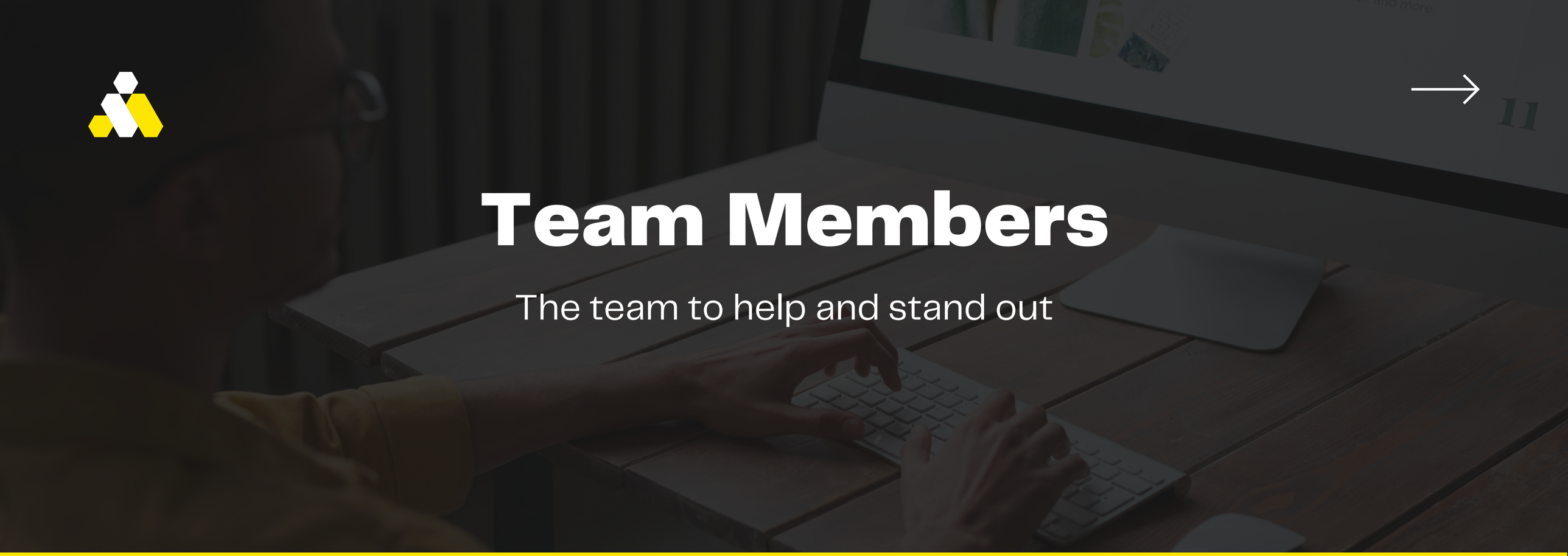
Group 7

ExploreCAN

Recommendation system for Restaurants and Tourist attractions



Team Members

The team to help and stand out

Rahulnikki Yerrapothu

Vikranth Reddy Tegala

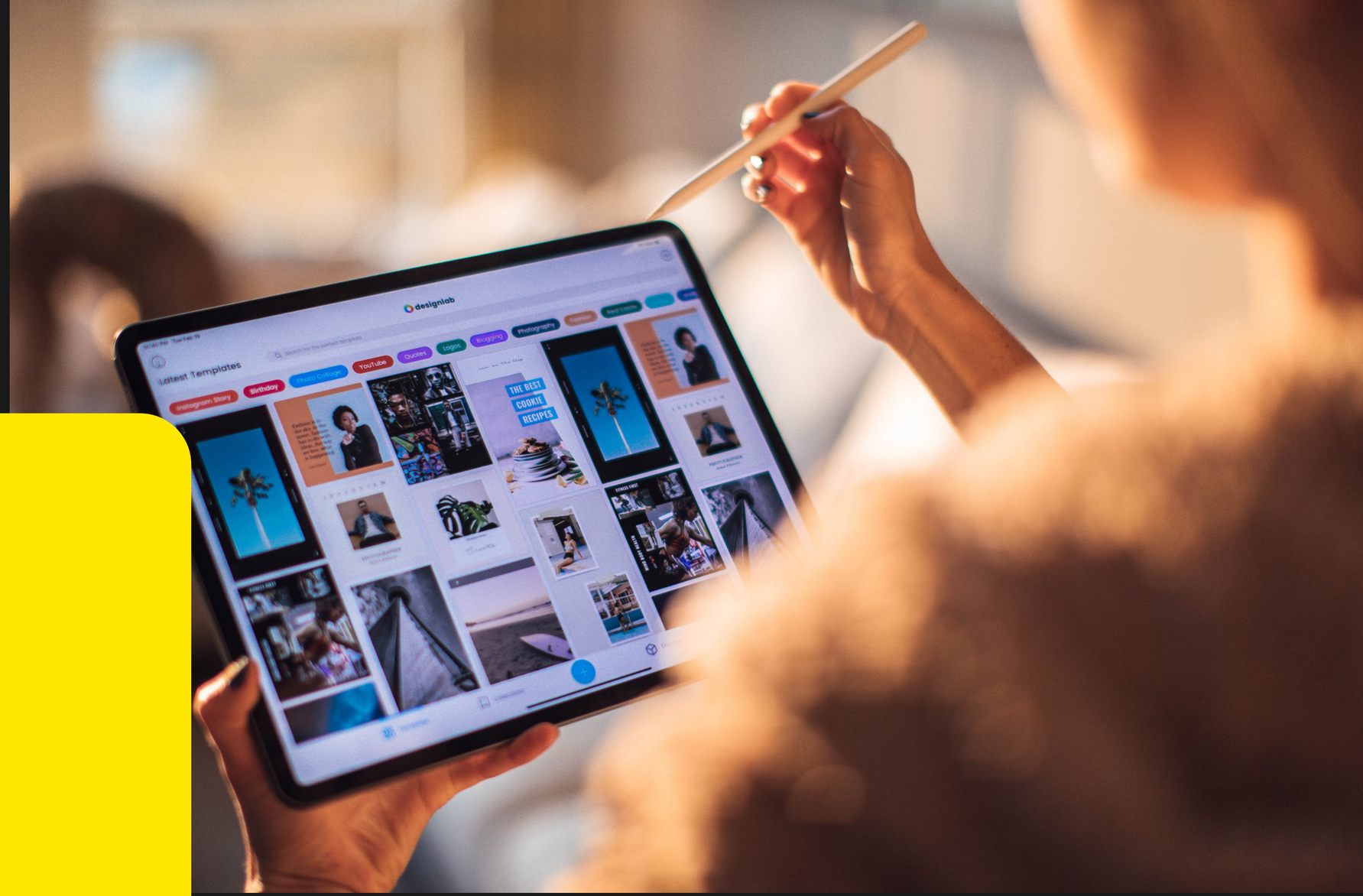
Sahithi Thokachitchu
Sai Prathyusha
Anusha Adem

Things to discuss

Key takeaways:

- Exploring the pathway
- Where we started
- Where we are expertise in
- Sample content
- Timeline

Problem Statement



Problem Statement

Help tourists to find the best Canadian restaurants and tourist attractions, develop a recommendation system that suggests options based on the user's location, preferences, and ratings.

This system should be intuitive, and personalized, and enhance user experience, increasing user satisfaction and engagement.

Vision and Mission

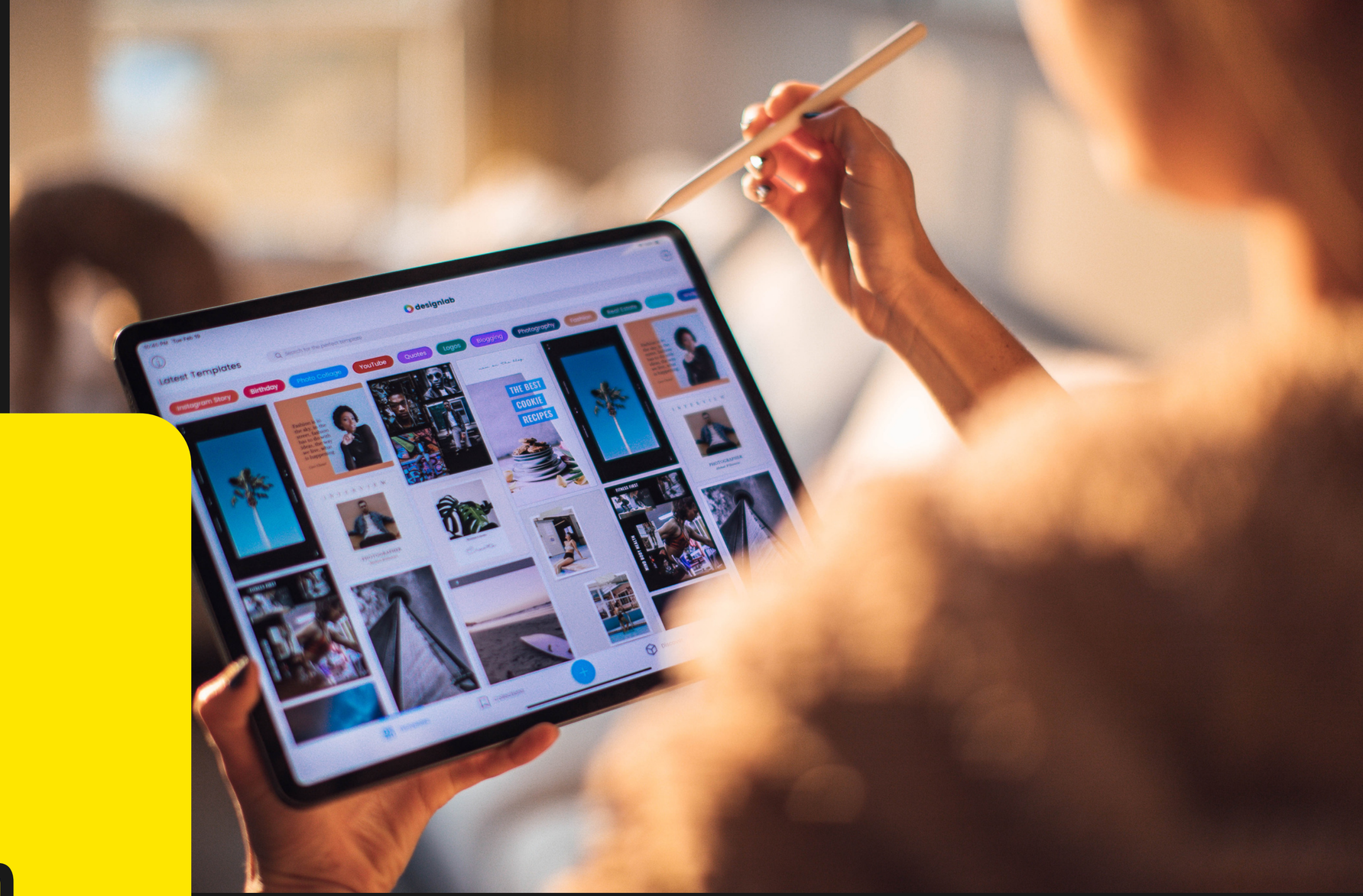
Our vision is to create a cutting-edge recommendation system.

That revolutionizes the way people discover Canadian restaurants and tourist attractions, providing them with a personalized and delightful experience.

Our mission is to develop a comprehensive and user-friendly recommendation system.

That leverages the latest technologies, including data analysis and machine learning To help users find the best options for their needs, leading to increased satisfaction and engagement.

Business Breakdown

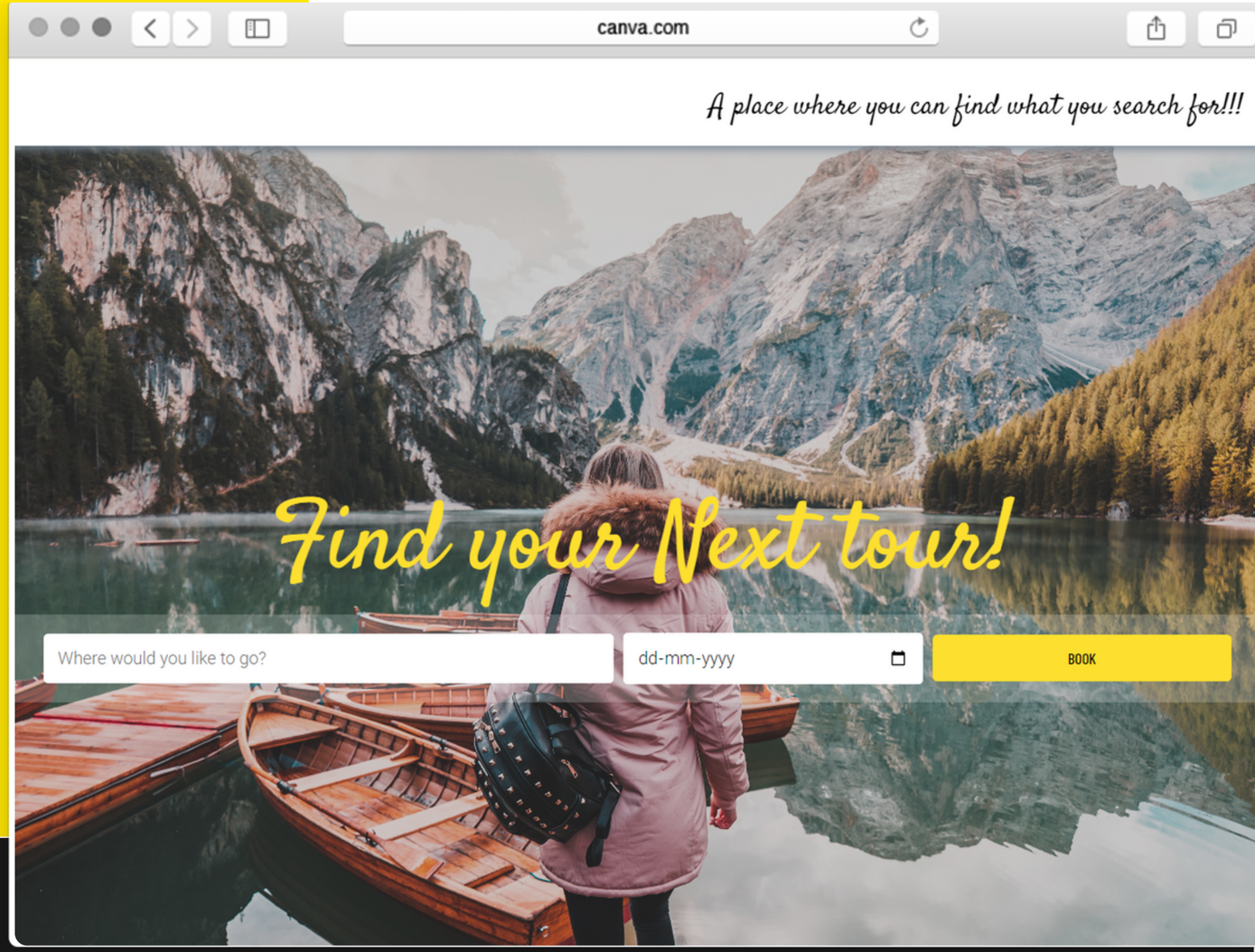


What do we target on?

Making it big online

User interface platform

By incorporating user reviews and ratings, the system can help users make informed decisions about where to eat and what to do, leading to a better overall user experience.



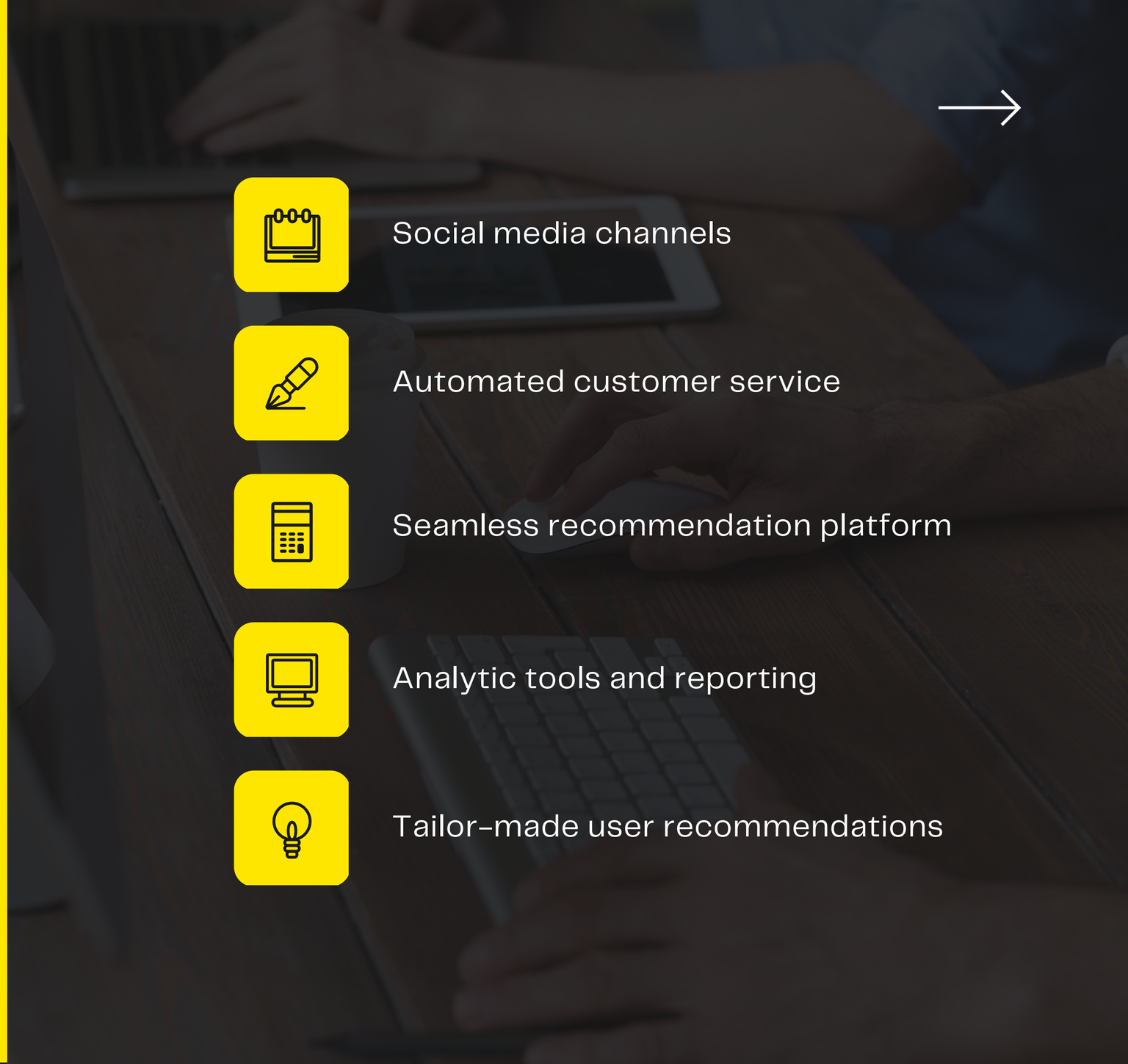
Exploring different channels

You have the freedom to choose your platform.

We have given the freedom to access the user to use different platforms to access our application

1. Web application
2. Mobile App

Our channels to attract customers and sponsors



- Social media channels
- Automated customer service
- Seamless recommendation platform
- Analytic tools and reporting
- Tailor-made user recommendations

Where to start

Creating brand value and Implementing marketing strategy

Creating our brand's profile

By creating

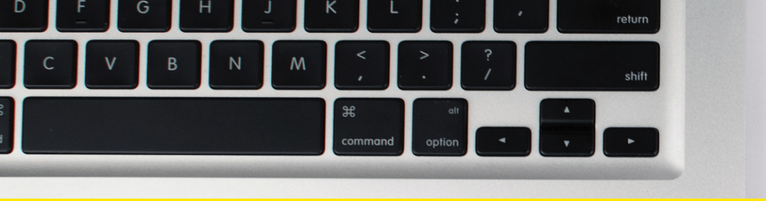
- Personalized recommendations
- user-friendly interface
- A comprehensive database of restaurants and tourist attractions

Develop a brand messaging strategy

This can involve creating a brand messaging framework that outlines the brand's value proposition, key messages, and brand personality.

Seeking our target audience

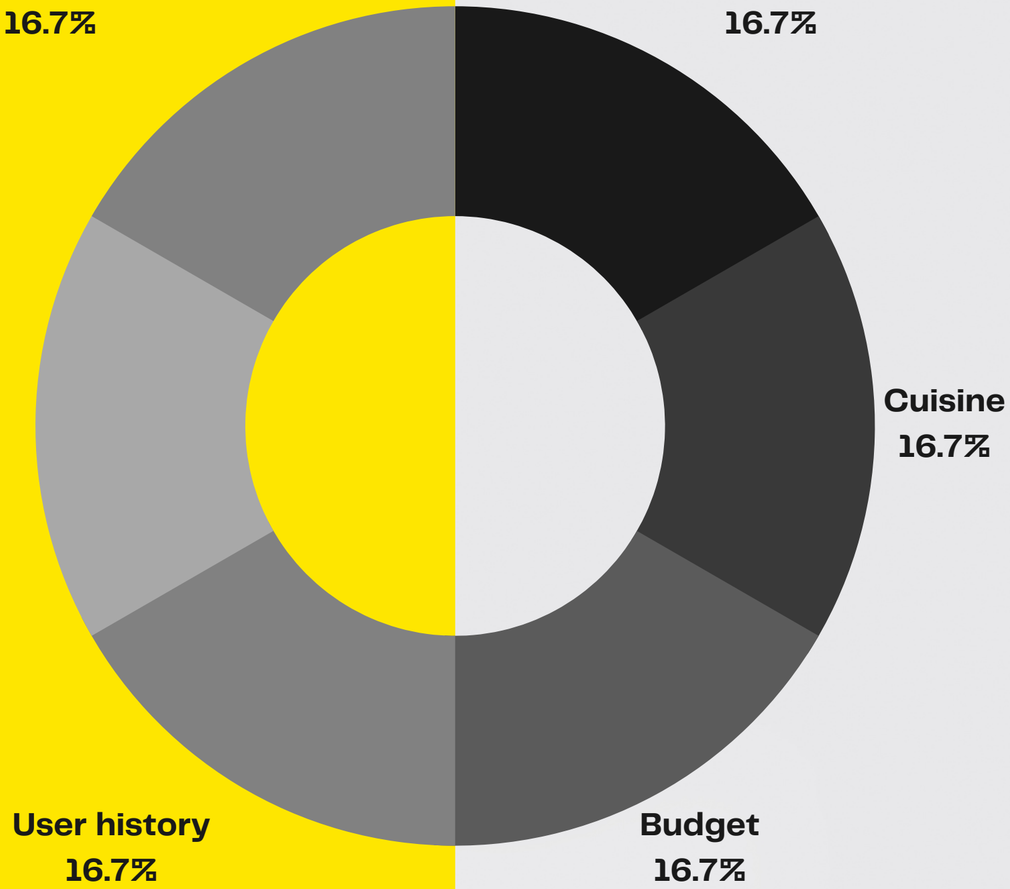
This can involve identifying the demographics, interests, and behavior of the target audience, such as foodies, travelers, or families.



Creating a bigger online presence

The different areas companies focus on online

Our recommendation system for Canadian restaurants and tourist attractions may focus on multiple areas to provide accurate and personalized recommendations that match the user's preferences and help them discover new and exciting experiences.

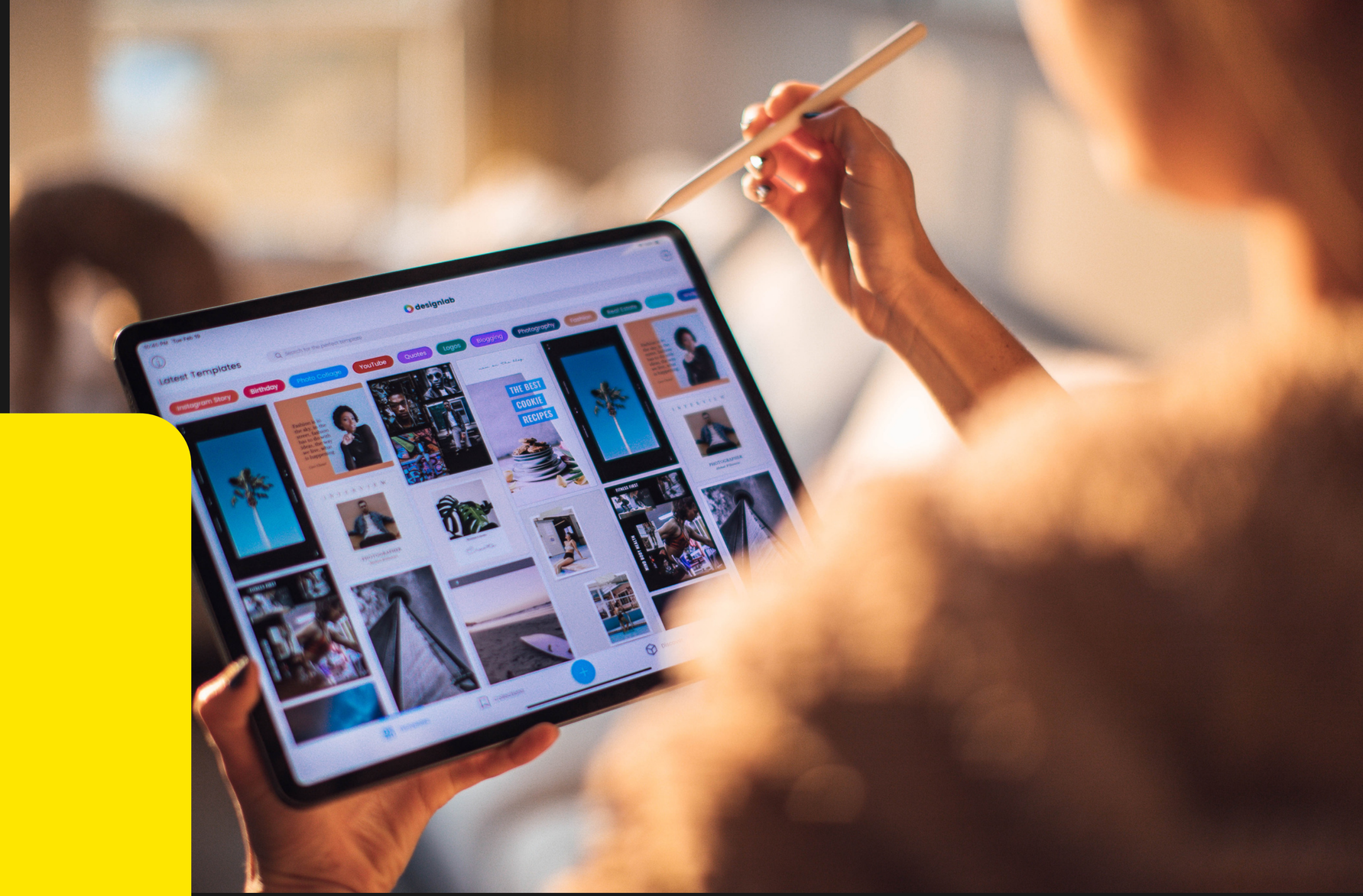


Top 5 competitors

Why are we better than them?

- Focus on Canadian culture
- Personalization
- Integration with local services
- Quality of data

Technical Approach



What do we target?

Key Aspects we focused on while creating the **User interface and Back end**

User Interface Technologies

- HTML/CSS
- JavaScript
- Boot strap
- Angular TS

Clear and concise design

Our design is clear and concise, with a minimalistic approach that highlights the most important information and recommendations.

Back End Technologies

- Python – Model Development
- MS-SQL Server – Database for storing user information, restaurant details and tourist attraction places.

What makes us unique

- Our recommendation system has been designed to handle many users and provide fast response times.
- Our backend is designed to monitor system performance and provide analytics on user behavior, recommendations, and other key metrics.

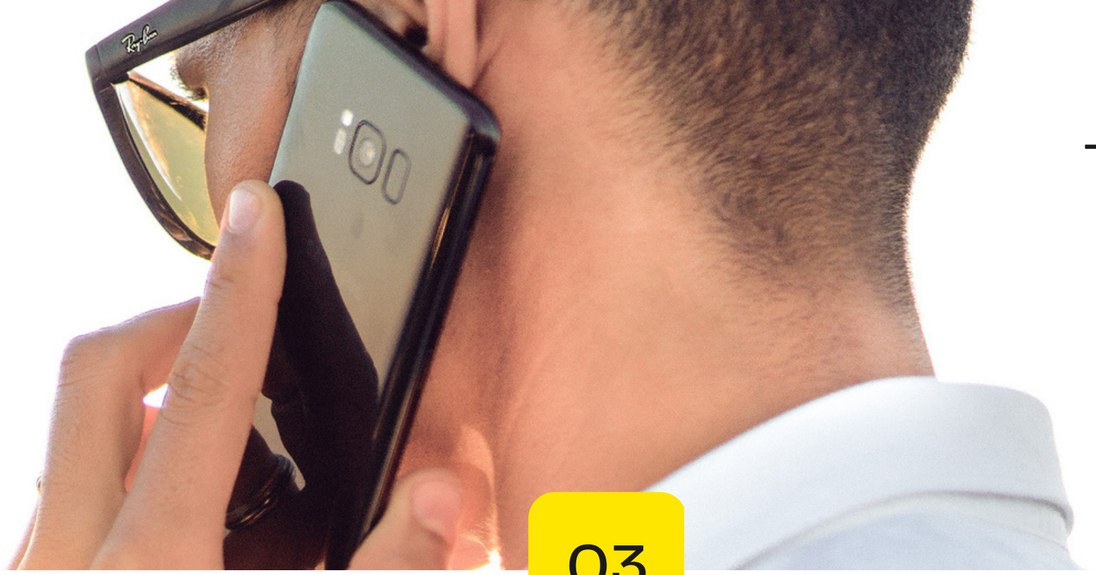
ML models we used

Why KNN and Random Forest?

The KNN algorithm is used in a recommendation system to calculate the similarity between items, select the K-nearest neighbors, predict ratings for user-item pairs, and generate recommendations for users based on their past behavior.

The Random Forest Algorithm is used to predict ratings and generate personalized recommendations for users.

Where are we?



01

User interface

We have created an interactive user interface web application. Where we will be using it as main landing page

02

Testing accuracy

We have used KNN and random forest Algorithms to find the accuracy of our dataset. Where we got an accuracy of 80% for the restaurant's dataset. Which is the best fit for training the model

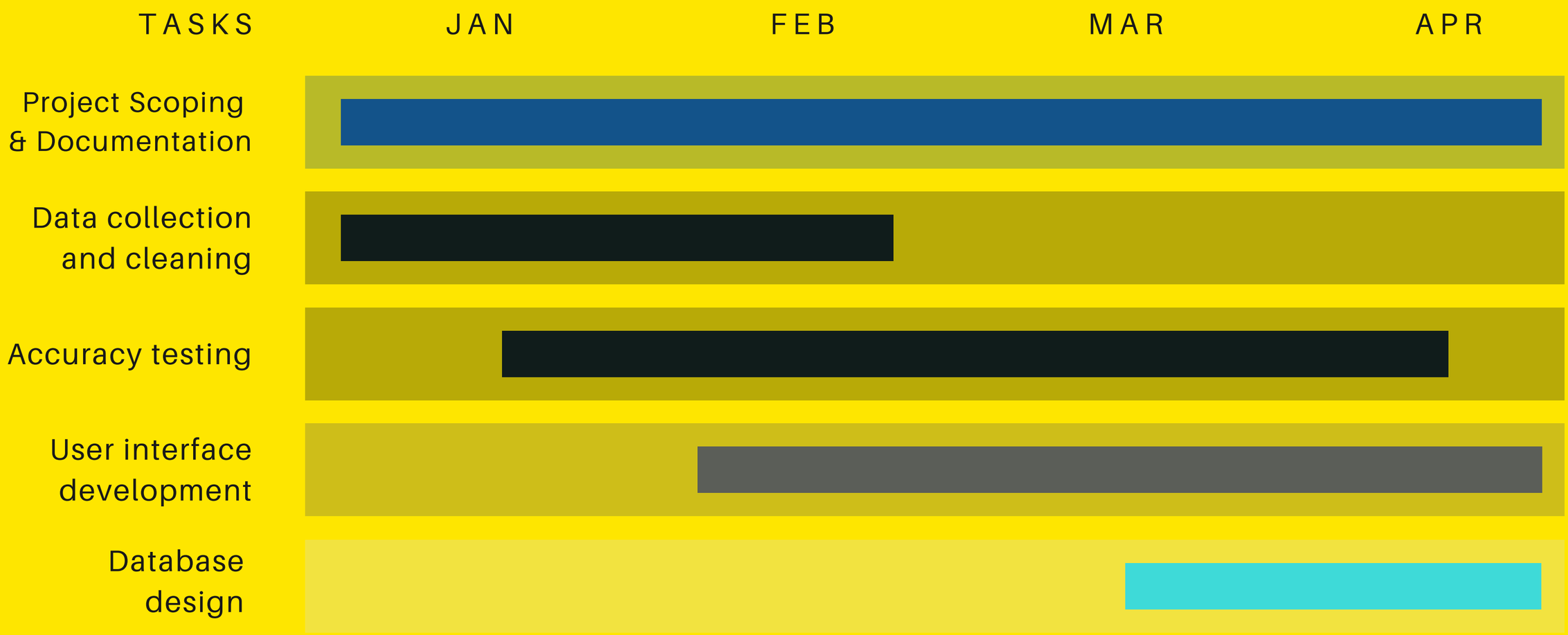
03

Backend Database

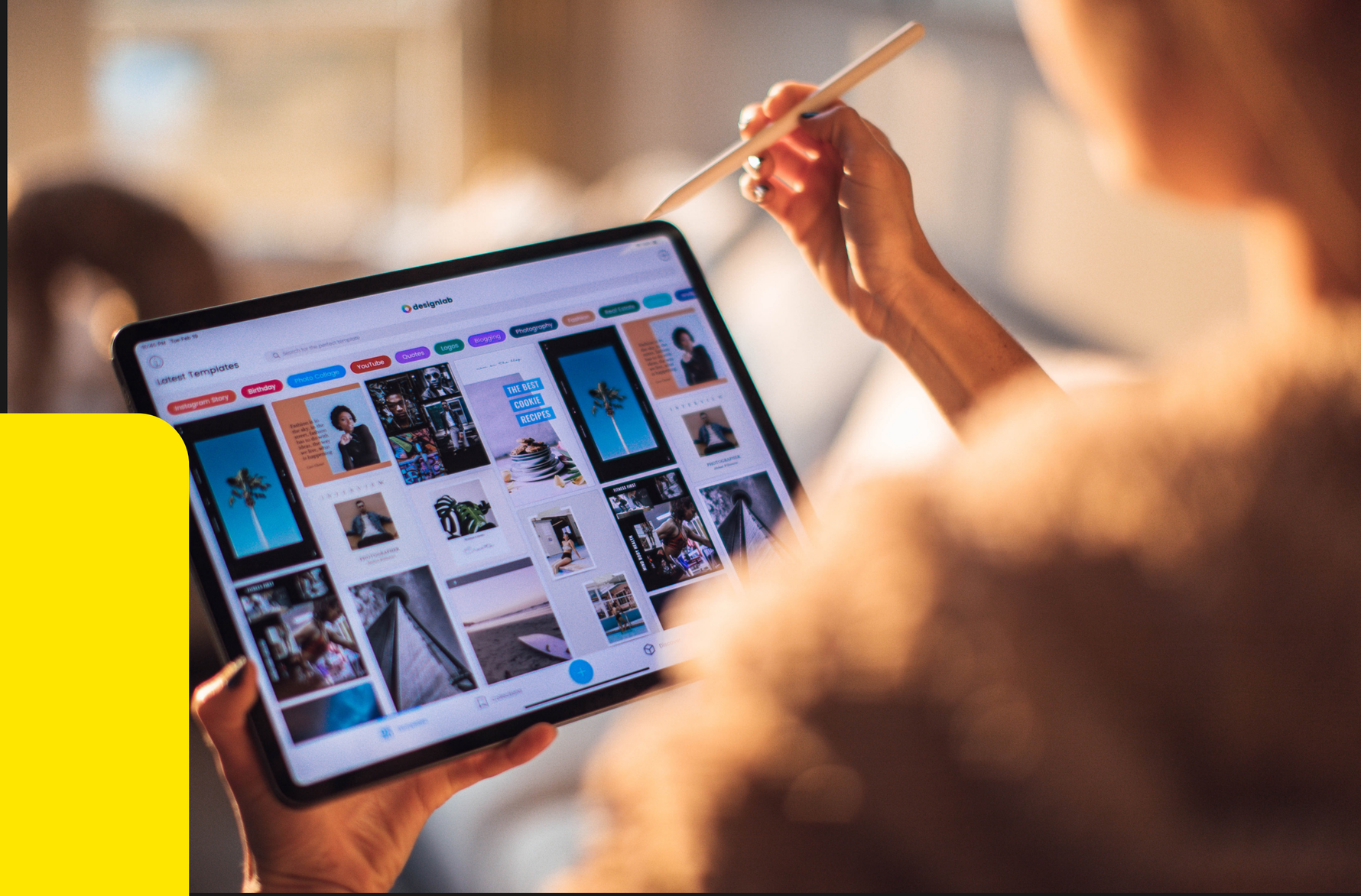
We have used an MS-SQL server and created restaurants and tourist attractions tables.

Progress till now

Start date: Jan 2023 - Till Apr2023



Challenges


designlab
Latest Templates
Instagram Story
Birthday
Photo Collage
YouTube
Quotes
Logos
Blogging
Photography
THE BEST
COOKIE
RECIPES

Challenges we faced?

Data collection and quality

One of the biggest challenges we have faced is collecting and maintaining high-quality data on restaurants and tourist attractions.

Cold-start problem

Occurs when the recommendation system has insufficient data on new users or items.

Scalability

As the number of users and items in the system grows, we may face scalability challenges.

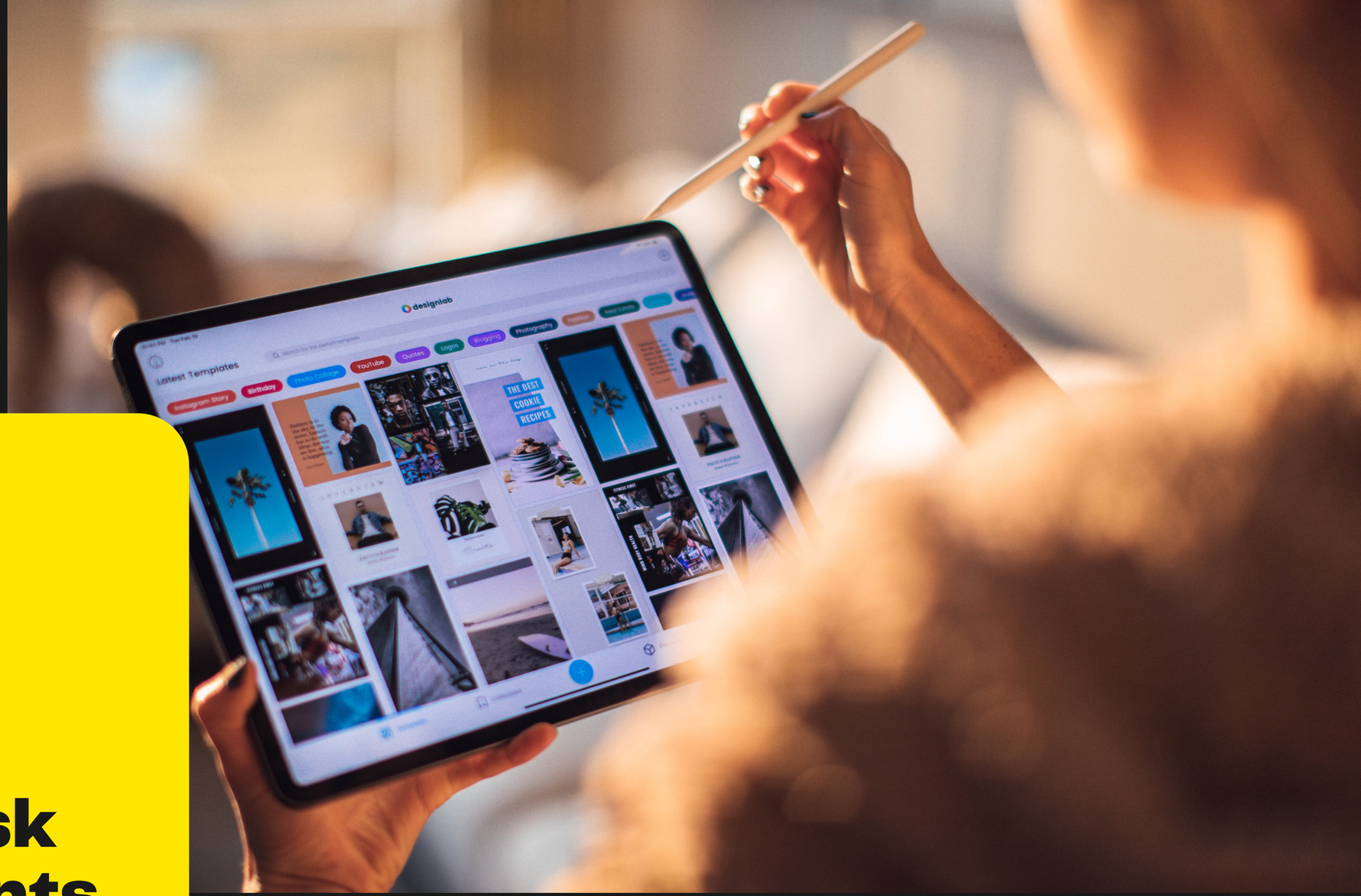
Privacy and security

Protecting user privacy and ensuring the security of sensitive data is critical.

User engagement

If the user interface is not intuitive or visually appealing, users may be less likely to interact with the system and provide feedback on the recommendations.

Individual Task accomplisments



Individual Task accomplisments

	PROJECT DOCUMENTATION	DATA CLEANING	TESTING ACCURACY	API GENERATION AND TABLEAU VISUALIZATION	USER INTERFACE AND DATABASE DESIGN
Sahithi	✓	✓	✗	✓	✓
Prathyusha	✓	✗	✗	✓	✓
Vikranth	✓	✗	✗	✓	✓
Anusha	✓	✗	✓	✓	✗
Rahul	✓	✓	✗	✗	✓

FUTURE DEVELOPMENT AND PLANNING

Design Process 101

Data Intergartion

Develop a Machine Learning algorithm that is used to develop the model according to the Q & A's

UI/UX Enchancement

Implement admin dashboard to manage the content and create a mobile adaptive landing pages

Mobile application creation

We are thinking to develop a mobile application. As it will be more feasible for many travellers

Testing and deployment

Deploy and test the application in a virtual interface

Version controlling

Continuously improve the recommendation system by incorporating feedback from users, adding new features, and updating the


Thankyou open for Q & A'S