Software Requirements Specification

for

Console Video

Game Catalog

Version 1.0 approved

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Table of Contents

Revision History

Name	Date	Reason For Changes	Version

1.   Introduction

1.1   Purpose

The product we have is the Console Video Game Catalog, revision or release number being 1.0.

1.1.1 Vision Statement

The aim of this project is to have a catalog where a user can search through a variety of console video games for the Nintendo Switch, Xbox One, and Playstation 4. Users will be able to see all the games they want and view their developers, price, genre, etc. all in one place.

1.1.2 Scope

The scope of this project includes the development of a <mark>GUI</mark> and a database full of console games and their information. Users will be able to access the database through the <mark>GUI</mark> and search, filter, and view the list.

1.2   Document Conventions

This document follows MLA Format. Bold-faced text has been used to emphasize section and subsection headings. Highlighting is to point out words in the glossary and italicized text is used to label and recognize diagrams.

1.3   Intended Audience and Reading Suggestions

This document is to be read by the development team, the testers, and documentation writers of Alphasoft. It contains the details needed to create and document the product and its development. Testers and developers need to familiarize themselves with the overall description, system features, external interface requirements, and functional and nonfunctional requirements.

1.4   Product Scope

This software will contain a catalog of games for the user to view, sort, filter, and search through via a <mark>GUI</mark>.

2.   Overall Description

2.1   Product Perspective

This product is a self-contained product built for the purposes of this class.

2.2   Product Functions

- Provide a list of video games to view with their name, developer, price, platform, genre, and rating (E-M)
- Be able to search for a specific game
- Be able to filter the list through price, platform, and developer
- Be able to sort by name, developer, platform, genre
- Log in / log out

2.3   Operating Environment

The final product will be functional as a stand-alone software program on both Windows and MacOS.

2.4   User Documentation

User documentation will be provided within the software itself in the form of an FAQ section.

3.   External Interface Requirements

3.1   User Interfaces

The software will have a Java-based GUI to show the list. Buttons will be provided for searching, logging in, setting up an account, sorting, and filtering.

3.2   Hardware Interfaces

The program will be able to run on both MacOS and Windows operating systems.

4.   System Features

4.1   Search

4.1.1 Description and Priority

This function is a high priority function that will allow the user to search for a particular game by typing in keywords into the search bar, which will pull up a list of games whose names or developers match that description.

4.1.2 Stimulus/Response Sequences

1. User will type in the keyword
2. User will click on the "search" button
3. Catalog will return a list of games that match the search requirements (or none, if there aren't any) to the window for the user to view.

4.1.3 Functional Requirements

REQ-1: Search bar and button
REQ-2: Search method connected to the database
REQ-3: Return "no matches found" if none of the games in the database match the search keywords

4.2   Filter

4.2.1 Description and Priority

This function is a high priority function that will allow the user to look at games by their platform through the filter buttons and see games that are only on that platform.

4.2.2 Stimulus/Response Sequences

1. User will click on the buttons on the left filter menu to select the intended platform
2. Catalog will return a list of games that match the filter requirements (or none, if there aren't any) to the window for the user to view.

4.2.3 Functional Requirements

REQ-1: Filter option buttons and menu
REQ-2: Filter method connected to the database
REQ-3: Return "no matches found" if none of the games in the database are available on that platform

4.3   Sort

4.3.1 Description and Priority

This function is a high priority function that will allow the user to sort the list by name (alphabetically), developer, platform, genre, and rating.

4.3.2 Stimulus/Response Sequences

4. User will click the arrows next to the "Name" column header
5. Catalog list will be sorted alphabetically and returned to the window to be viewed

4.3.3 Functional Requirements

REQ-1: Sort buttons next to the section headers
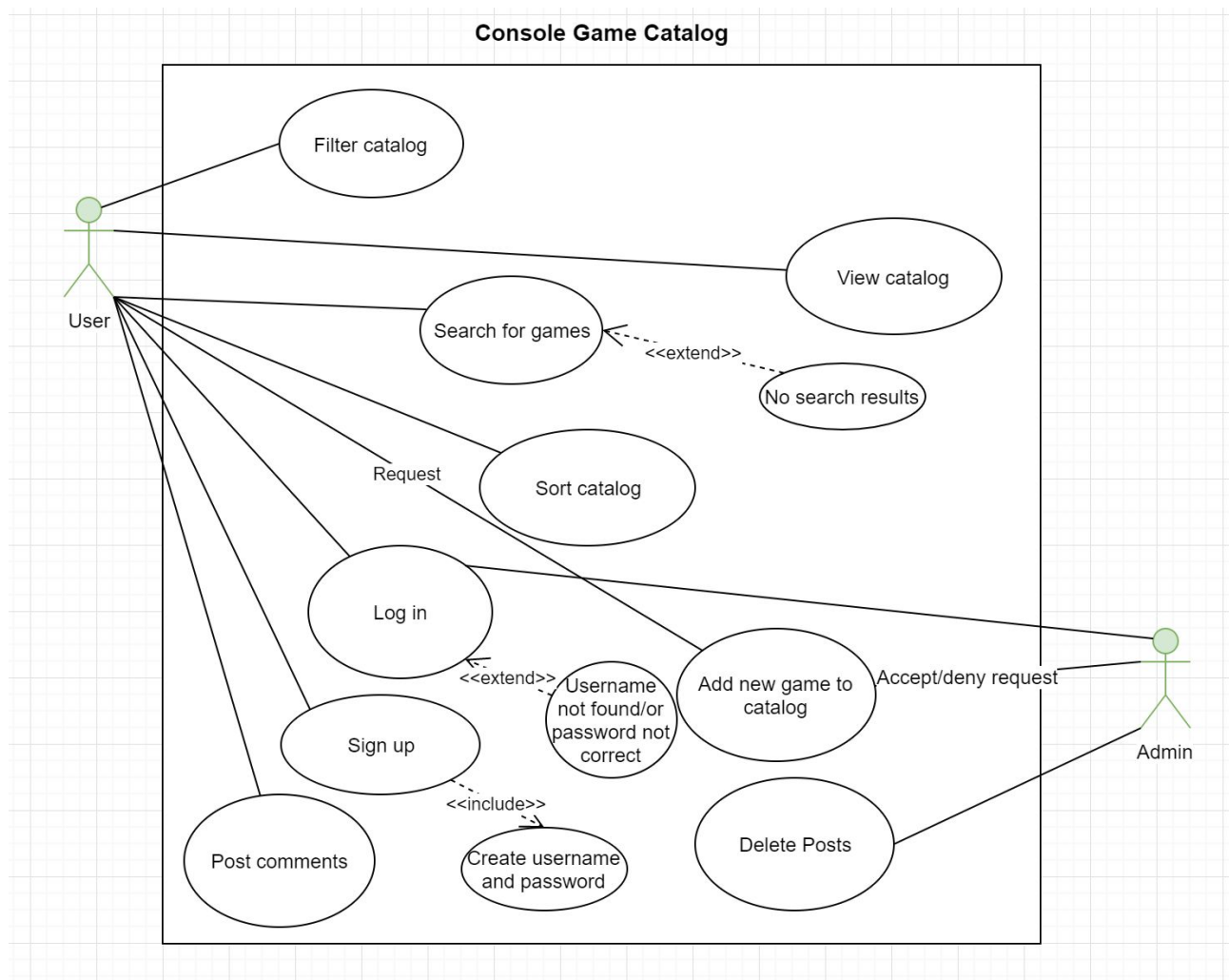REQ-2: Sort method connected to the database

Appendix A: Glossary

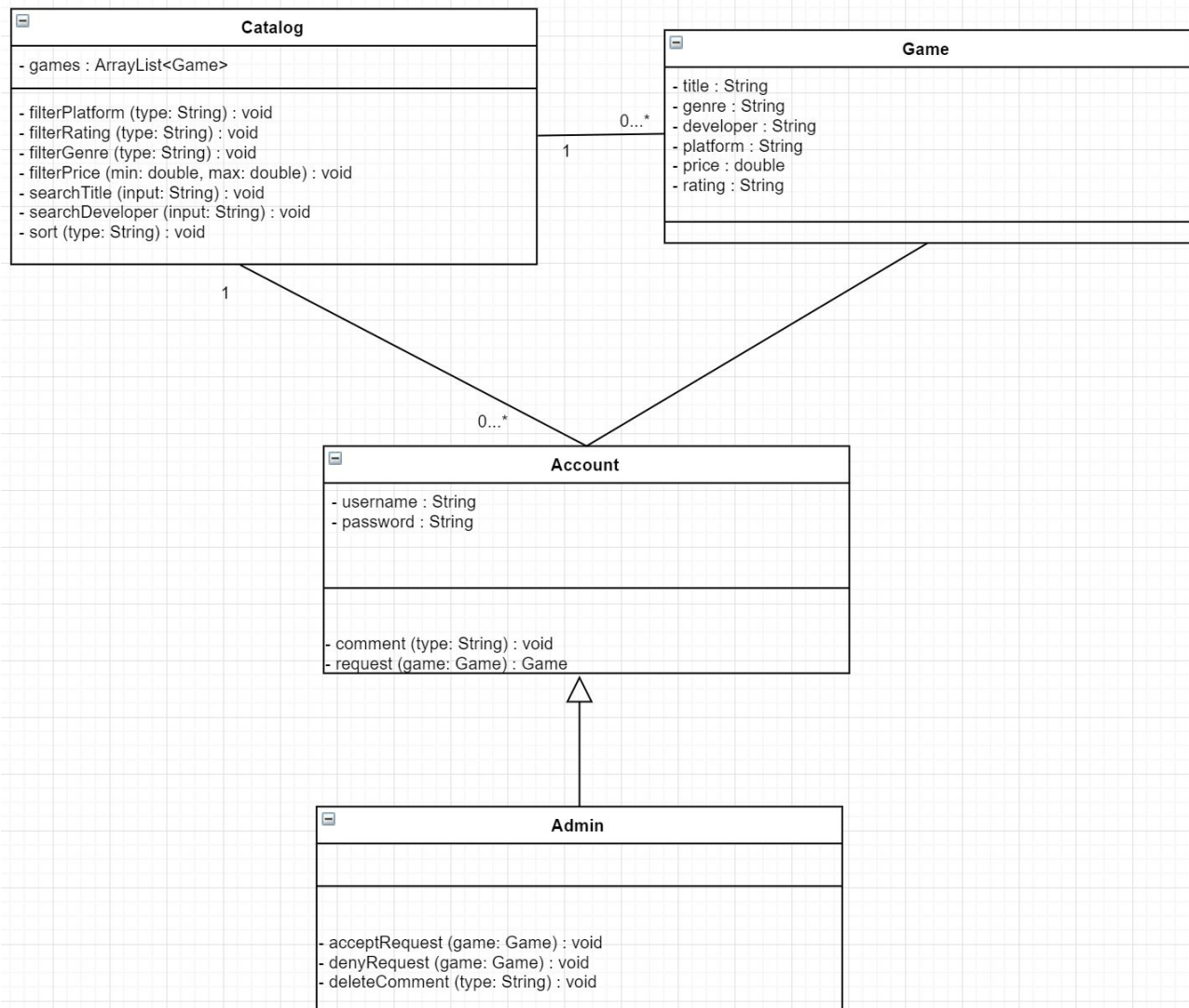GUI - Graphical User Interface. What the user shall see and interact with.

FAQ - Frequently Asked Questions. A mini user manual written in question and answer format
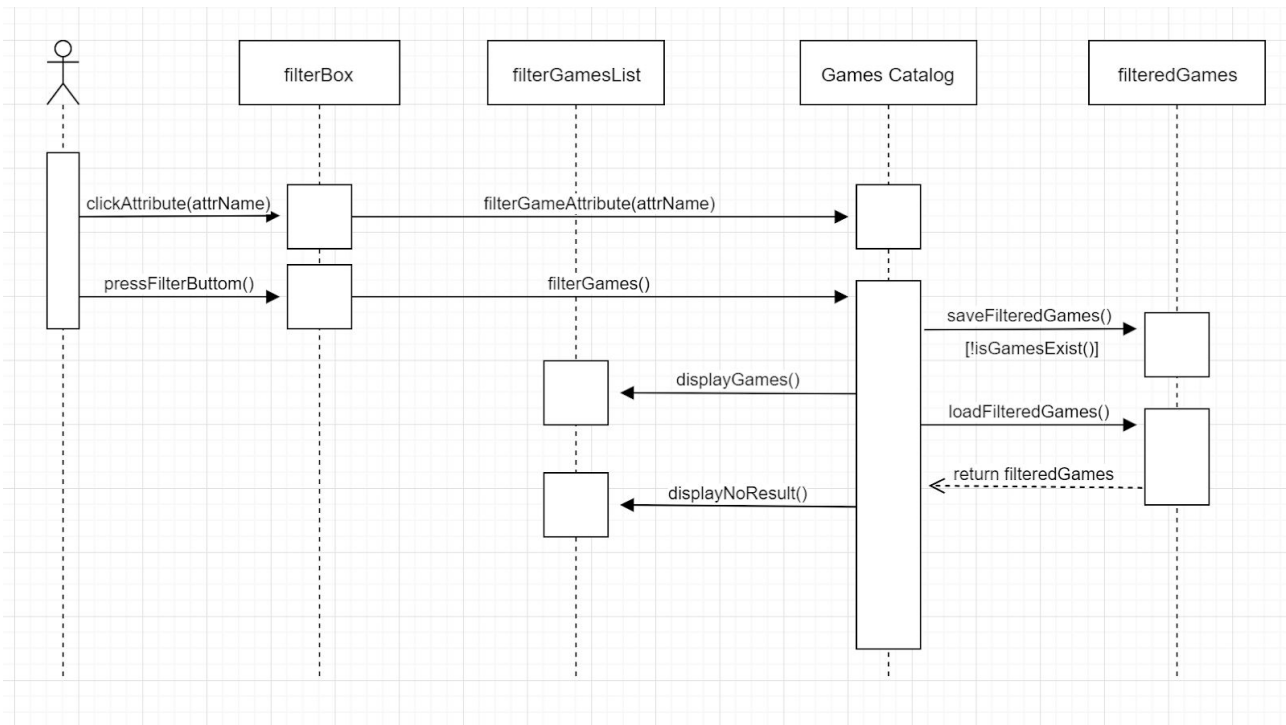
Appendix B: Analysis Models

Use Case Diagram

UML Class Diagram

Catalog
- games : ArrayList<Game>
- filterPlatform (type: String) : void - filterRating (type: String) : void - filterGenre (type: String) : void - filterPrice (min: double, max: double) : void - searchTitle (input: String) : void - searchDeveloper (input: String) : void - sort (type: String) : void

Game
- title : String - genre : String - developer : String - platform : String - price : double - rating : String

0...*

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1

0...*

Account
- username : String - password : String
- comment (type: String) : void - request (game: Game) : Game

Admin
- acceptRequest (game: Game) : void - denyRequest (game: Game) : void - deleteComment (type: String) : void

UML Sequence Diagram

UML Statechart Diagram