1. Introduction

1.1 Purpose

The purpose of this document is to explain the design of the Level-0 Support Chatbot for BELSİS.NET. This chatbot system is intended to assist municipal employees by automating responses to common inquiries and providing an efficient and user-friendly platform for accessing information. It aims to reduce the workload of support teams by handling repetitive tasks and improve response times for users. Additionally, the chatbot is designed to integrate seamlessly with existing systems, ensuring smooth and reliable operation.

1.2 Scope Of The Project

The scope of this project is to develop a Level-0 Support Chatbot for BELSİS.NET, an ERP system used by municipalities. The chatbot is designed to assist municipal employees by answering common questions and providing step-by-step guidance for tasks related to the BELSİS.NET modules. It will use natural language processing (NLP) to understand and respond to user queries effectively. The goal is to automate up to 70% of repetitive inquiries, improve user satisfaction, and enhance the efficiency of municipal operations.

1.3 Glossary

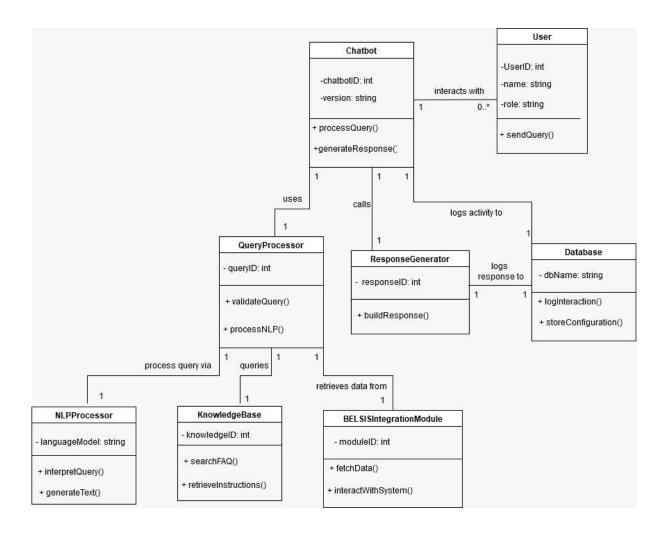
- **Chatbot:** A software application that interacts with users in natural language to provide information or perform tasks automatically.
- Level-0 Support: Basic support that handles simple and repetitive user inquiries without human intervention.
- Natural Language Processing (NLP): A technology that enables the chatbot to understand, process, and generate human language in a meaningful way.
- Artificial Intelligence (AI): The simulation of human intelligence processes by machines, particularly computer systems, to solve complex problems.
- **BELSIS.NET**: An ERP system designed to manage various operations within municipalities, including finance, human resources, and administrative tasks.
- **API (Application Programming Interface):** A set of protocols and tools that allows different software applications to communicate and interact seamlessly.
- **PostgreSQL:** An advanced, open-source database management system used for storing and managing structured data.

1.4 Overview of the Document

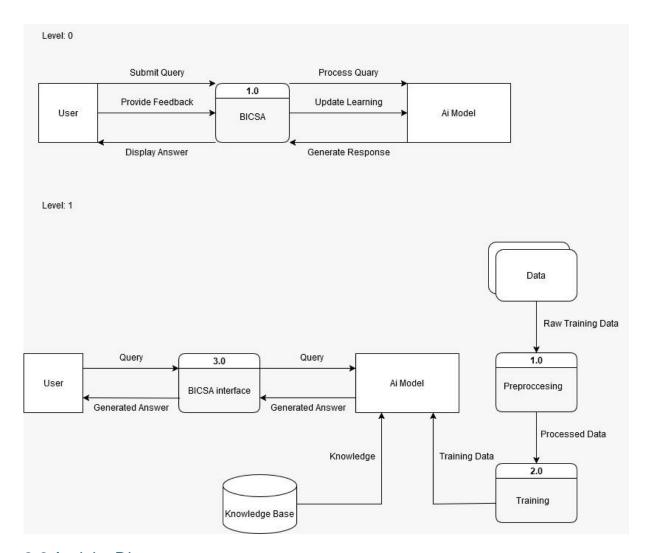
This document provides a detailed description of the design and architecture of the Level-0 Support Chatbot for BELSİS.NET. It begins with an introduction that explains the project's purpose, scope, and objectives. Following this, the document delves into the technical aspects, including various design diagrams—such as class, data flow, activity, and sequence diagrams—which illustrate the system's structure and processes. It also features a section on user interface design, showcasing the layout and functionalities of the sample web and mobile applications.

2. System Design

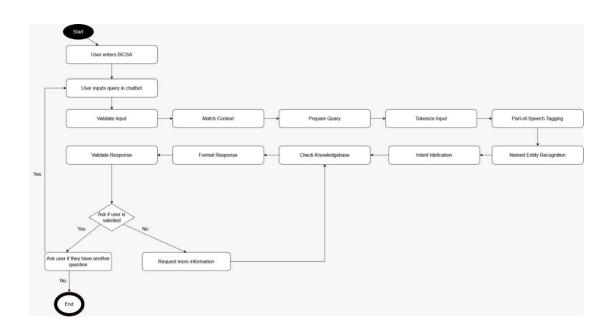
2.1 Class Diagram



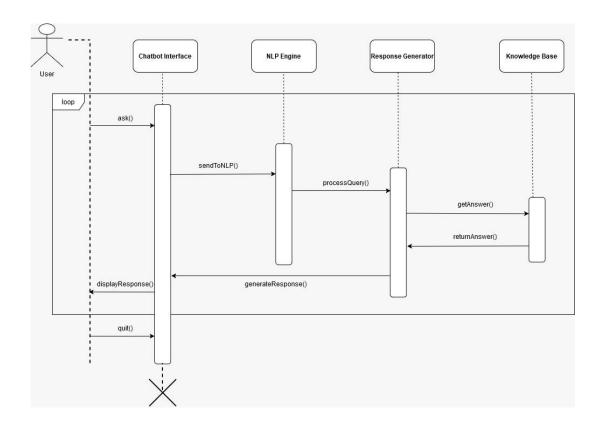
2.2 Data Flow Diagram



2.3 Activity Diagram



2.4 Sequence Diagram



3. User Interface Design

