

**VIDEO GAME DISTRIBUTION SERVICE**

**Software Requirement Specification**

– Hanoi, August 2022 –

Record of changeS

|  |  |  |  |
| --- | --- | --- | --- |
| Date | A\* M, D | In charge | Change Description |
| 13/Apr | A | KienNT | Thêm mô tả chức năng Setting Details (II.1.a) |
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\*A - Added M - Modified D - Deleted

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# I. Overview

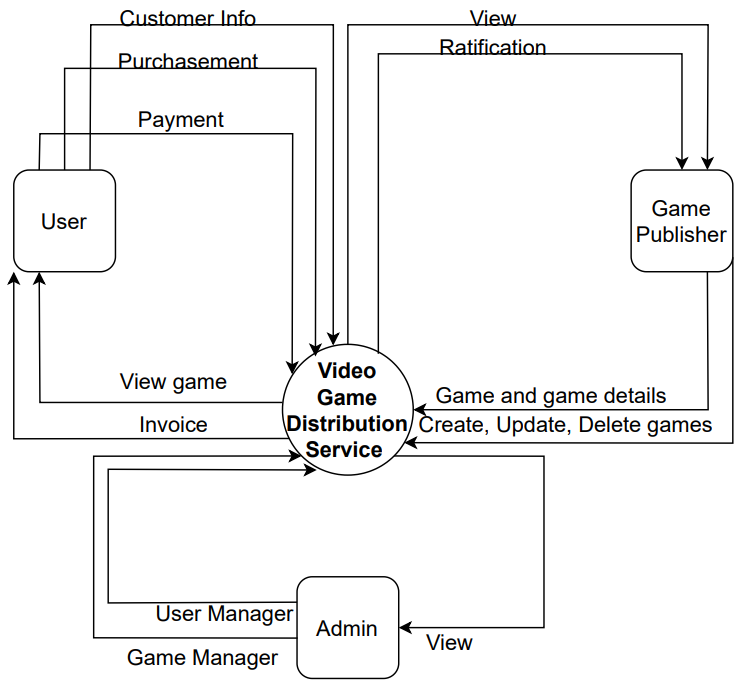
## 1. Introduction

Video Game Distribution Service is a web application that allows people that love video games to upload and sell their own games online. Meanwhile, anyone visiting the website can register for a free account to buy whatever games they want.

Game with good quality but at affordable prices for the community remains the top priority for our website. Our goal is to bring the gaming community the best experience when visiting our website.

* Guest: unregistered users.
* User: registered users who can purchase items online and interact with them(rate, comment,…)
* Publisher: registered users who sell their games to the customers.
* Admin: the system administrator.

**The interaction between the system and external entities is described as the following diagram:**

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**Figure 1.1: Interaction between the system and entities**

## 2. System Functions

#### a. Screen Flow

User Screen Flow:

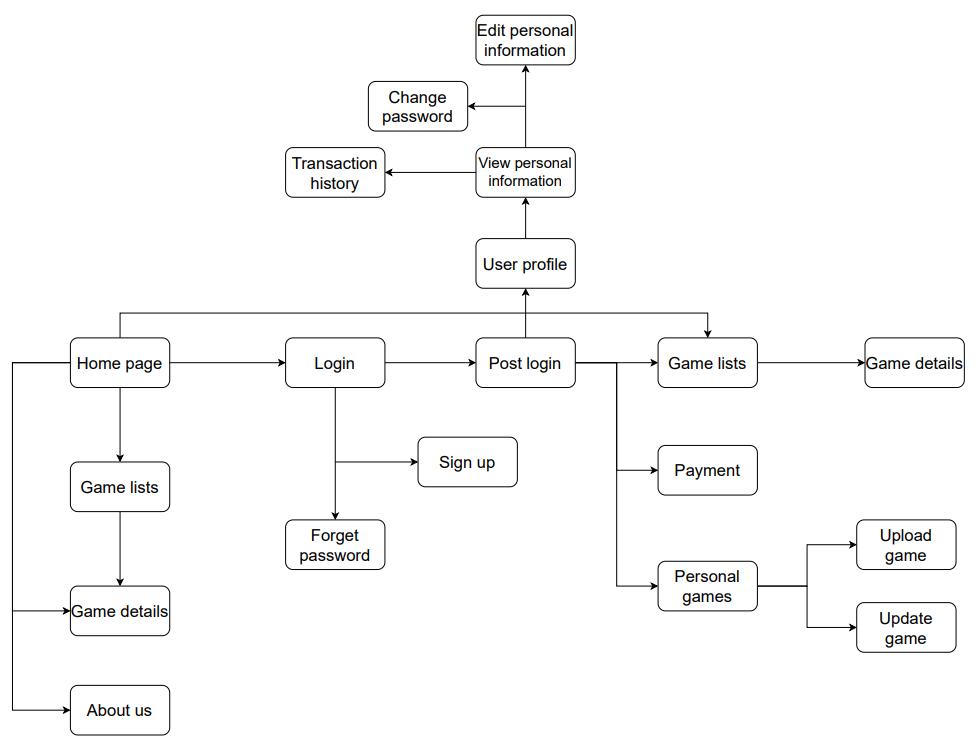


Figure 2.1: User screen flow

Admin Screen Flow:

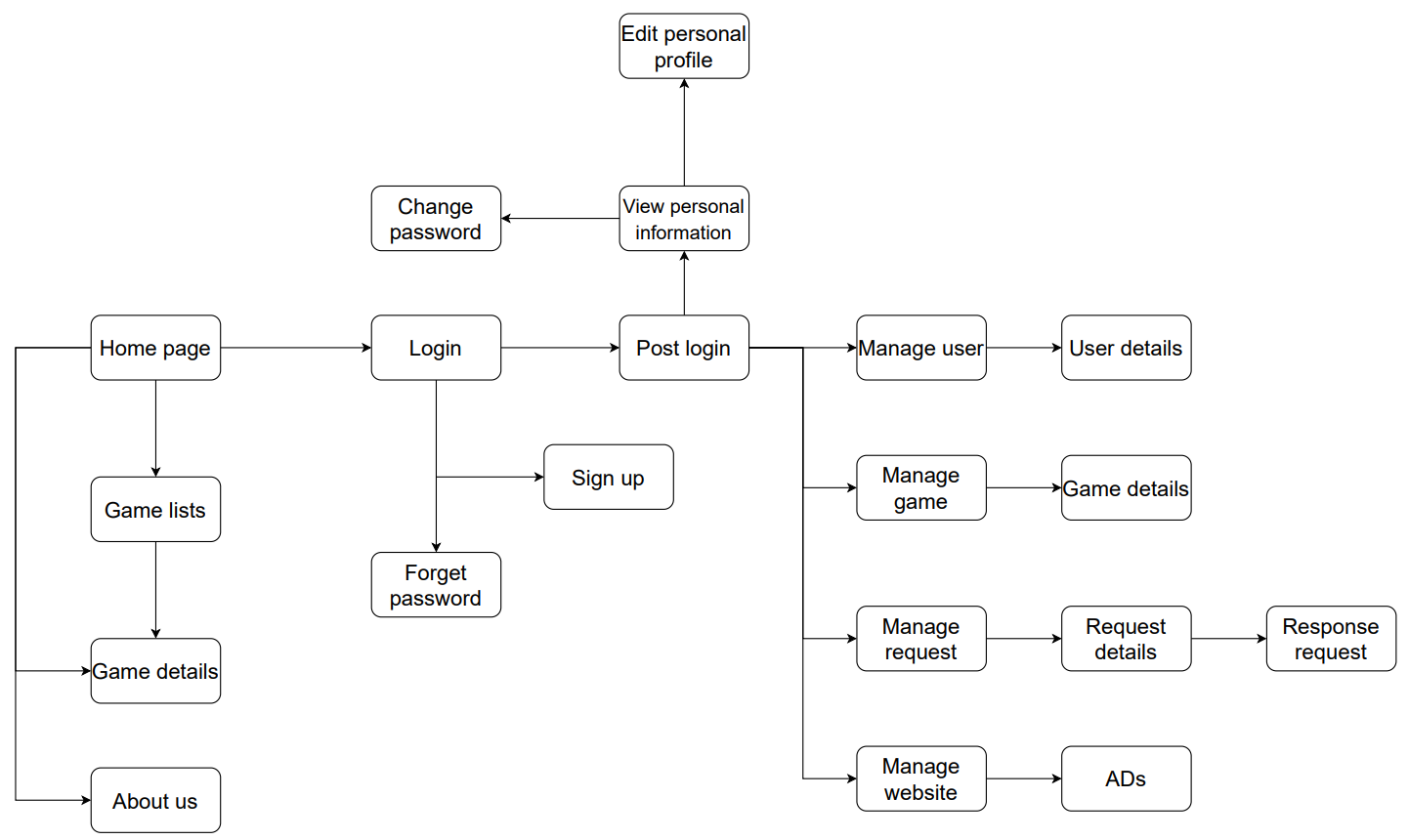


Figure 2.2: Admin screen flow

#### b. Screen Details

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Screen/Function** | **Feature** | **Description** |
| 1 | Login | Common | Allow user to enter username and password to login. On this page, there are also options for user to register for new accounts or reset password in case he/she forgets it. |
| 2 | Sign up | Common | Allow user to register to the system by inputting required information. Then the system validates users and creates new user account using the inputted information |
| 3 | Forget password | Common | User will input email of the account then the system will send them an email of the new password of the account. After that, user must login and change the password. |
| 4 | Home page | Public | * Show contact information with social links of our group. * Show brief information of the team. * Show hot and recommended games. User can search for the game they want |
| 5 | Game lists | Public | After user search game, or click a category, the website redirect user to this page. User can see the list of games according to what user want to see. |
| 6 | Game details | Public | Show game details (including name, publisher, price, image, description, …) and some recommended games with the same categories. |
| 7 | About us | Public | Show information of the team. |
| 8 | User profile | User | Show user profile. There are also options for user to edit their information, change password and view transaction history. |
| 9 | Transaction history | User | Show user transaction history. Each transaction includes the amount of money, date, … |
| 10 | Change password | User | Allows user to change their account’s password. User must input old password and then their new password and confirm it. |
| 11 | Edit personal information | User | Allows user to change their information. User will input new information and submit. Then the system will change it for them. |
| 12 | Payment | User | Allow user to add money to the account. User must choose payment method and input the money they want to add. There is also a option to withdraw money and a request to refund money to the admin. |
| 13 | Personal games | User | User can view their game lists including bought-game list and self-upload game list. |
| 14 | Upload game | User | User can upload their own game. They will show their games and input the game’s information. But the game will be uploaded if it is approved by the admin. |
| 15 | Update game | User | User can update their uploaded games information (price, description, …) or update a new version of the game. |
| 16 | Manage user | Admin | * Admin can search for users by input name in the box on the top of the page. * Admin can view the lists of top ten users sort by having the most income, most active, … |
| 17 | User details | Admin | Admin can see their information, their account balance, their activities, their uploaded and downloaded games. |
| 18 | Manage game | Admin | * Admin can search for games by input name in the box on the top of the page. * Admin can view the lists of top ten games sort by having the most income, most downloaded, newest, … |
| 19 | Game details | Admin | * Admin can view game detail information * View the game’s income, downloads, rate, comments, … * Admin can also delete the game if the game violated the rule. |
| 20 | Manage request | Admin | Admin can view list of the requests. |
| 21 | Request details | Admin | Admin can view request details. They can delete it, accept it and response it. |
| 22 | Response request | Admin | Admin can fill a form and the form will be sent to the requested email. |
| 23 | Manage website | Admin | Admin can view the income of the web, the details of the income. |
| 24 | Ads | Admin | Update soon |

#### c. User Authorization

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Screen** | **Guest** | **Customer** | **Publisher** | **Admin** |
| Login |  | X | X | X |
| Sign up | X |  |  |  |
| Forget password |  | X | X | X |
| Home page | X | X | X | X |
| * Search games | X | X | X | X |
| * View recommended games | X | X | X | X |
| Game lists | X | X | X | X |
| Game details | X | X | X | X |
| * Buy game |  | X | X |  |
| * Leave comment |  | X | X |  |
| * Rate |  | X | X |  |
| * Report |  | X | X |  |
| * View game information | X | X | X | X |
| About us | X | X | X | X |
| User profile |  | X | X |  |
| Transaction history |  | X | X |  |
| Edit profile |  | X | X | X |
| Change password |  | X | X | X |
| Payment |  | X | X |  |
| * Loading money to the account |  | X | X |  |
| * Request refunding |  | X | X |  |
| Personal games |  | X | X |  |
| * View games income |  |  | X |  |
| * Edit game’s information |  |  | X |  |
| Upload game |  |  | X |  |
| Update game |  |  | X |  |
| Manage user |  |  |  | X |
| * Search user |  |  |  | X |
| * View sorted user list |  |  |  | X |
| User details |  |  |  | X |
| * View user information |  |  |  | X |
| * Send message to user |  |  |  | X |
| * View user’s game list |  |  |  | X |
| Manage game |  |  |  | X |
| * Search game |  |  |  | X |
| * View sorted game list |  |  |  | X |
| Game details |  |  |  | X |
| * View game information |  |  |  | X |
| * View game’s income |  |  |  | X |
| * Delete game |  |  |  | X |
| Manage request |  |  |  | X |
| * View sorted request list |  |  |  | X |
| Request details |  |  |  | X |
| * View request details |  |  |  | X |
| * Delete request |  |  |  | X |
| Response request |  |  |  | X |
| Manage website |  |  |  | X |
| * View website income |  |  |  | X |
| Ads |  |  |  | X |

In which:

* Guest: unregistered users.
* User: registered users who can purchase items online and interact with them(rate, comment,…)
* Publisher: registered users who sell their games to the customers.
* Admin: the system administrator.

#### d. Non-Screen Functions

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Feature** | **System Function** | **Description** |
| 1 | User authorization | Authorization | Implementation of authorization mechanism in the system, including the specify the role of the logged-in user, his/her authorized page links displayed items menu and preventing unauthorized access via entering the links directly |
| 2 | Easy to use | Provide smooth flow, friendly UI | User don’t have to think about how this function works. We can achieve this by building comprehensive flow and designing user-friendly UI. |

## 3. Entity Relationship Diagram

## 

Figure 3.1: Entity–relationship model diagram

**Entities Description**

|  |  |  |
| --- | --- | --- |
| **#** | **Entity** | **Description** |
| 1 | User | The person that uses the website (buy games, upload their own games, …) |
| 2 | Admin | The person who acts as the system administrator. |
| 3 | Account | Including username and password, used to login. Only user with an account can buy, rate, … games and have other interactions. |
| 4 | Game | Is the main reason for people to visit the website and for the existence of this website 😉 |
| 5 | GameCategory | Each game has some categories. For example, The Walking Dead is tagged as Horror, Action, Adventure. |
| 6 | Request | Request from user to admin. They can be Game-upload request, Game-update request, … |
| 7 | Notification | Is the way the website notify user. |
| 8 | Payment | Consist of all things related to user’s money $\_$ |

# II. Functional Requirements

## 1. Login system

### a. Login

Function trigger: Click on SIGN IN

Function description:

Actor: Admin

Purpose: login to systems in order to manage user, profile, data and post information.

Actor: User

Purpose: login to systems in order to purchase game or publish game.

Interface: Appear text box for user enter account and button to submit result to system.

Data processing: System compare result with data for login result.

|  |  |  |
| --- | --- | --- |
| # | Actor | Action description |
| 1 | User, Admin | Click on SIGN IN, enter account data (username, password, type), press Enter to login.  *normal cases*  If system found exist account data, then allows User logins to system.  *abnormal cases*  If system can’t found exist account data, then eject and send error message to try again. |
| 2 | System | Display screen with the following fields   * Username, Password, Type: text box * Sign in, Password reset, Sign up: button |

### b. Logout

Function trigger: Click on LOGOUT

Function description:

Actor: Admin, User

Purpose: logout from system.

Interface: In account setting with button logout.

Data processing: System end access to current account.

|  |  |  |
| --- | --- | --- |
| # | Actor | Action description |
| 1 | User, Admin | Click on LOGOUT.  *normal cases*  Return to home without login.  *abnormal cases*  N/a |
| 2 | System | Display screen with the following fields:   * Logout: button |

### c. Forgot password

Function trigger: Click on Password reset

Function description:

Actor: Admin, User

Purpose: get new password if user forget old password.

Interface: Appear text box for user to enter email and button to submit result to system.

Data processing: System delete password from the account have email enter and send new password to that email.

|  |  |  |
| --- | --- | --- |
| # | Actor | Action description |
| 1 | User, Admin | Click on Password reset  *normal cases*  If enter email success, system send new password to that email and delete the old in data.  *abnormal cases*  If not found email or account, then eject and show error message to try again |
| 2 | System | Display screen with the following fields   * Email: text box * Get new password: button |

### d. Change password

Function trigger: Click on Change password

Function description:

Actor: Admin, User

Purpose: change password.

Interface: Appear text box for user to enter old password, new password, confirm new password and button to submit result to system.

Data processing: System replace old password from current account with new password.

|  |  |  |
| --- | --- | --- |
| # | Actor | Action description |
| 1 | User, Admin | Click on change Password  *normal cases*  If enter correct (old, new, confirm new) password, system delete old password and replace it with new password.  *abnormal cases*  If enter incorrect (old, new, confirm new) password then eject and send error message to try again. |
| 2 | System | Display screen with the following fields   * Profile setting: button * Change password: button |

### e. Sign up

Function trigger: Click on Sign up

Function description:

Actor: User

Purpose: Create new account with User type.

Interface: Appear text box for user to enter Username, password, confirm password, mail and button to submit result to system.

Data processing: System save data of new account.

|  |  |  |
| --- | --- | --- |
| # | Actor | Action description |
| 1 | User | Click on Sign up  *normal cases*  If enter correct username and password, system save data new account and send direct to home page which has login with that account.  *abnormal cases*  If enter incorrect password or username has exists then eject and send error message to try again. |
| 2 | System | Display screen with the following fields   * Username, password, confirm password, mail: Text box * Submit: button |

## 2. Search systems

### a. Search by word

Function trigger: Click on Search and fill text box then enter to search

Function description:

Actor: Admin, User

Purpose: find items by name

Interface: Appear text box for user to enter name and button to submit result to system.

Data processing: System find items that have include name then post to list.

|  |  |  |
| --- | --- | --- |
| # | Actor | Action description |
| 1 | User, Admin | Click on Search and enter name  *normal cases*  Appear all items have same name.  *abnormal cases*  System can’t find any item with name searched. |
| 2 | System | Display screen with the following fields   * List of items have same name searched. |

### b. Search by type

Function trigger: Point to Store, it has drop down all type of items to click on

Function description:

Actor: Admin, User

Purpose: find items by type

Interface: Appear combo box drop down for user to choose and submit result to system.

Data processing: System find items that have type that clicked then post to list.

|  |  |  |
| --- | --- | --- |
| # | Actor | Action description |
| 1 | User, Admin | Point to Store has drop down and click on items list  *normal cases*  Appear all items have same type.  *abnormal cases*  N/a |
| 2 | System | Display screen with the following fields   * List of items have same type. |

### c. Search User by name

Function trigger: Click on Search and fill text box then enter to search

Function description:

Actor: Admin

Purpose: find Users by name

Interface: Appear text box for user to enter name and button to submit result to system.

Data processing: System find Users that have include name then post to list.

|  |  |  |
| --- | --- | --- |
| # | Actor | Action description |
| 1 | Admin | Click on Search and enter name  *normal cases*  Appear all Users have same name.  *abnormal cases*  System can’t find any Users with name searched. |
| 2 | System | Display screen with the following fields   * List of items have same name searched. |

## 3. Manage systems

### a. Manage profile

Function trigger: Click on Profile avatar

Function description:

Actor: Admin, User

Purpose: change profile

Interface: Appear settings for user change information and button to save result to system.

Data processing: System save new data and delete old data.

|  |  |  |
| --- | --- | --- |
| # | Actor | Action description |
| 1 | Admin, User | Click on Avatar Account  *normal cases*  Appear settings options.  *abnormal cases*  N/a |
| 2 | System | Display screen with the following fields   * Settings profile options. |

### b. Manage items

Function trigger: Click on Manage Items

Function description:

Actor: Admin

Purpose: See details and control items list.

Interface: Appear list items for user change information, view details items.

Data processing: System show data and save data if has change.

|  |  |  |
| --- | --- | --- |
| # | Actor | Action description |
| 1 | Admin | Click on Manage Items  *normal cases*  Appear items list to view or change.  *abnormal cases*  N/a |
| 2 | System | Display screen with the following fields   * Items list. |

### b. Manage personal items

Function trigger: Click on Manage Items

Function description:

Actor: User

Purpose: See details and control of user account items list.

Interface: Appear list items for user change information, view details items.

Data processing: System show data and save data if has change.

|  |  |  |
| --- | --- | --- |
| # | Actor | Action description |
| 1 | User | Click on Manage Items  *normal cases*  Appear items list to view or change.  *abnormal cases*  N/a |
| 2 | System | Display screen with the following fields   * Items list. |

### c. Manage request

Function trigger: Click on Manage request

Function description:

Actor: Admin

Purpose: See details and response to user request.

Interface: Appear list items for user view details and response.

Data processing: System show data and send response to user account.

|  |  |  |
| --- | --- | --- |
| # | Actor | Action description |
| 1 | Admin | Click on Manage request  *normal cases*  Appear items list to view, response.  *abnormal cases*  Request not exists. |
| 2 | System | Display screen with the following fields   * Items list. |

### c. Manage payment

Function trigger: Click on Manage payment

Function description:

Actor: User

Purpose: Payment items and see details transaction history.

Interface: Show account bank and list transaction history for user view details or make payment.

Data processing: System show data of user account.

|  |  |  |
| --- | --- | --- |
| # | Actor | Action description |
| 1 | Admin | Click on Manage payment  *normal cases*  Appear items list to view, show account bank.  *abnormal cases*  Not found if user hasn’t bought anything. |
| 2 | System | Display screen with the following fields   * Items list, account bank. |