

# TRIBHUVAN UNIVERSITY INSTITUTE OF ENGINEERING PULCHOWK CAMPUS

A Minor Project Report On

Hamro Menu

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## **Abstract**

"Hamro Menu" is a new app that aims to provide users with access to menus from a wide range of local restaurants in Nepal. With its user-friendly search features, users can easily find the perfect restaurant for any occasion and make reservations or place orders directly through the app. "Hamro Menu" is expected to become a widely-used app for finding restaurants in Nepal, and will provide users with access to a wide range of dining options, including traditional Nepali cuisine and international flavors. Users will be able to make informed decisions about which restaurants to visit based on ratings and reviews from other users and will be able to save their favorite restaurants and receive personalized recommendations based on their previous dining preferences. Users will also be able to view a menu of the nearby location. Overall, the "Hamro Menu" is a valuable resource for anyone looking for great dining options in Nepal.

## Introduction

#### **Background**

Deciding where to eat can be a difficult and time-consuming process, especially when there are so many options to choose from. "Hamro Menu" aims to make this process easier by providing users with access to a comprehensive database of local restaurants, along with menus and ratings, and reviews from other users. With "Hamro Menu," users can easily find the perfect restaurant for any occasion, whether they're in the mood for a quick snack, a romantic dinner, or a festive celebration.

#### **Problem Statement**

The problem that "Hamro Menu" aims to solve is the difficulty of finding and choosing restaurants in Nepal. With so many options to choose from, it can be difficult for users to decide where to eat, and they may end up settling for a subpar meal. Also, middle-class people fear entering a restaurant assuming it to be highly priced or overpriced.

### **Proposed Solution**

Therefore, "Hamro Menu" aims to make this process easier by providing users with access to a comprehensive database of local restaurants, along with menus and ratings, and reviews from other users. With "Hamro Menu," users can easily find the perfect restaurant for any occasion, whether they're in the mood for a quick snack, a romantic dinner, or a festive celebration.

Additionally, the "Hamro Menu" aims to address the problem of convenience for users. Many people do not have the time or energy to spend hours researching restaurants and making reservations and may resort to eating at the same few places over and over again. "Hamro Menu" allows users to make reservations or place orders directly through the app making it easier for users to find and enjoy great meals without having to put in too much effort.

Overall, "Hamro Menu" aims to solve the problem of finding and choosing restaurants in Nepal by providing users with a comprehensive, user-friendly resource for discovering new dining options.

# **Objectives**

- 1. To choose the right restaurants around your location
- 2. To be able to look at the menu and price of the items available
- 3. To be able to read reviews of people if available
- 4. To use Sentimental analysis to analyze the reviews and provide recommendations.

# **Methodology**

#### **Application Development**

We will be using flutter for developing our application. Flutter provides the front-end and back-end development environment. We will use google map API for finding the list of nearby restaurants and hotels. After finding the hotel's list we can click on the hotels to find the menu of each restaurant. The user will have a feature to upload the image on it. Optical Character Recognition (OCR) feature is provided for scanning of the menu by the app users to convert it into text which is searchable

#### **Sentimental Analysis**

For understanding the reviews of the hotels and restaurants provided by the users, we are planning to integrate any of the sentiment analysis models provided by hugging face. Based on this we will be recommending the restaurants in the future. Secondarily, We are looking to come up with our own analysis model using BERT (Bidirectional Encoder Representations from Transformers) in the final stage.

## **Project Schedule**



# **Expected Results**

The final outcome of the project will be the standard "Hamro Menu" app that suggests potential local restaurants along with its Menu and respective prices. The users will also be able to get reviews and possible suggestions through the app.

# **Conclusion**

Thus, "Hamro Menu" aims to provide a platform where a user can locate nearby restaurants and look at its menu. This will allow the users to know the detailed description of restaurants before being there which prevents bad experiences. Also, a new to a city person or a tourist will be able to find a local restaurant with better reviews and ratings. Developing this app requires a proficient amount of study and research regarding the topic. Sufficient testing and quality assurance will be required after the development phase for the successful implementation of the project.