning**
- **Real-time weather & safety alerts**
- **User reviews and travel insights**
- **Transport & accommodation booking integration**

Features & Benefits:

- **Personalized Experience:** AI-driven customized recommendations.
- **Live Travel Insights:** Real-time weather, safety, and crowd conditions.
- **Integrated Bookings:** Seamless planning via partnered travel services.
- **User Community & Reviews:** Trusted recommendations from real travelers.

Positioning:

- **Against Competitors:** Unlike general travel platforms, our system offers AI-driven personalization and real-time insights, making it superior to traditional static recommendation tools.
- **Justification:** Personalized recommendations improve user satisfaction and streamline travel planning.

Potential Challenges & Solutions:

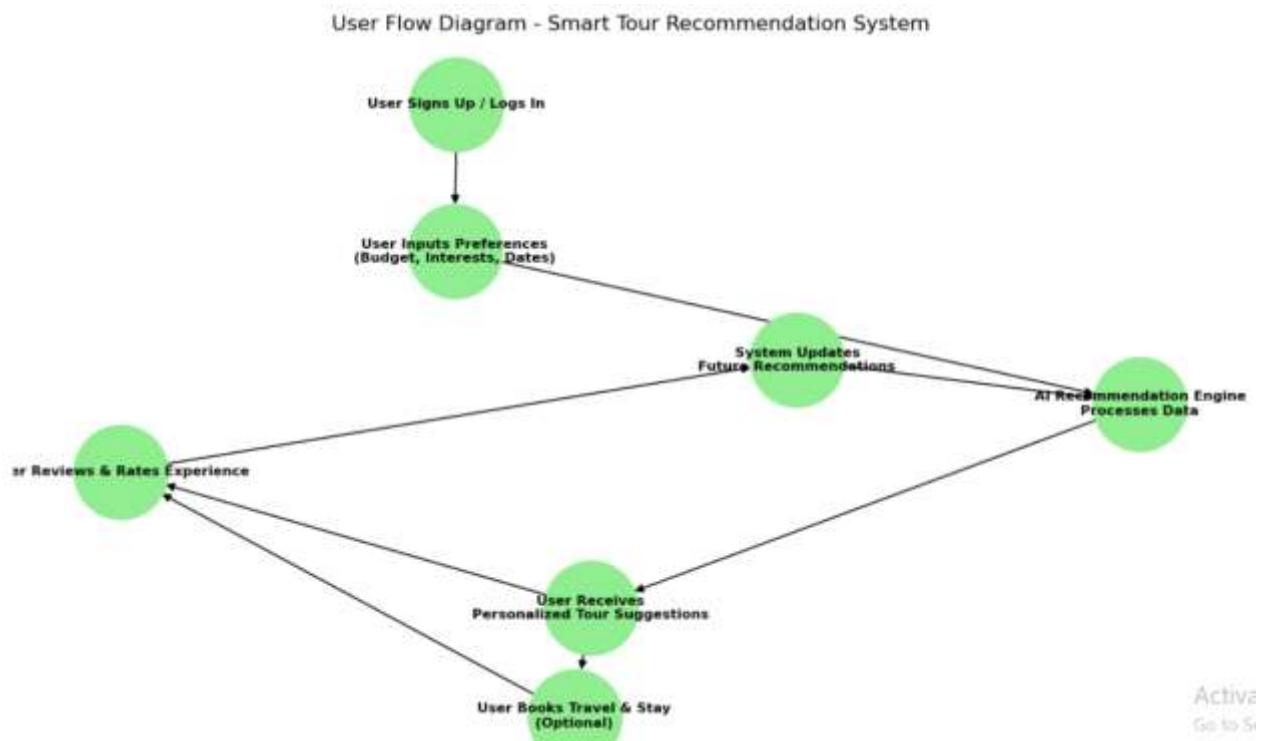
- **Data Availability:** Partnering with local agencies and open-source travel APIs.
- **User Adoption:** Initial marketing through influencers, social media campaigns, and referral incentives.

- **Technical Integration:** Employing cloud-based scalable architecture to handle increasing data loads.

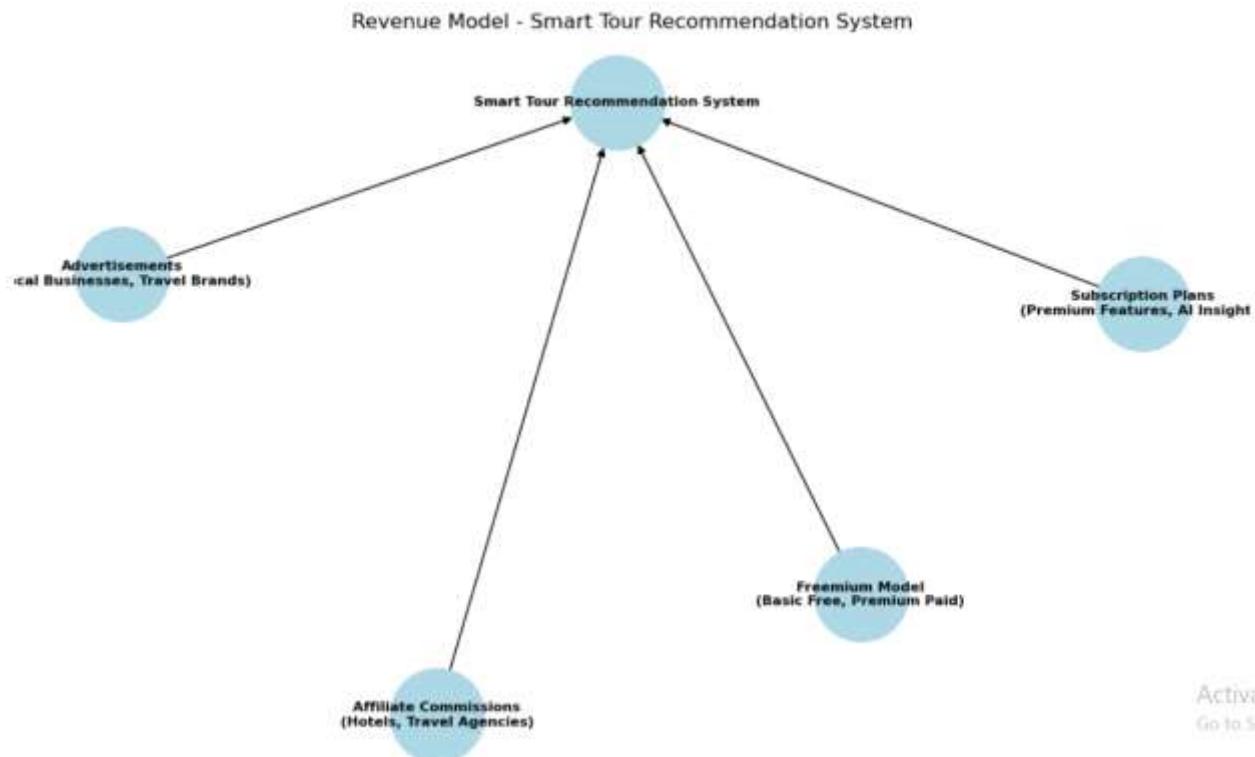
Initial Business Model:

- **Revenue Streams:**
 - Freemium model with premium travel insights.
 - Affiliate commissions from travel bookings.
 - Advertisements from local businesses and travel agencies.
- **Operations:**
 - B2C: Direct recommendations and bookings for travelers.
 - B2B: Partnerships with travel agencies and local businesses.

The user flow Diagram:



The Revenue Model:



The system Architecture:

