



Team 7

Altug Gunes

Arif Akkas

Fercan Sen

Mehmet Savran

Osman Altug Ak

Tugcan Akkoylu

Design Document

SE 302

Principles of Software Engineering

Izmir University of Economics

1 Introduction

1.1 Information

CyberShelf is a program that helps user to store different type of items inside it with different attributes. User can also search for a specific item , can delete and edit it. Within the Software Design Document including use case diagrams, collaboration models, object behaviour models, sequence diagrams and other supporting requirement information.

1.2 Purpose

The purpose of the Software Design Document is to provide a description of the design of a system fully enough to allow for software development to proceed with an understanding of what is to be built and how is expected to built. The Software Design Document provides information necessary to provide description of the details for the software and system to be built.

1.3 Scope

This Software Design Document is a model of a system which wanted to build , giving only base level system and critical parts of it. For this particular Software Design Document, the focus is placed on generation of the documents and modification of the documents. Via using this model, aim is the create a specific and unique project.

1.4 Overview

The Software Design Document is divided into 6 sections. The sections of the Software Design Document are :

- Design Information
- Context
- State Dynamics
- UML Diagram
- Architecture
- User Interface

2 Design Information

CyberShelf is a software for categorize any items that users specify. All segments have photographs that will help user to understand the structure and design of the CyberShelf.

CyberShelf has a user friendly visual menu system for user interface that supports easy using. All visual attributes are explained in the user interface segment. The context shows and explains the relationship between the user and the CyberShelf's functions. All functions also have been explained. The UML diagram is a visual index for classes that will built CyberShelf's software. Type, Item and Attributes classes are located in UML diagram. Architecture shows how the software is going to be built and will be a future reference for how CyberShelf's software structure will be. All the user and system dynamics are shown at state dynamics segment.

3 Context:

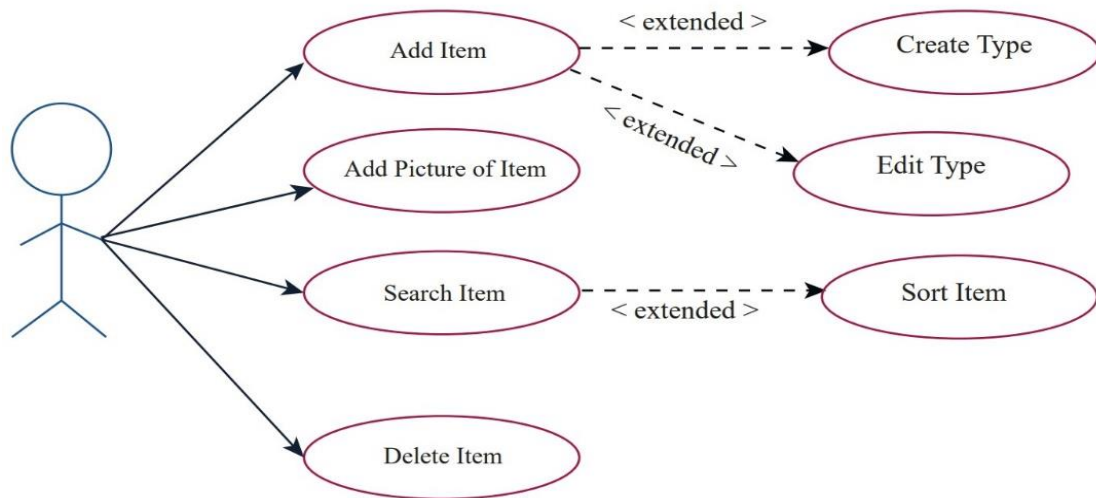


Figure 1: Context Diagram

CyberShelf provides a comfortable use for the user. User can easily add, delete and sort items according to your needs. User can also search for the added parts easily. No extra work is required. User can add images for the types to add. Also user can directly use the system and access its content any without any user authentication.

4 State Dynamics

4.1 System State Dynamics

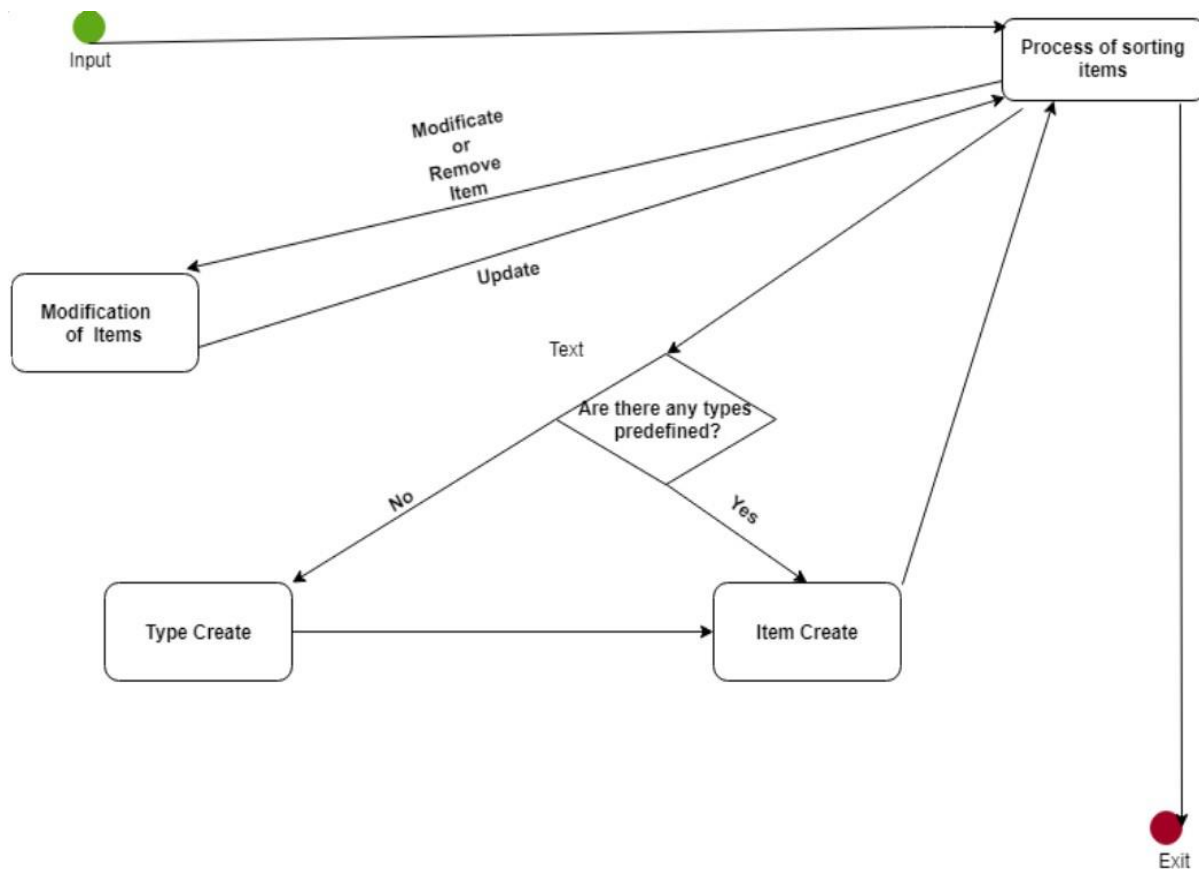


Figure 2: System State Diagram

This application will categorize the information of objects, items or work of arts etc... The application should work like a virtual shelf for collectors. User should be able to add any type of item and category he/she wishes.

Application bonds database and Java with connection using java.sql* package. For instance, we can search items using search class property of Java. As a result, in the nal product, user should be able to make a search and/or lter the results within the list of added items and sort the listed items. Using the same connection between Java and the database, user should be able to edit or delete the items stored in the database.

4.2 User State Dynamics

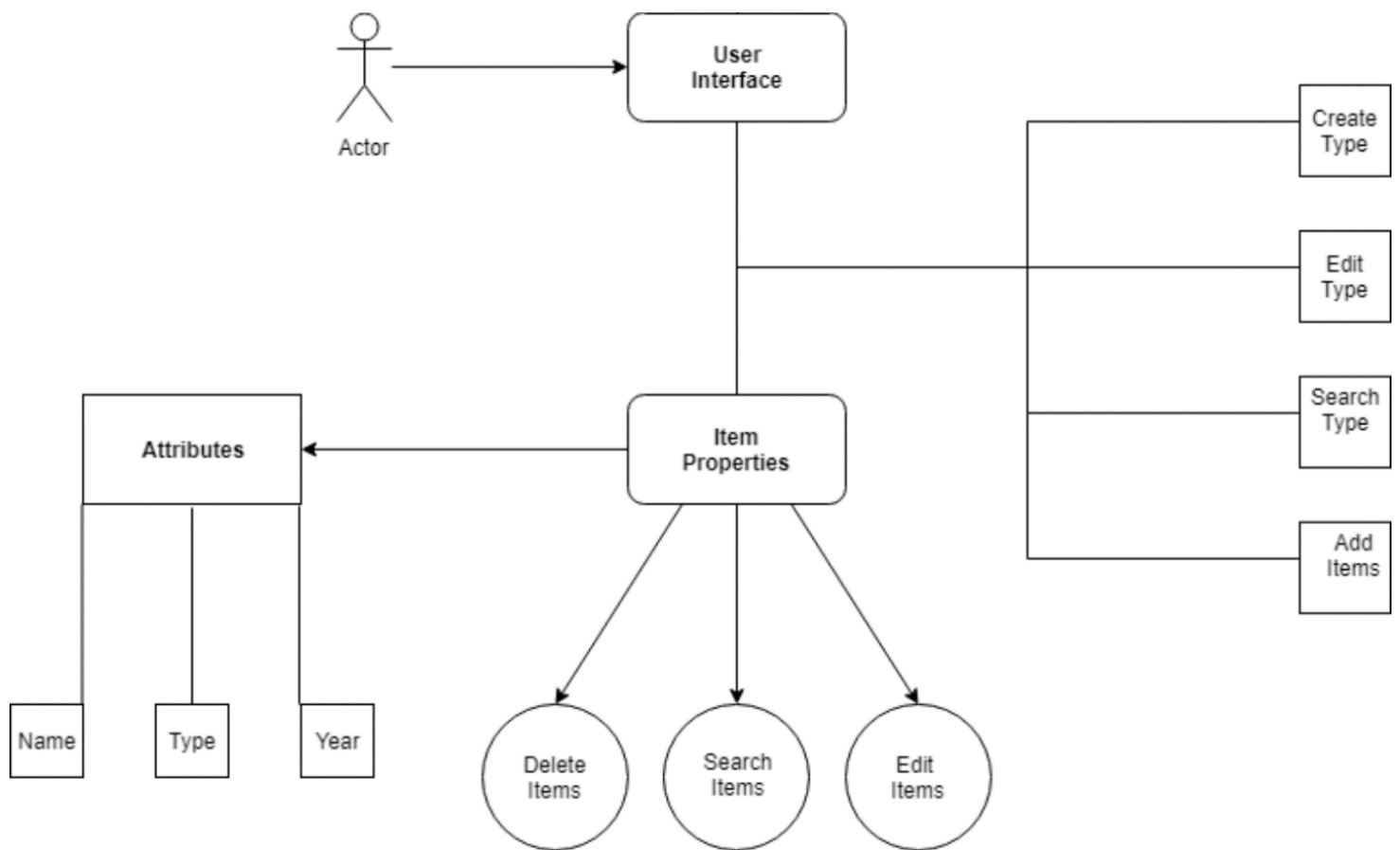


Figure 3: User State Diagram

5 UML Diagram

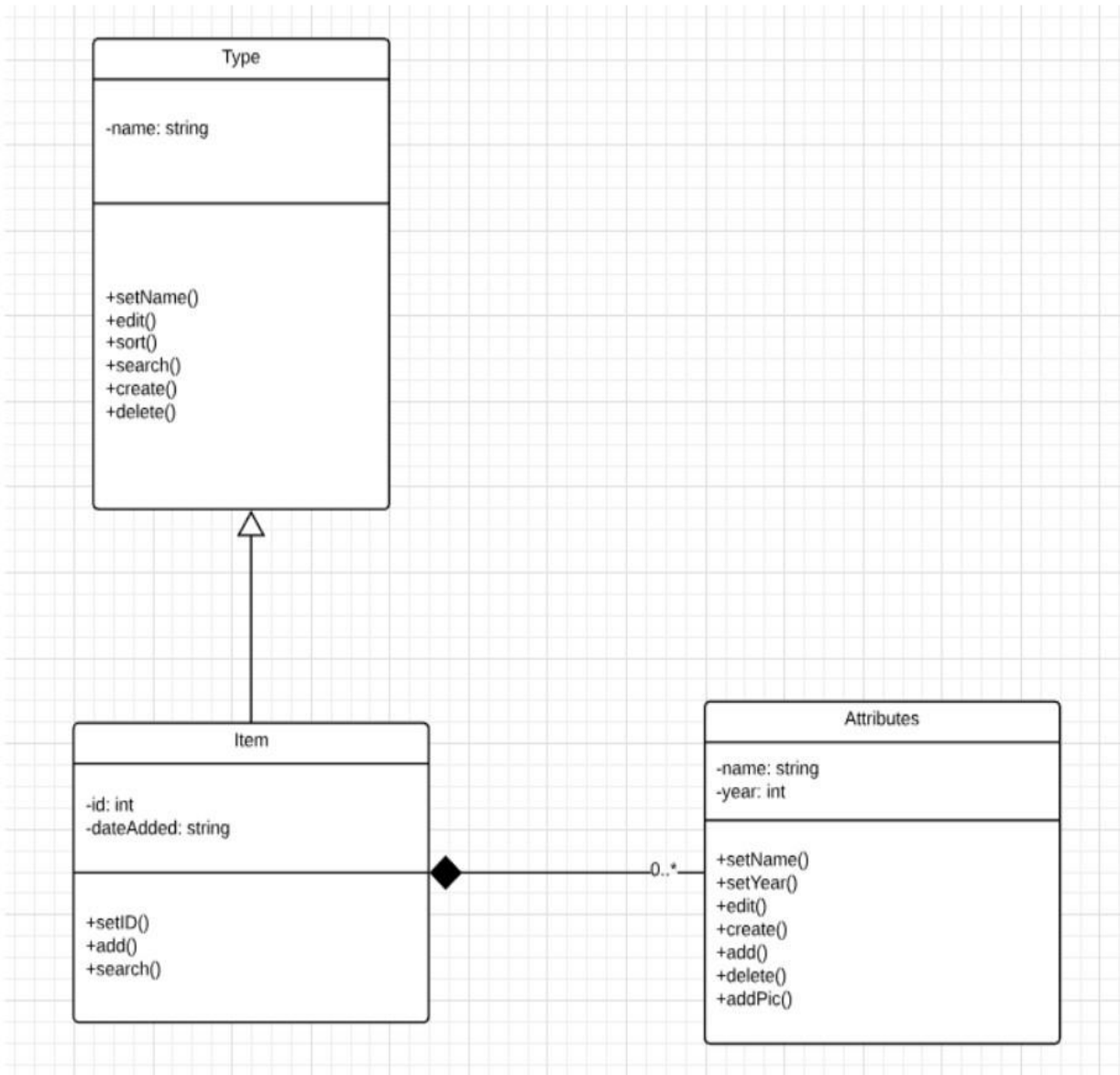


Figure 4: UML Diagram

6 Architecture

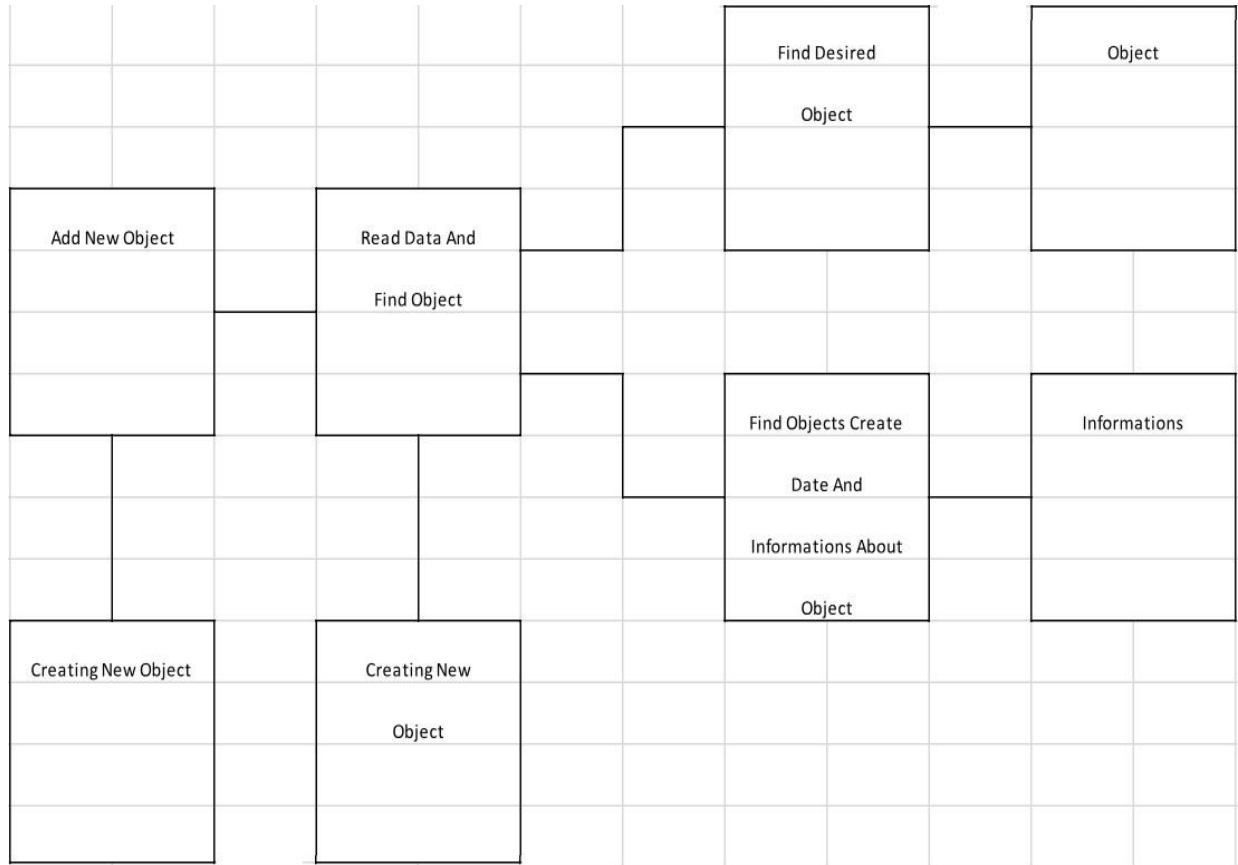


Figure 5: Context Diagram

7 User Interface

The screenshot displays the CyberShelf user interface. At the top, there is a header bar with the 'Cyber Shelf' logo on the left and window control buttons (minimize, maximize, close) on the right. Below the header, a navigation bar contains three buttons: 'Add Item', 'Edit Item', and 'Create Type', followed by a 'Search Item' input field. The main content area is divided into two columns. The left column features a 'Type Menu' with a list of types: 'Type - 1', 'Type - 2', 'Type - 3', 'Type - 4', 'Type - 5', 'Type - 6', and 'Type -'. Each type has a right-pointing arrow. The right column is titled 'Attributes' and contains a table with four rows, each labeled 'Attribute'. To the right of the table is a large 'Picture Area' with an 'Add Pic.' button. Below the picture area are four input fields labeled 'Type :', 'Name :', 'Year :', and 'Comment :'. At the bottom right, there are two buttons: 'Delete' and 'Edit'.

Type Menu	Attributes
Type - 1 >	Attribute
Type - 2 >	Attribute
Type - 3 >	Attribute
Type - 4 >	Attribute
Type - 5 >	Attribute
Type - 6 >	Attribute
Type - >	Attribute
	Attribute
	Attribute
	Attribute
	Attribute

Picture Area

Add Pic.

Type :

Name :

Year :

Comment :

Delete Edit

Figure 6: User Interface

The CyberShelf user interface has been designed in a modern and eye-catching way. It has been created as a user-focused remote. The species to be added are grouped. Users can easily add types from the top menu and group these types on the left side. The user can easily add types from the top menu and can group these types on the left side. Each type can divide itself into smaller segments. This provides an easy grouping option. You can also enter detailed information into these segments.