



IIT ROORKEE



NPTEL ONLINE  
CERTIFICATION COURSE

# INTRODUCTION TO INTERACTION DESIGN

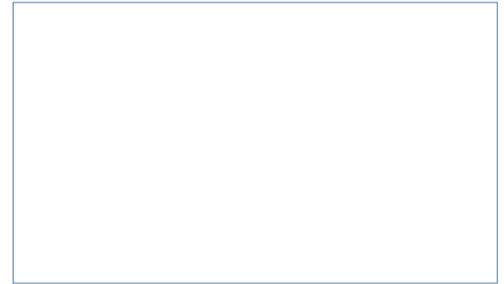
## Lecture 16

### Design and Prototyping (Part 02)

Prof. Sonal Atreya  
DEPARTMENT OF DESIGN



# Design and Prototyping



**To gain a clearer understanding, let's examine a case study involving the website design for promoting tourism in Uttarakhand.**



# Website Design for Uttarakhand Tourism

IDN - 534 Interaction Design

Somya Burman

21712018

MDes Sem II

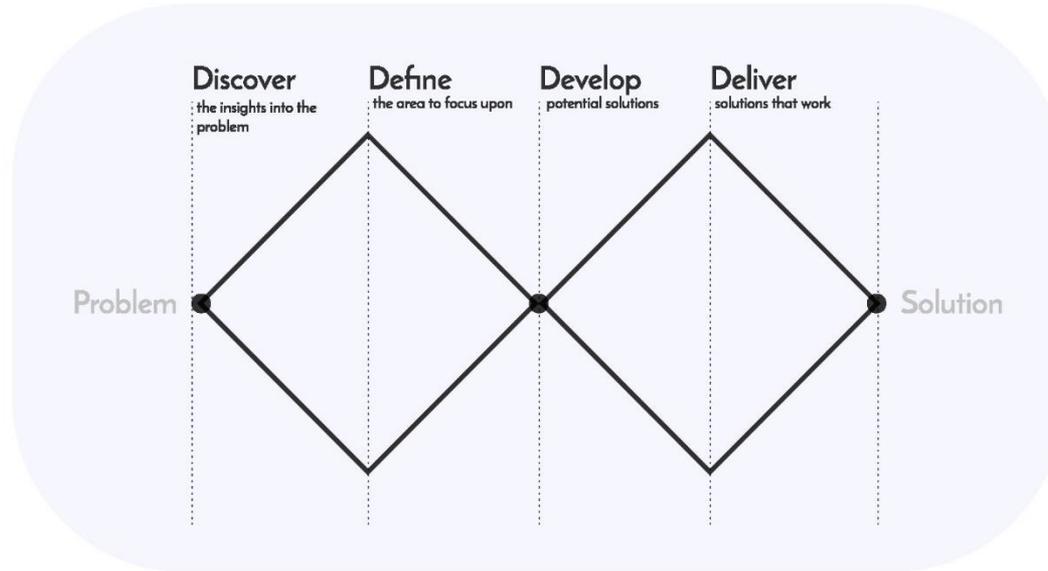
## About

Uttarakhand, a state in northern India crossed by the Himalayas, is popularly known as Devbhumi (land of Gods) due to the presence of numerous Hindu pilgrimage sites. Uttarakhand offers limitless opportunities for tourism and adventure. There is something for everyone - Pilgrimage, Temples, Wildlife tours, Bird Watching, Rafting, Mountaineering, Skiing, Trekking, Camping, Yoga and Meditation and much more.

In 2019, domestic tourist arrivals in the state was 37.58 million, while foreign tourist arrivals crossed over 0.15 million.



# Design Thinking Approach



My design thinking approach is a double diamond method, wherein, I started with the problem space - "Tourism in Uttarakhand" and then researching more in the problem area. In the solution space, I discovered various possible outcomes and then narrowed upon one.

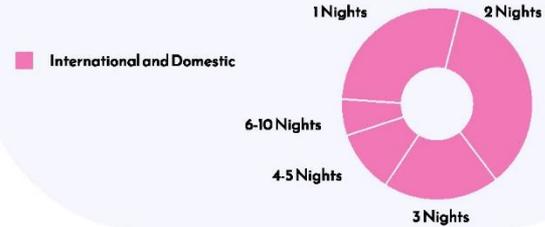
# Primary Research Insights



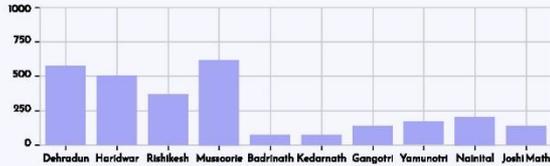
## Popular adventure activities

- Trekking
- Paragliding
- Ziplining
- Bungee Jumping
- Elephant Safari
- Canoeing and Kayaking
- Skiing
- Cable Car Ride
- Camping
- White Water Rafting

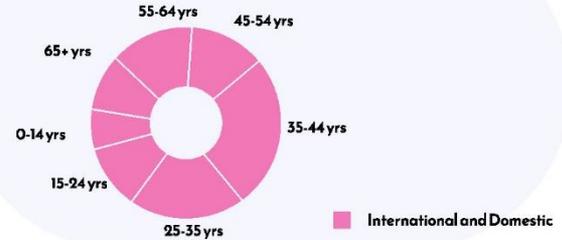
## Stay period of visitors



## Popular tourist spots



## Age group of visitors



# Secondary Research Insights

## Incredible India



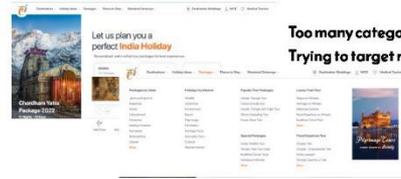
Less but efficient categorization,  
language support  
mainly targetting international tourists

## Morocco tourism

no translator on website, not impactful for foerign tourist,  
showases culture..single iternary - no variations



## Tourmyindia



Too many categories - might be confusing  
Trying to target many different types of audience at once

## Uttarakhand Tourism

Lacking the cultural aspect  
Easy to get itineraries  
More focussed on adventure sports



Categorization,  
Showcases the culture of India  
Help users to plan efficient trips  
Tourism-of-india.com



## MP Tourism

Showcasing the culture of India  
Blogs, vidoes, etc to increase user engagement

- Accessible websites
- Main focus on planning and itineraries
- Cultural showcase
- Help Desk / Chat Support
- Blogs and articles to engage users

# User Interviews

"I often find difficult to plan the trip, what to explore and what not! There is no proper categorization of tourist places and what and when to visit. Also, many a times there are hidden gems near some of the very popular places which we are unaware about."



"As a female, I face difficulty in finding washrooms and safe resting spots while travelling. It gets really hectic for me to plan a safe trip with my family in terms of food and hygiene. I enjoy having a trip with my entire family - my husband, my children and parents but it gets difficult to plan activities for each age group."

"I like travelling to offbeat places, food and hygiene is a matter of primary concern. I also need internet connectivity and safe environment to travel. I like everything planned out and know the conveyance, stay, popular eateries and culture well in advance. I do ask my friends who have travelled there about the reviews and things to do beforehand."



"I wish I can customize iternary based on my area of interests. I like indulging in a local experience, understanding local culture, exploring both popular as well as un-popular spots. And ofcourse, the local food :)"

## How Might We....

How might we design an interactive application for Uttarakhand Tourism Industry

How might we be able to provide customizable itenay planning

How might we be able to enggage user for planning and executing their trips in a flexible way

How might we give users a healthy community of travellers

How might we provide efficient and true feedbacck to users

How might we help users discover the undiscovered

## Problem Statement

Designing an application for the Uttarakhand Tourism industry, that helps users discover the undiscovered, and focuses on customizable itenary, reviews and participatory discussions of users to create a healthy community of travellers.



# Persona / Scenario



**Sourav Sharma**  
25, Software Engineer

- Seeking peace
- Empathetic
- Tech Savvy
- Likes exploring new places
- Nature lover

“I would rather explore one good place in a day very well than visit five different places in haste”

## Goals

- Find an intermediate solution between local and tourist experience
- Visit somewhere peaceful and appreciate the beauty of nature
- Prefers visiting less explored places
- Visits solo or with a close friend
- Likes to plan a budget friendly trip, well in advance
- Wants to compare hotel and ticket prices

## Frustration

- Crowded tourist spots
- Unaware of local culture and practices
- Having a demanding work schedule and willingness to travel

## Scenario

Sourav has a long weekend next month and wishes to explore the Valley of Flowers National Park in Uttarakhand. Being a nature lover, he wishes to make the most of his 3- day trip. Along with this he wishes to explore the nearby places like a traveler and not like a tourist. He visits certain websites regarding what he can do in those 3 days, how to travel from one place to another, etc. At the same time, he wanted to hear from someone who has visited the National Park to understand the time needed there and what to expect.

After a lot of research, he could find all these places in tidbits but not in detail.

# Affinity Mapping

## booking

itinerary  
hotels  
hostels  
cabs  
train  
flights  
accommodation  
Self drive vehicles  
bus  
custom travel guide



## filters

pricing  
age  
deals  
departure time  
ratings  
peak time  
crowd ratio  
safe for women

## help and support

help desk / chat bot  
email / phone  
refer and earn  
compare prices

## User engagement

blogs  
videos  
share your experience



## Accessibility

font size increase  
contrast  
voice search  
screen reader

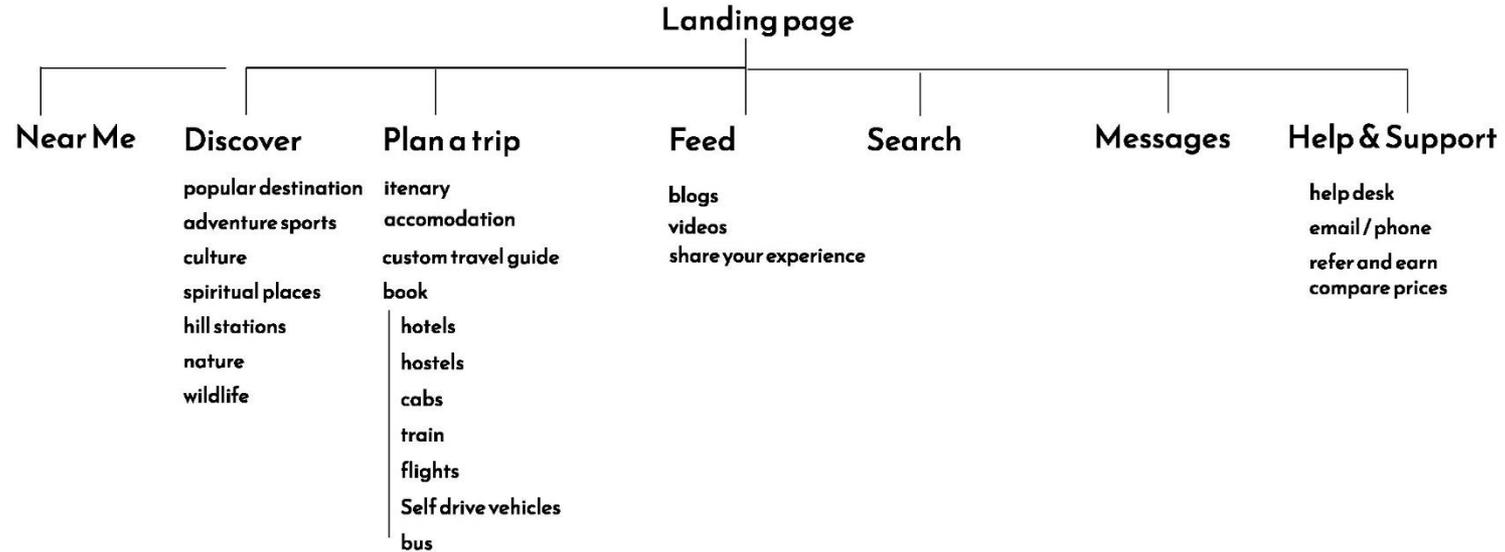


## things to do

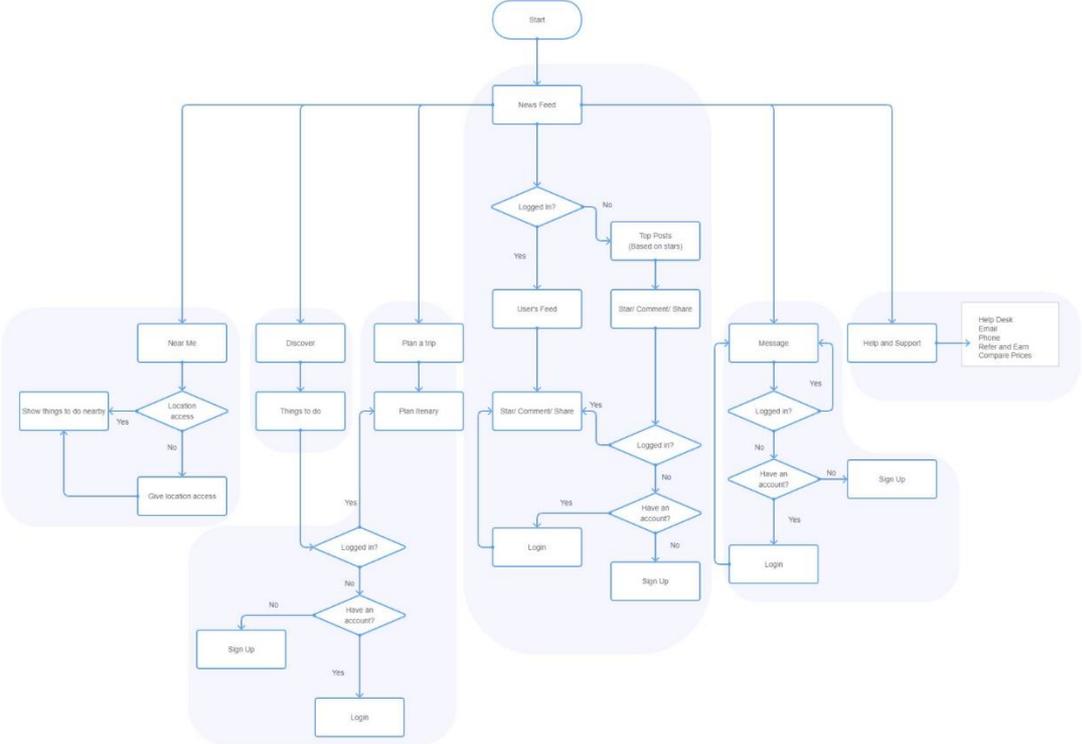
popular destination  
discover explore  
adventure sports  
culture  
spiritual places  
hill stations  
nature  
wildlife



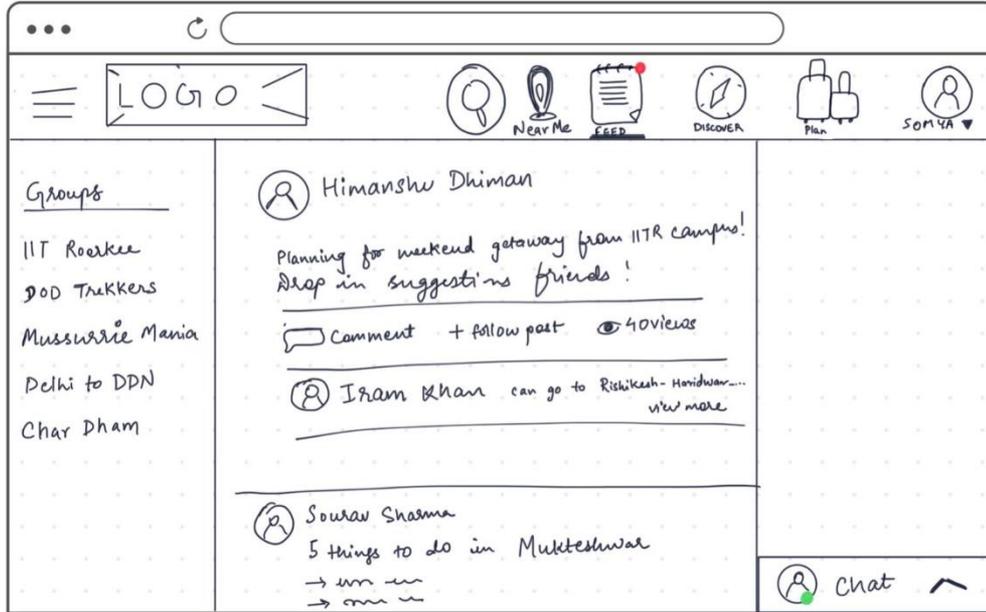
# Information Architecture



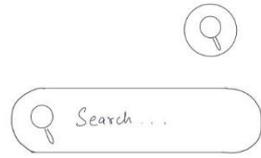
# User Flow Diagram



# Wireframe - Exploration I

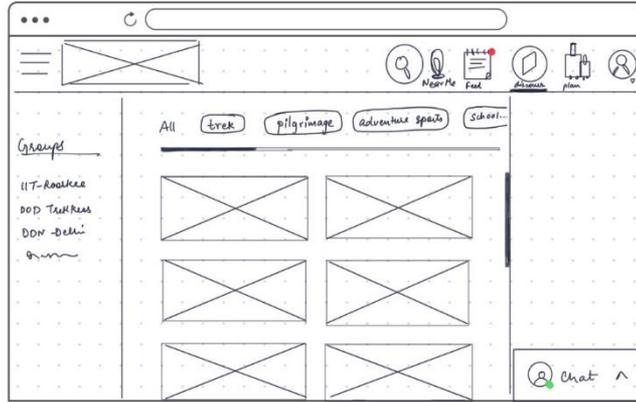


Landing page



Expanding search button

# Wireframe - Exploration I



Discover Portal

## Discover Portal





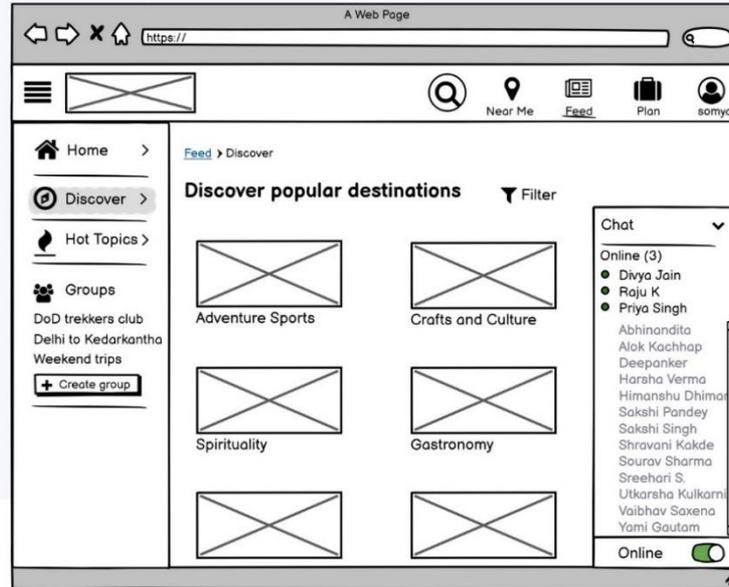
## Usability Test and Insights [for wireframe1]

- How does post appear on the feed? How and whom do I need to follow?
- What if I want to share my post to some other social media?
- Creating a post here might feel an add-on task. I might just wish to share photos from my Instagram to this platform.
- What does this chat option do? With whom can I chat?
- Discover section looks pretty good but its placement on the webpage looks off.
- Near Me feature is cool! Will be helpful in real time.
- How can I customize my itenary? There is no provision to do that currently.
- How can I look for a particular place? or if I am planning to visit a particular post, how can I read all discussions about that particular topics.

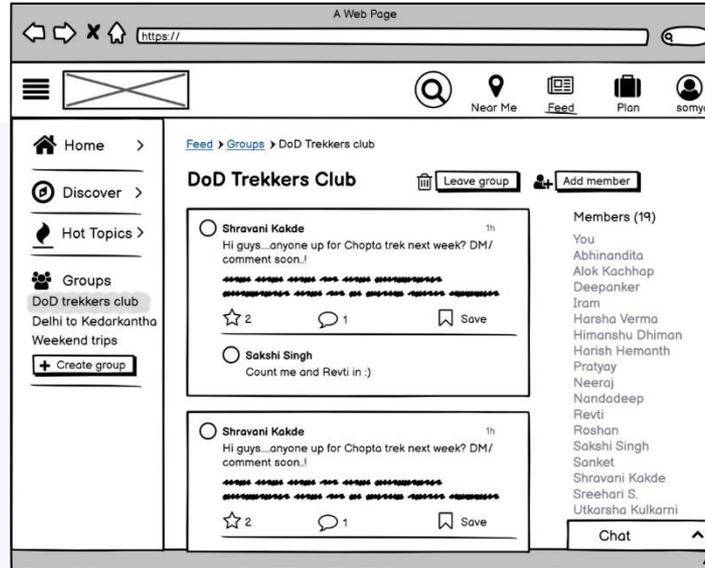


# Final Wireframes

- Divided the headings in top header and side-nav for better proximity of related features.
- Added breadcrumb for website navigation.
- Enhanced the landing page feed section and the topic scroll.

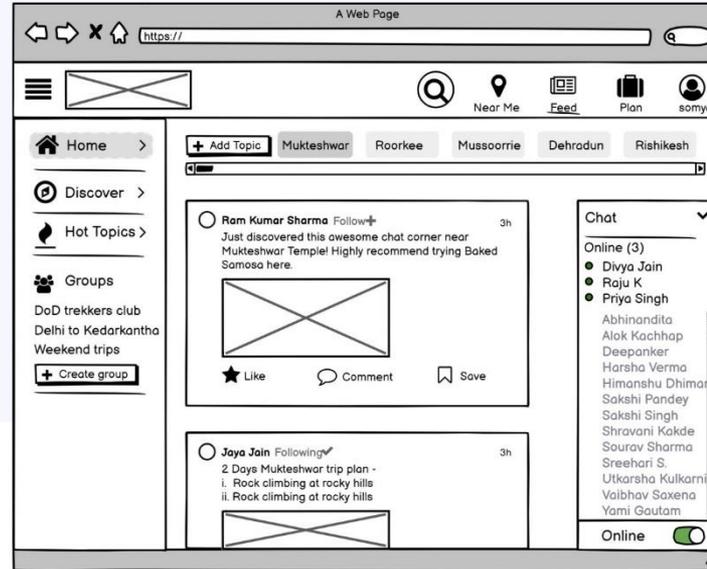


# Final Wireframes



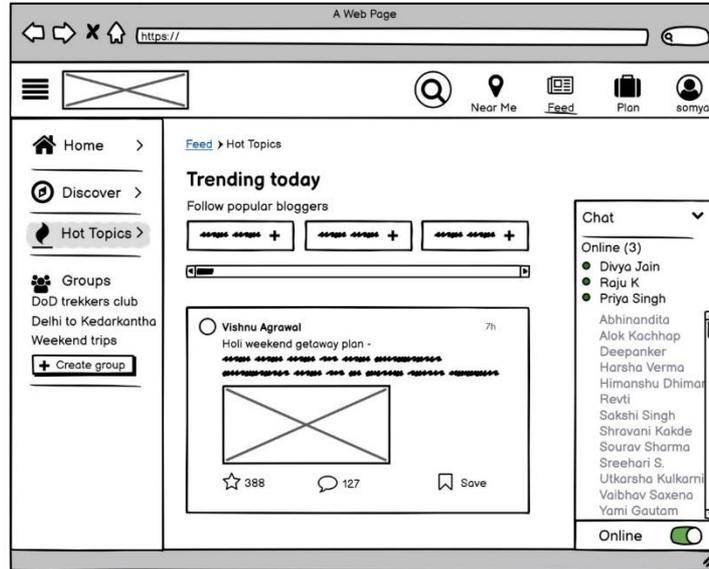
Create group with friends and plan trips together

# Final Wireframes



Map to help users locate nearby places like local cafes, restaurants, parks, holy spots, wash rooms etc.

# Final Wireframes

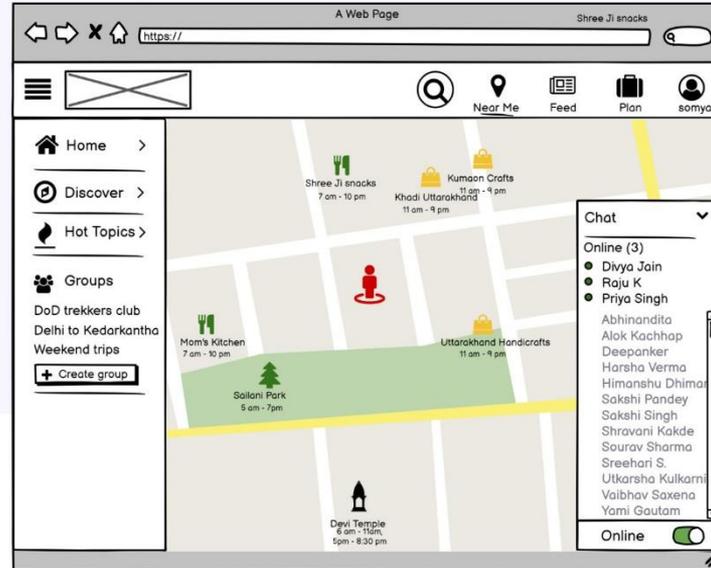


Trending topics based on occasion or occasion etc

## Final Wireframes

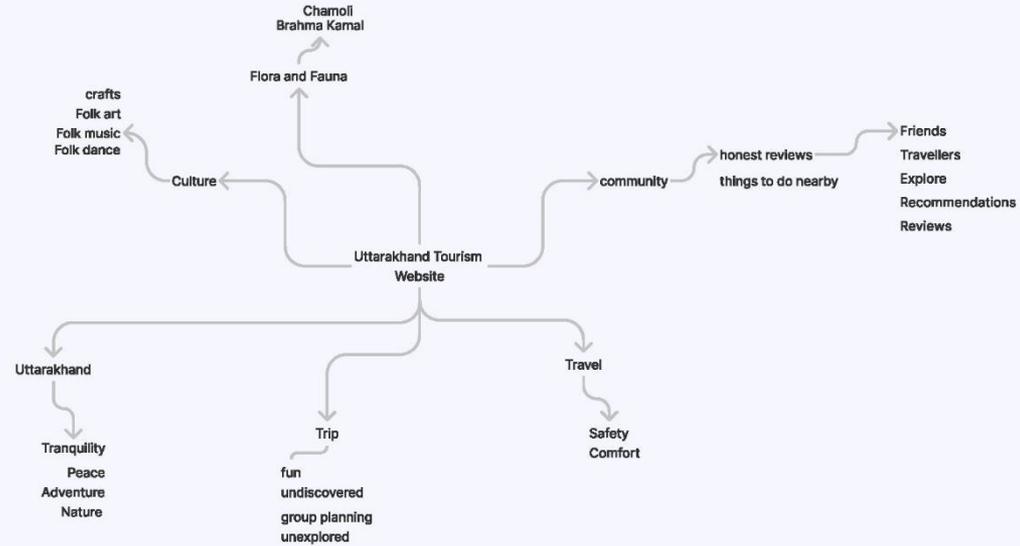
Give location access?  
See what is near you

No	Yes
----	-----



Map to help users locate nearby places like local cafes, restaurants, parks, holy spots, wash rooms etc.

# Mind Mapping



## Visual Identity



**Raleway**

**RALEWAY**

abcdefghijklmnopqrstuvwxyz



**Barlow**

**BARLOW**

abcdefghijklmnopqrstuvwxyz



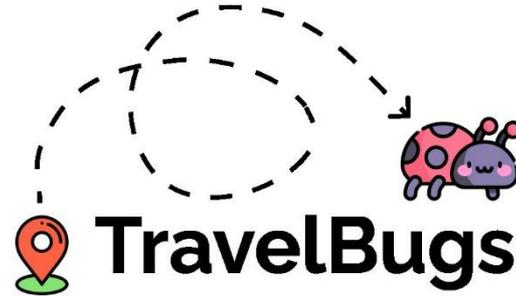
## Logo Explorations

TravelBugs 

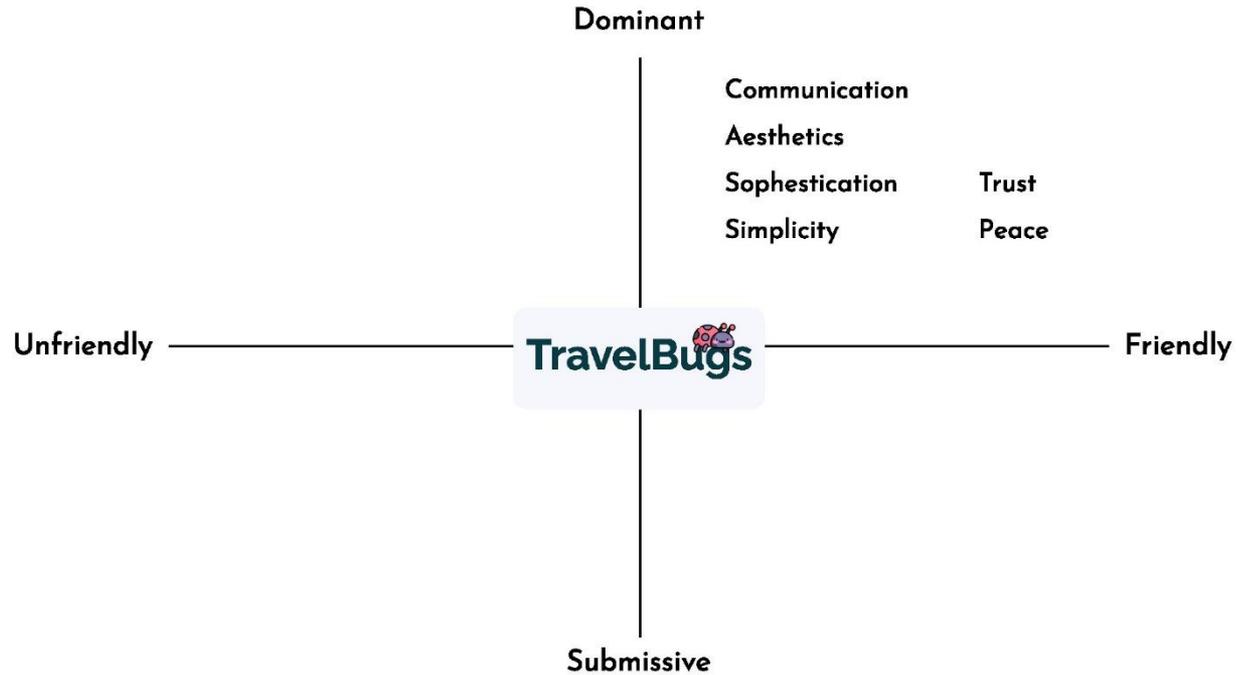
**TravelBugs** 



**HUMR  HEE**



# Brand Personality



# TravelBugs

TravelBugs is a website that caters to the young audience and lets them explore the unexplored places. This website helps users create a community of travellers to interact with and find people with common interests. Users can post updates about their trips, helps planning an itinerary, explore nearby options.

Friends

Travellers

Explore

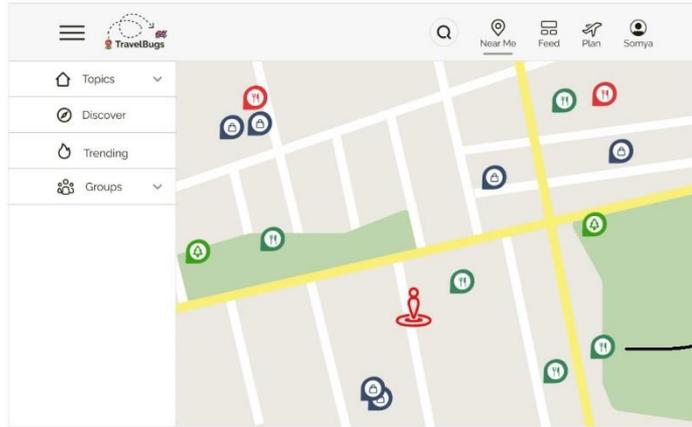
Recommendations

Reviews

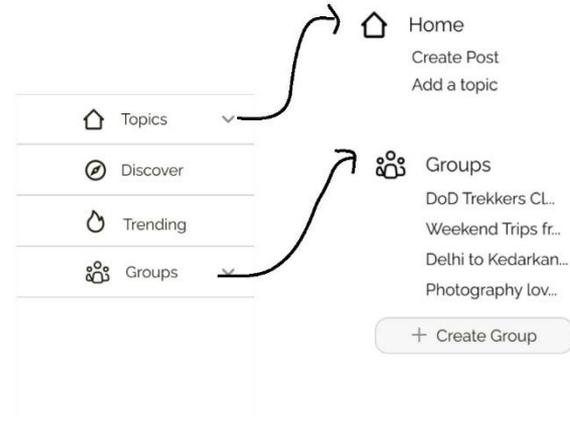
Community



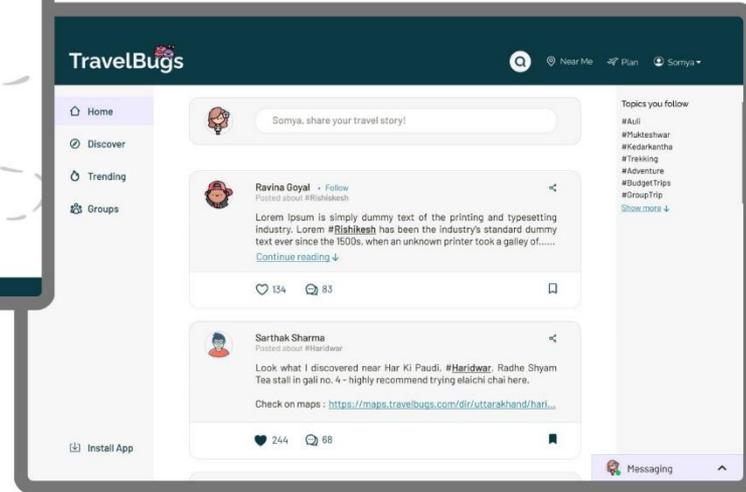
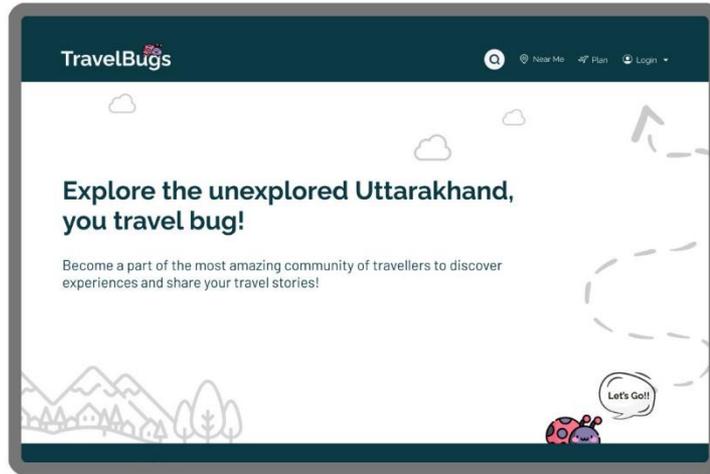
# UI Exploration 1



on hover interactions  
of location tags



## UI Exploration 2

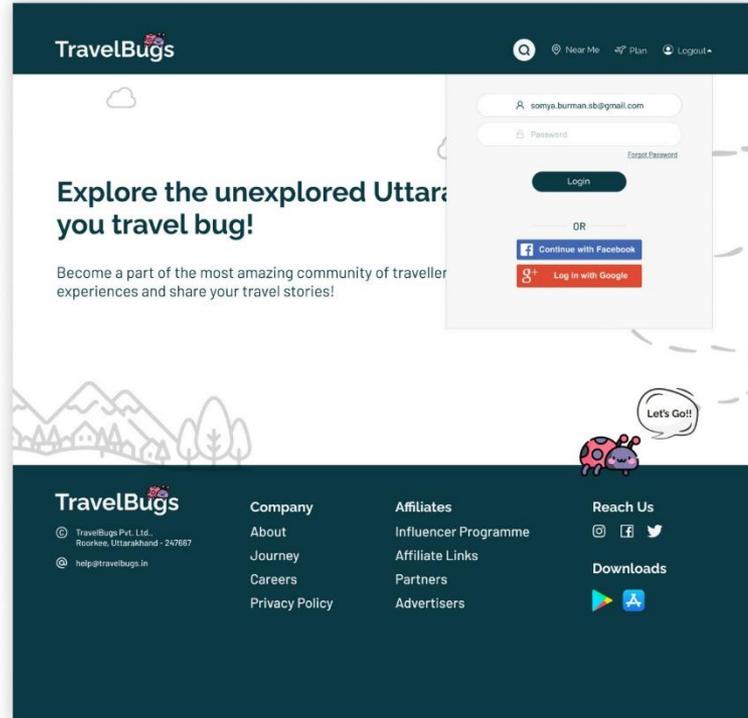


## UI Exploration 2

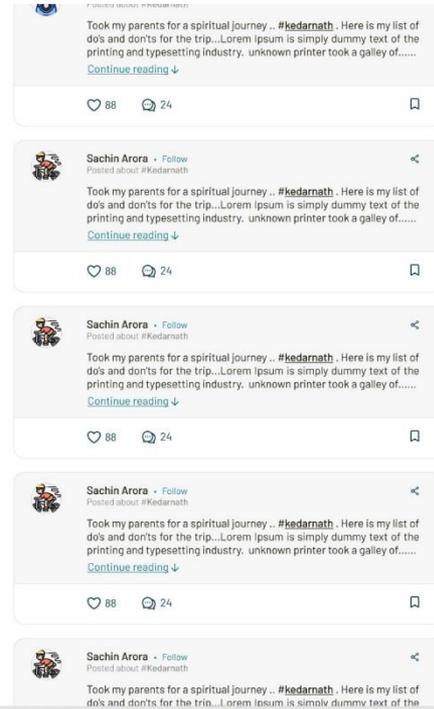
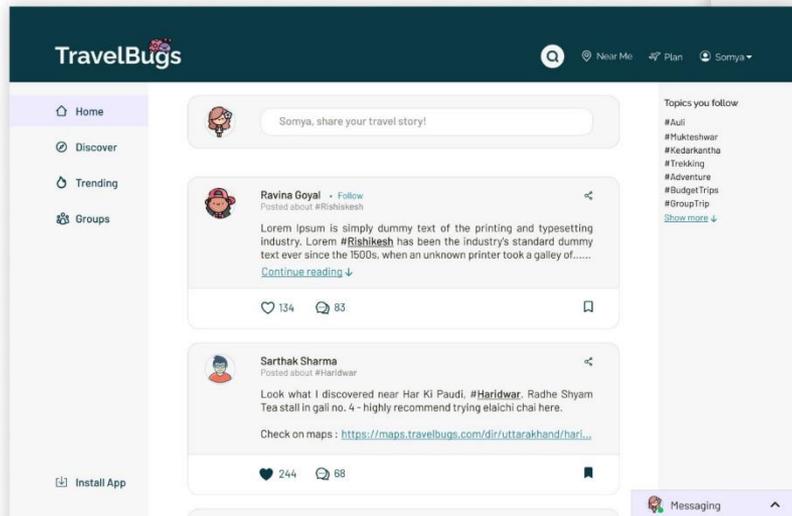
Footer



SignUp Page



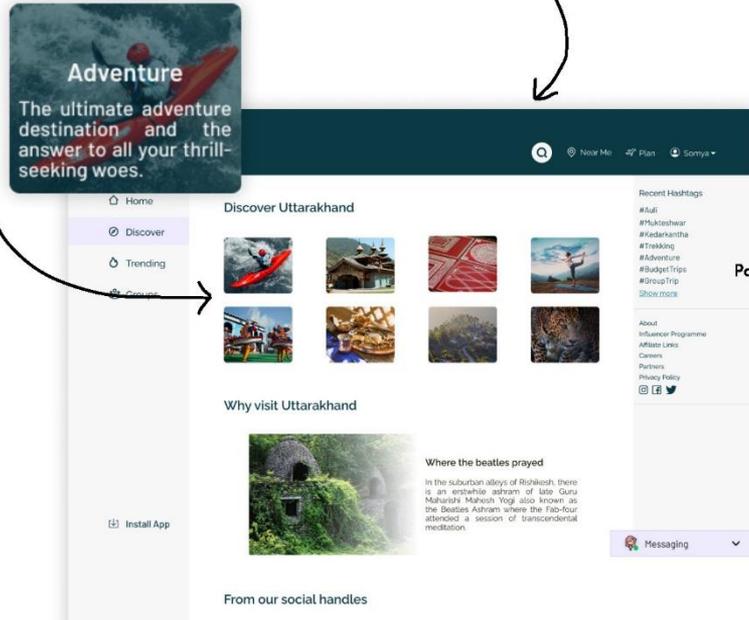
Landing Page (Create a post and view posts based on topics and people you follow)



Automatic slider - displaying the prominent facts about Uttarakhand

Discover section - consists of categories on what Uttarakhand has to offer

On Hover interaction



Install App

Why visit Uttarakhand



Where the beatles prayed

In the suburban alleys of Rishikesh, there is an erstwhile ashram of late Guru Maharshi Mahesh Yogi also known as the Beatles Ashram where the Fab-four attended a session of transcendental meditation.

Careers  
Partners  
Privacy Policy



Messaging

From our social handles

Best of April! Tag us on your Uttarakhand photos on Instagram and stand a chance to win exciting prizes. We curate the best photos on our Instagram handle @travelbugs.uk.



Posts from Instagram handle

Read these articles

10 best treks to do in Uttarakhand

Guide to planning char-dham yatra for elderly

Must visit places in Rishikesh

Things to do in and around Dehradun

Your spiritual guide to Rishikesh

16 dishes from Garhwal and Kumaon you just cannot miss

5 reasons to visit Valley of Flowers

Weekly trending posts

The screenshot displays the TravelBugs app interface. At the top, the app's logo "TravelBugs" is visible alongside navigation icons for search, location, plan, and user profile. A dark green header contains the app name and navigation options. Below this is a light gray sidebar with menu items: Home, Discover, Trending (highlighted), and Groups. An arrow from the text "Weekly trending posts" points to the Trending menu item. The main content area is titled "Trending this week" and features a row of hashtag filters: #SummersInUttarakhand, #YogaDay, #HunarHaatDehradun, #ChoptaTrek, and #MonsoonTrek. Two trending posts are shown. The first post, under the filter #SummersInUttarakhand, is by Deeksha Jain and describes a 4-day trip plan. The second post, under #YogaDay, is by Anuj Tripathi and also describes a 4-day trip plan. Both posts include placeholder text for the trip details and a "Continue reading" link. On the right side, there is a "Recent Hashtags" section with a list of tags and a "Show more" link, and a user profile section with various links like "Influencer Programme" and "Privacy Policy". At the bottom right, there is a "Messaging" button.

Card to showcase suggested group options



Chatbox

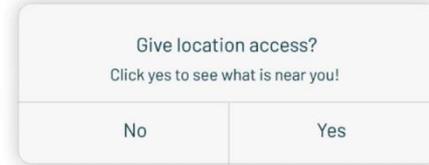
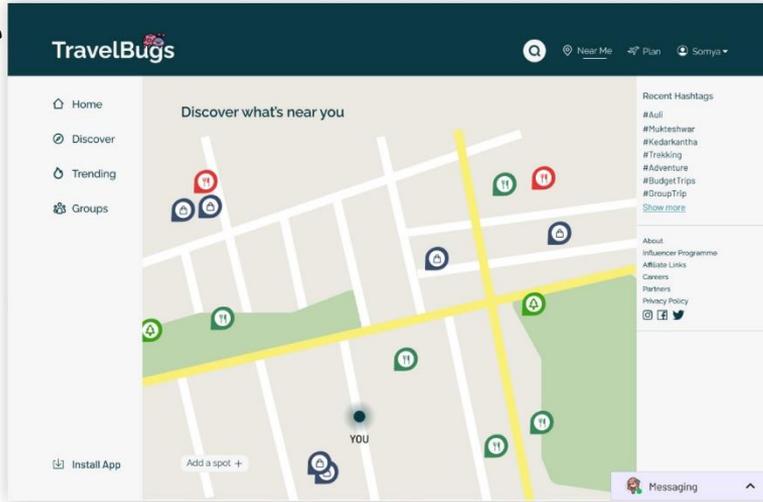
On-hover view of a user's profile



Card to showcase status update on user's feed



Near me section - to help users locate what is near them



Permission request for users to share location



On hover interaction of the location tags

Add a new and undiscovered location for other user's benefit



Add a new and undiscovered spot ×

Place Name \*

Category \* ▾

Address \*

Hours \* >

**Submit**

✓  
Submitted ×

[travelbugs.in/location/newlocation/221\\_34..](https://travelbugs.in/location/newlocation/221_34..) 📄

**Share as post** ↗



Share the added location as a post on your timeline

Customized itenary for users preferences

The screenshots illustrate the following steps in the TravelBugs app:

- Build your own customizable itenary:** The user enters a destination address, start date, and end date. A "Start Planning" button is visible.
- Package Selection:** A list of travel packages is shown, including "Roorkee, Uttarakhand, India" with a duration of "02 Nights".
- Traveler Type Selection:** Options include "Solo Traveller", "Couple Holiday", "Family Holiday", and "Friends".
- Guest Selection:** Options for "Adult" (01 years) and "Kids" (00 years).
- Optional Choices:** A list of services to include: "Transportation", "Accommodation", and "Things to do".

Optional choices for user's custom itenary

### Customized itenary suggestion



Roorkee → Dehradun → Roorkee | 02 Nights ✓

Day 1	Day 2	Day 3
ABC Stays	ABC Stays	ABC Stays
ABC Food	ABC Food	ABC Food
Camping	Camping	Camping
Dinner	Dinner	Dinner

[Edit](#) [Talk to travel agent](#)

### Comment view on group posts



**DoD Trekkers Club**  
Himanshu Dhillon • 4h

Hi guys... let's plan for a trip after exams????  
Planning to go Rishikesh - Dehradun.  
Who's in?

♥ 10    💬 22    📌

**Alok Kachhap**  
Count me in bro.  
Like Reply

**Deepanker Mukherjee**  
Me too bro...  
Like Reply

[Load more comments](#)

## UI Exploration 3



Moodboard



Illustration explorations

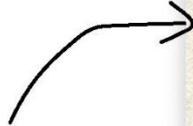


Landing Page UI Concept (illustrative / doodled design)

Unconventional button design



Textured background to align with the doodled/illustrative UI design



Footer with illustrations - inspiration extracted from the elements of Uttarakhand



Source: <https://www.behance.net/gallery/152305519/TravelBugs-UIUX-Project-for-Uttarakhand-Tourism>

**Thank You**

