T.C.
YEDITEPE UNIVERSITY
FACULTY OF ENGINEERING

ISE 402 – CSE 344 SPRING 2023 TERM PROJECT

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CONTENTS

1. INTRODUCTION

This report evaluates a restaurant recommendation website project that we have developed. The website aims to assist users in their decision-making process by providing restaurant suggestions based on factors such as price, taste, service, and speed. The examination of existing similar applications has revealed their inadequacies and the potential for further improvements. This report includes the reasons and objectives of the restaurant recommendation website project. Additionally, it encompasses the analysis of the current state of existing similar applications to identify their shortcomings and address them. We describe the features and design of the newly created website within this report.

1.1 Purpose of the document

The purpose of this document is to introduce and evaluate a restaurant recommendation system project. The restaurant recommendation system is designed to guide users in their restaurant selection process and provide them with tailored suggestions based on their preferences. This document explains the reasons and goals of the restaurant recommendation system project. It also delves into the system's design, functionality, and the benefits it offers to users. Furthermore, the document describes how the system will assist its users and address the challenges they face in the restaurant selection process.

1.2 Purpose Of the system

1.2.1 Users and Provided Features

This new system is a restaurant recommendation platform aimed at assisting in restaurant selection. Users can utilize the system to receive suggestions tailored to their restaurant preferences. The system caters to the following types of users:

1. General Users: Individuals who use the system to choose or explore any restaurant. General users can receive restaurant recommendations and access information based on factors such as price, taste, service quality, and speed.
2. Yeditepe University Students: This system is specifically designed for Yeditepe University students. Yeditepe University students can gather information about cafes near the university and receive recommendations based on their preferences. The system allows students to filter cafes based on their priority factors (such as price, taste, popularity, etc.).

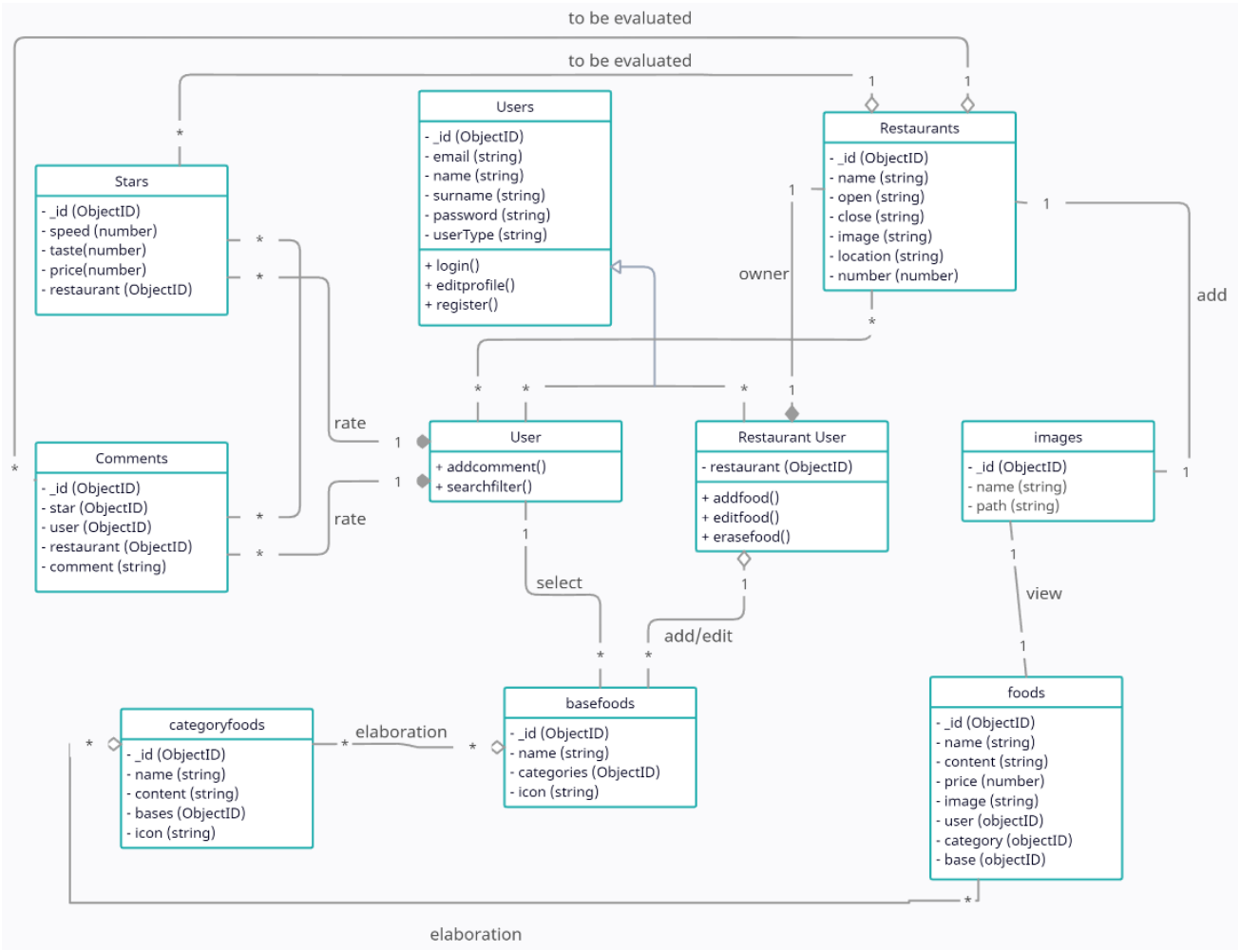
The features provided to users may include:

1. Restaurant Recommendations: Personalized restaurant recommendations are presented to users based on their preferences. These recommendations are made considering factors such as price, taste, and speed.
2. Filtering Options: Users can filter restaurants based on their own preferences and needs. For example, a user prioritizing affordable prices can apply filters accordingly.
3. Restaurant Details: Users can access detailed information about each restaurant. This information may include the restaurant's menu, price range, service evaluations, user reviews, and restaurant location.
4. User Reviews and Ratings: Users can evaluate restaurants, leave comments, and share their own experiences with other users. They can also rate speed, taste, and price separately. The average of user ratings contributes to the overall restaurant rating. This assists users in making more informed decisions when choosing a restaurant.

1.3 Structure of the document

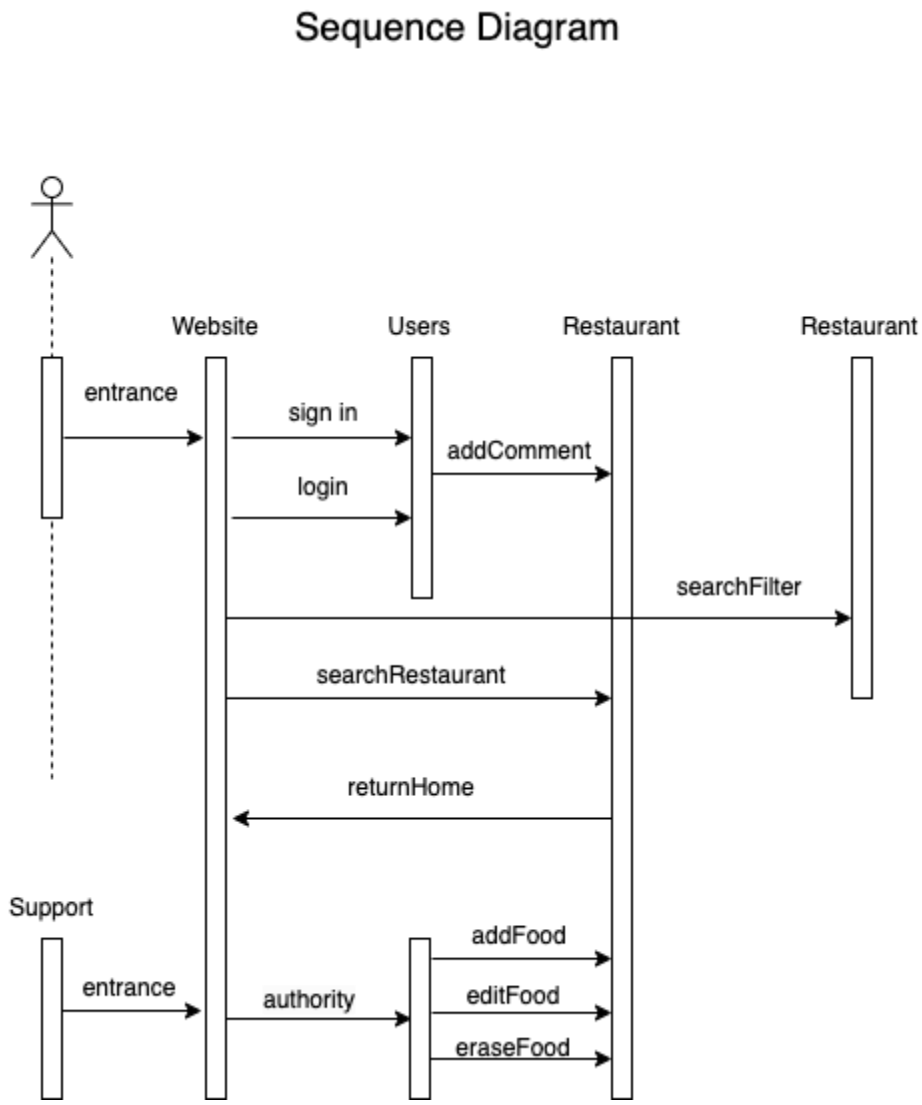
This document consists of five main sections. The first section discusses the purpose of this document and the system. When explaining the purpose of the system, it mentions the target users and the features we have added to the system. In the second section, the class diagrams we created in the previous report are redesigned and presented in a more organized and understandable format. The third section of our report consists of the dynamic models of our website, including sequence, state, and activity diagrams. The fourth section discusses the software architecture of our website. We describe the software architecture with UML package diagrams and UML component diagrams. In the fifth and final section, we include entity relationship diagrams.

2. DETAILED DESIGN CLASS DIAGRAM

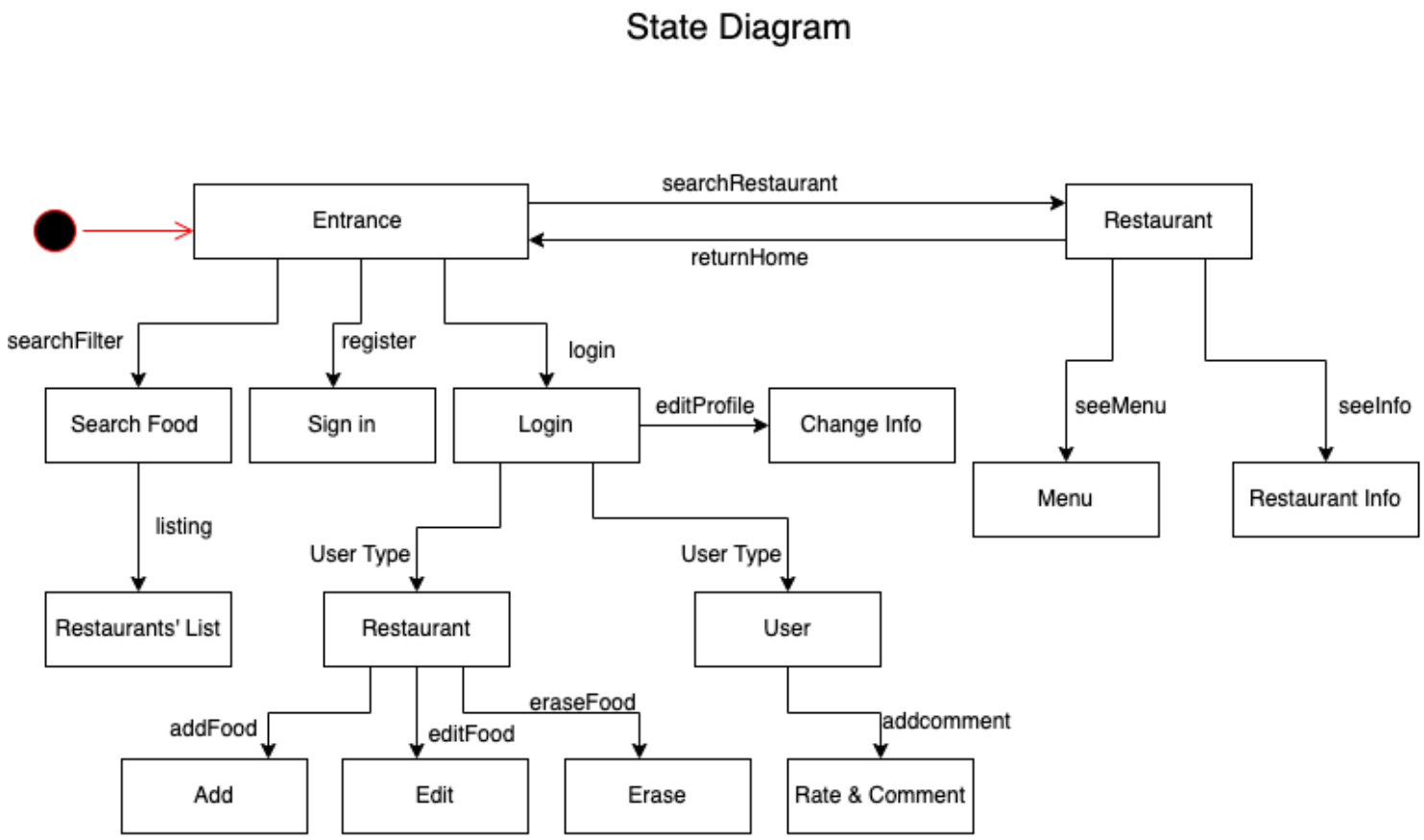


3. DYNAMIC MODELS

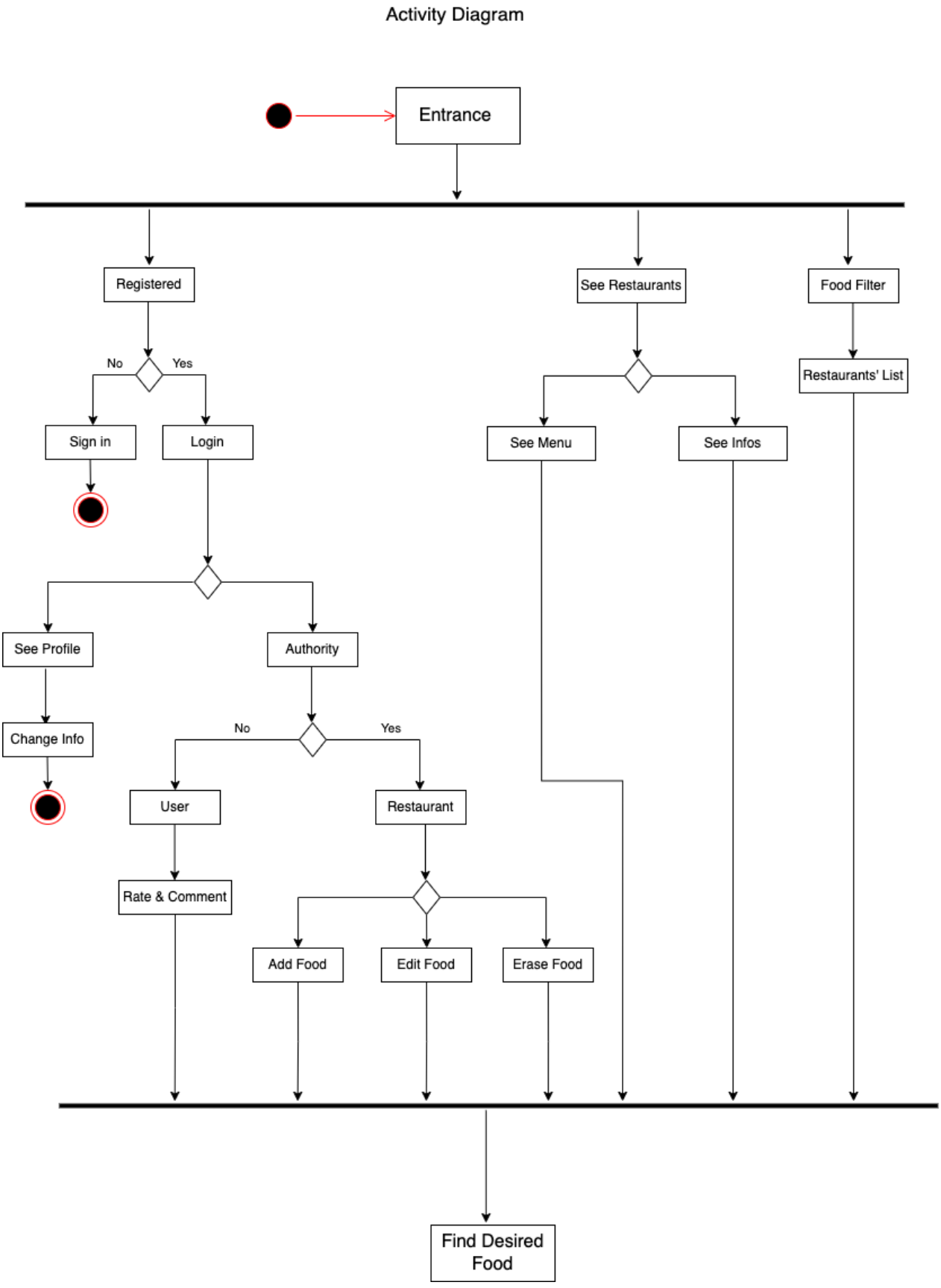
3.1 Sequence Diagram



3.2 State Diagram

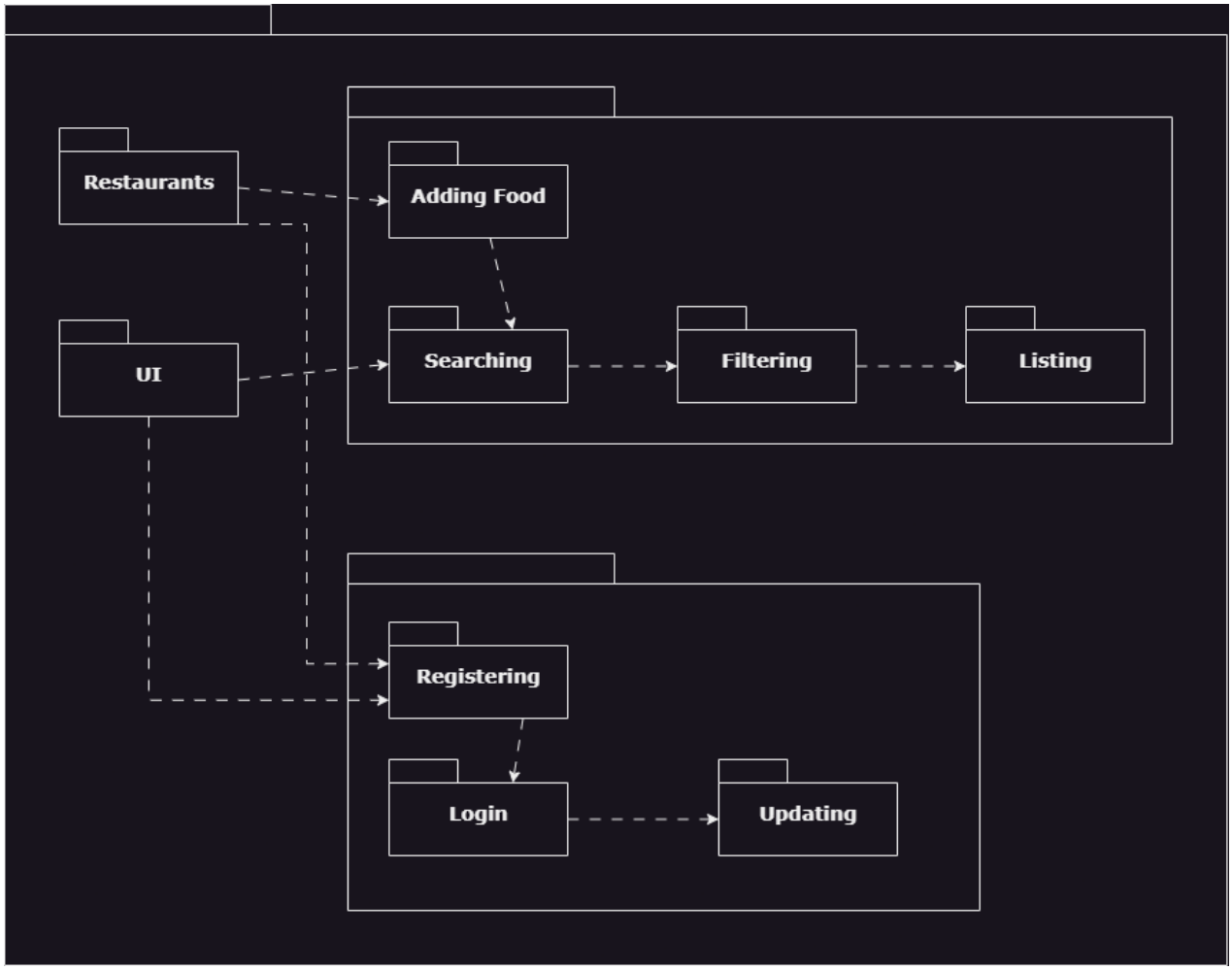


3.3 Activity Diagram

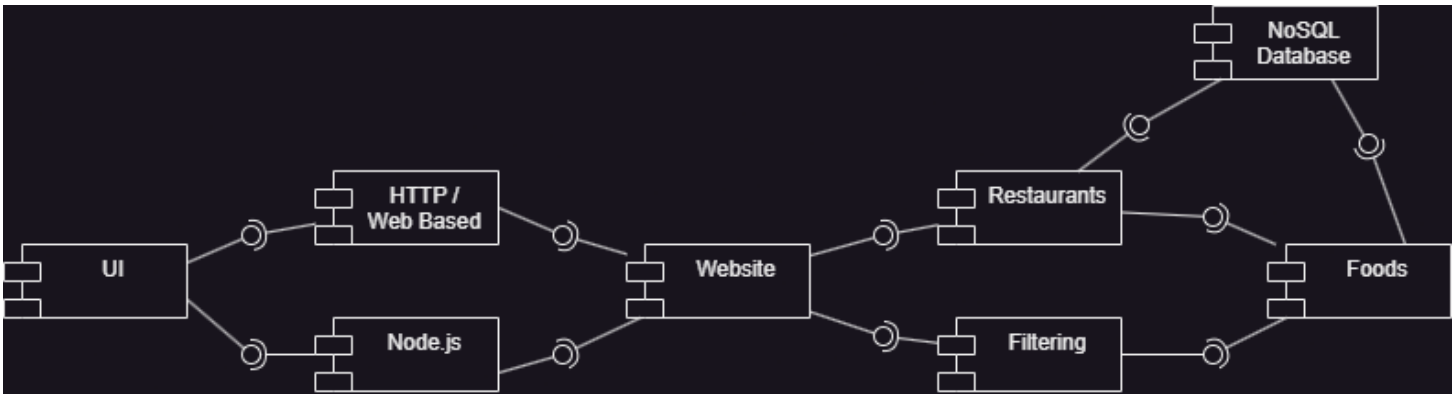


4. SOFTWARE ARCHITECTURE

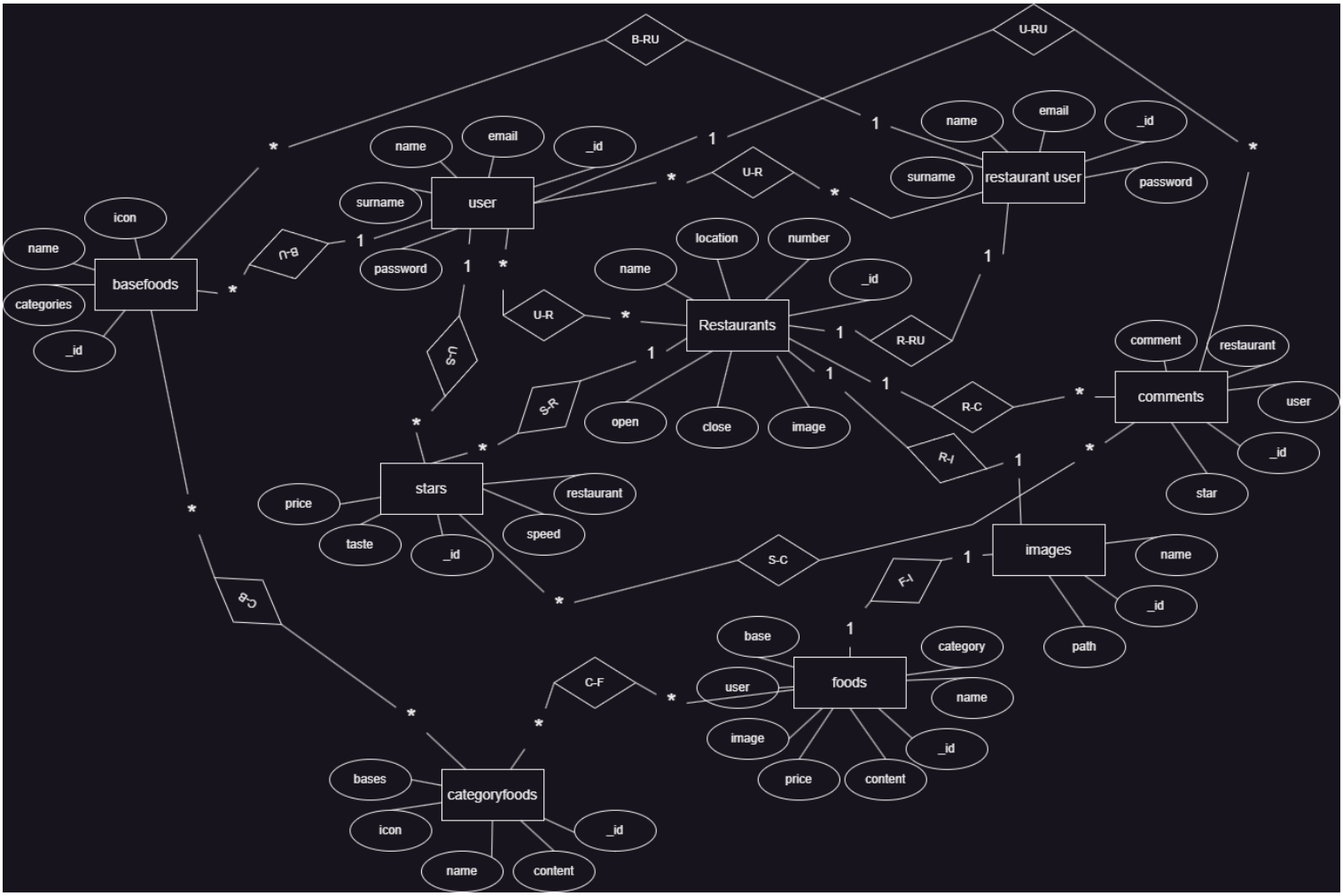
4.1 UML Package Diagram



4.2 UML Component Diagram



5. ENTITY RELATIONSHIP DIAGRAM



6. GLOSSARY & REFERENCES

- draw.io
- https://www.visual-paradigm.com/solution/freeumltool/
- https://www.visual-paradigm.com/tutorials/how-to-model-relational-database-with-erd.jsp
- https://www.visual-paradigm.com/learning/handbooks/software-design-handbook/activity-diagram.jsp
- https://www.visual-paradigm.com/VPGallery/diagrams/State.html
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