

Software Requirements Specification (SRS) Document

Spartan Games (Game Hosting Software)

12/11/2024

Final Version

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https://github.com/klud008/spartan_games

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1. Project General Description

The goal of the Spartan Games web application is to allow users to share and download games, displaying recommended games on the home screen and allowing users to review and comment on games. It will also allow creators to post their own games to the app and update as needed.

2. Product Features

The Spartan Games application is designed to be an easy-to-use site which will allow users to share and download games. Below are the key features and functions that define the essence of the application:

Personalized Profile Creation: Enables users to create their own profile. It allows for simple personalization, including a description and optional profile picture. Also displays games that the user has published.

Game Searching: Spartan Games allows users to search for games that they'd like to try. It will also display recommended games on the home screen so that users have a starting place.

Game Posting: Allows users, specifically creators, to post their games to the site, along with a description of the game. Users can also update games they've already posted and view reviews left by users.

3. Functional Requirements

- FR0: The app will allow users to create a profile.
- FR1: The app will allows users to modify their profile.
- FR2: The app will allow the user to search for games.
- FR3: The app will allow the user to click on games and view the game page.
- FR4: The app will allow the user to leave reviews on game pages.
- FR5: The app will allow creators to post their own games.
- FR6: Games being posted will need to be verified by administrators before being properly posted to the site.
- FR7: The app will allow administrators to approve of games being posted.
- FR8: The app will allow administrators to review reports made by users and block reported users or games as needed.
- FR9: Administrators will be assigned.

4. Non-Functional Requirements

- NFR0: Recommended games will be generated 10 at a time first, and will then generate an additional row of 5 each time the user scrolls far enough to the side.
- NFR1: Leaving reviews or reports should be able to be done in under 10 seconds.
- NFR2: Games uploaded should be under 10 gb.
- NFR3: Download speeds

5. Scenarios

a. Users - *Kevin Ludwig*

i. **Create/modify user profile**

1. **Initial Assumption:** The user has access to the web app..
2. **Normal:** The user will be presented with a page in which they can sign in or sign up.
 - a. If the user chooses to sign in, they will go through the sign in process and be presented with their profile, which they can either click off of or edit details.
 - b. If the user chooses to sign up, they will be presented with the sign up process, and will then be presented with their newly-created profile, which they will then be able to either click off of or edit details.
3. **What Can Go Wrong:** The user may accidentally click back or reload in the middle of the process, erasing their progress. There will be a pop-up that asks the user if they actually want to switch off the page first.
4. **Other Activities:** The user can add a description and add basic customization to their profile.
5. **System State on Completion:** The profile will be completed and any changes saved, and the user will be able to modify the profile again or click off the page.

ii. View Games

1. **Initial Assumption:** The user has access to the web app and is on the home page.
2. **Normal:** The user will be presented with the home page and the recommended and new games listed there.
 - a. If the user clicks on a game, they will be taken to the game page.
 - b. If the user scrolls along to the side, more games will be loaded.
3. **What Can Go Wrong:** The user may be overwhelmed if too many games are displayed. Games will be categorized into new and recommended games, and possible other categories like top games, and will be displayed in rows of five, which can be swiped to show another row of five.
4. **Other Activities:** The user can search for more specific games.
5. **System State on Completion:** The user will be presented with the game page.

iii. **Download Games**

1. **Initial Assumption:** The user has access to the web app and is on a posted game page.
2. **Normal:** The user is on the game page. The user can then download the game to their device.
3. **What Can Go Wrong:** The user may accidentally click to download a game when not intending to. The site will ask for confirmation to be given before downloading the game.
4. **Other Activities:** The user can review and report a game.
5. **System State on Completion:** The game file will be downloaded to the user's device.

iv. **Write Review**

1. **Initial Assumption:** The user has access to the web page and is on a posted game page.
2. **Normal:** The user is on the game page. The user can post a review which others will be able to see.
3. **What Can Go Wrong:** The user accidentally clicks the button to post a review without writing anything. The user will be asked to confirm before posting a review, and the review must have some kind of text before being posted.
4. **Other Activities:** The user can also report games in a similar fashion, but reports will be sent to admins and not posted publicly. They can also view the reviews of other users and respond, should they so choose.
5. **System State on Completion:** The user's review is posted onto the page of the game.

b. Creator - *Rahul Yadav*

i. **All the same functionalities as users.**

ii. **Upload Game**

1. **Initial Assumption:** The user has access to the web page and an account.
2. **Normal:** The user uploads their game file along with the name, description, and relevant images and tags to its own page.
3. **What Can Go Wrong:** The user accidentally clicks to upload their game too early. They will be asked to confirm before the upload is done.
4. **Other Activities:** The user may be able to “pause” the game uploading process instead of having to restart if they’re missing something or decide to not upload yet.
5. **System State on Completion:** The game is sent to review by an admin and, if approved, uploaded onto the site and put under the “new games” section.

iii. **Update/Modify Game Page**

1. **Initial Assumption:** The user is signed into their account and on a game page they uploaded.
2. **Normal:** The user clicks to edit their game and is given the opportunity to upload a new, updated version of the game and update any images, tags, or the description on the page.
3. **What Can Go Wrong:** The user misclicks to update their game too early. The site will ask for confirmation before saving changes, and previous game versions should also be able to be accessed (may be changed if too difficult to accomplish).
4. **Other Activities:** The user can also be able to add in version notes, rather than forcing them to put updates in the description or leave them out entirely.
5. **System State on Completion:** The changes to the game page are sent for approval, then saved once they are approved by an admin, or rejected otherwise.

iv. **View Download Statistics**

1. **Initial Assumption:** The user is signed in and on a game page they uploaded.
2. **Normal:** The user clicks to check downloads and is given statistics of how many times their game was downloaded, along with time frames for each.
3. **What Can Go Wrong:** The user may misinterpret the statistics. Help boxes will be offered to give more detailed information on the statistics provided.
4. **Other Activities:** The user will be able to sort the statistics more thoroughly, such as restricted to a specific time frame, or restricted based on game version.
5. **System State on Completion:** The statistics on the game downloads and rating are shown.

- c. Admin - *Richard Antwi-Bediako*
 - i. **All the same functionalities as users + creators (viewing download statistics extends to admins regardless of if they uploaded the game page or not).**
 - ii. **Manage User Access**
 - 1. **Initial Assumption:** The admin is signed in and on the page of a user.
 - 2. **Normal:** The admin can issue warnings to the user or block their access to the site, either permanently or for a specific time frame.
 - 3. **What Can Go Wrong:** The admin may accidentally click to block a user. Confirmation must be given and the block can be undone. Admins may also unjustly block users, so a blocked user can submit a request to be unbanned, which will be sent to a different admin than the one who performed the ban..
 - 4. **Other Activities:** The admin can check the user's recent activity on the site (recently downloaded games or posted reviews). They can also check any reports levied against that user.
 - 5. **System State on Completion:** The user is banned or left untouched accordingly. The user is notified when they are blocked.

iii. **Moderate Games:**

1. **Initial Assumption:** The admin is signed in and on the page of a game.
2. **Normal:** The admin can issue warnings to the creator of the game page or block the game page from being accessed, either permanently or for a specific time frame.
3. **What Can Go Wrong:** The admin may accidentally click to block a game. Confirmation must be given and the block can be undone. Admins may also unjustly block games, so a user with a blocked game can submit a request to have it be unbanned, which will be sent to a different admin than the one who performed the ban..
4. **Other Activities:** The admin can check the game's statistics, similarly to the developer. They can also check reports issued to that game in particular.
5. **System State on Completion:** The game page is blocked or left untouched accordingly. The developer is notified if their game page is blocked.

iv. **Moderate Reviews:**

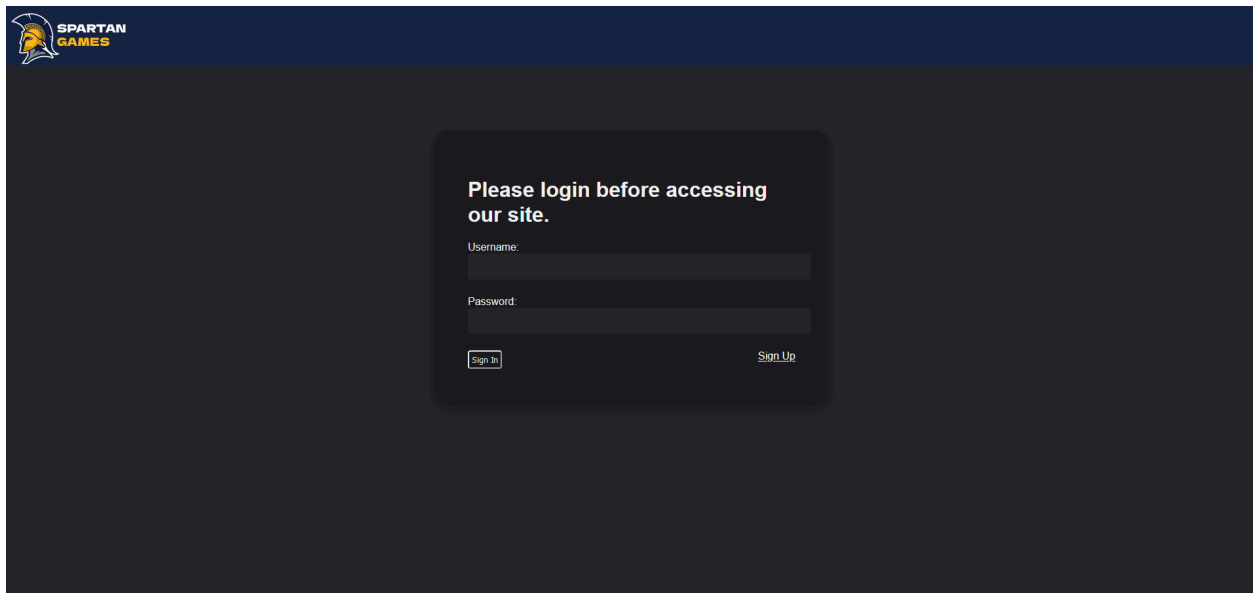
1. **Initial Assumption:** The admin is signed in and on the reports page.
2. **Normal:** The admin can check reports and details on them. They will be able to go to the user/game being reported. They will also be able to remove the report after reporting it and state whether it was dealt with or if it was a meaningless report.
3. **What Can Go Wrong:** Reports are accidentally removed or are otherwise dealt with inappropriately. Reports are compiled and archived after being removed, meaning they can be re-accessed later on if needed.
4. **Other Activities:** Admins can request the aid of another in reviewing a report.
5. **System State on Completion:** Removed reports are archived, and other reports are left on the page for admins to go through as needed.

v. **View Usage Statistics:**

1. **Initial Assumption:** The admin is signed in and on one of the pages of the site.
2. **Normal:** The admin can open a side-window which displays usage information on the site, as well as information on the page they're currently on.
3. **What Can Go Wrong:** The information may be overwhelming if shown all at once. The information is stripped down to its bare essentials, such as number of users visiting and such, and there will be a button for more advanced statistics.
4. **Other Activities:** Admins can save and "file away" the statistics of a given time.
5. **System State on Completion:** The statistics are displayed. The admin can close and re-open the window at any time.

6. Scenarios with Screenshots

Initial login - Kevin



The screenshot shows the login page of the Spartan Games website. The page has a dark blue header with the Spartan Games logo on the left. The main content area is dark gray. In the center, there is a white box with the text "Please login before accessing our site." Below this text are two input fields: "Username:" and "Password:". Below the "Password:" field are two buttons: "Sign In" and "Sign Up".

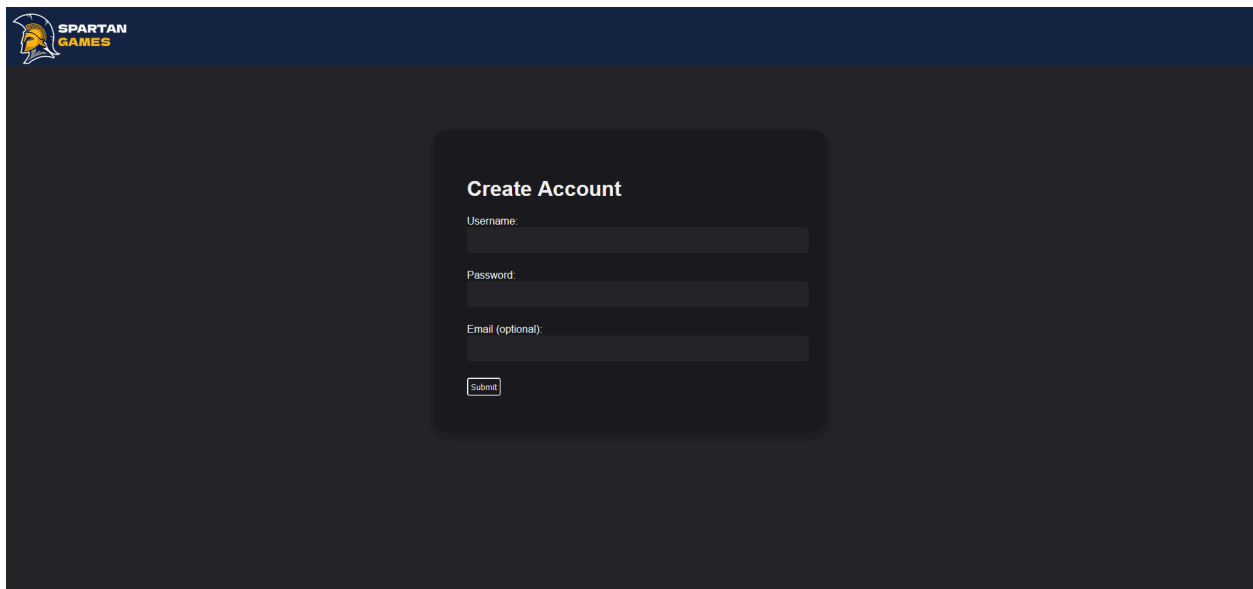
SPARTAN GAMES

Please login before accessing our site.

Username:

Password:

Sign up - Kevin



The screenshot shows the sign up page of the Spartan Games website. The page has a dark blue header with the Spartan Games logo on the left. The main content area is dark gray. In the center, there is a white box with the text "Create Account". Below this text are three input fields: "Username:", "Password:", and "Email (optional):". Below the "Email (optional):" field is a "Submit" button.

SPARTAN GAMES

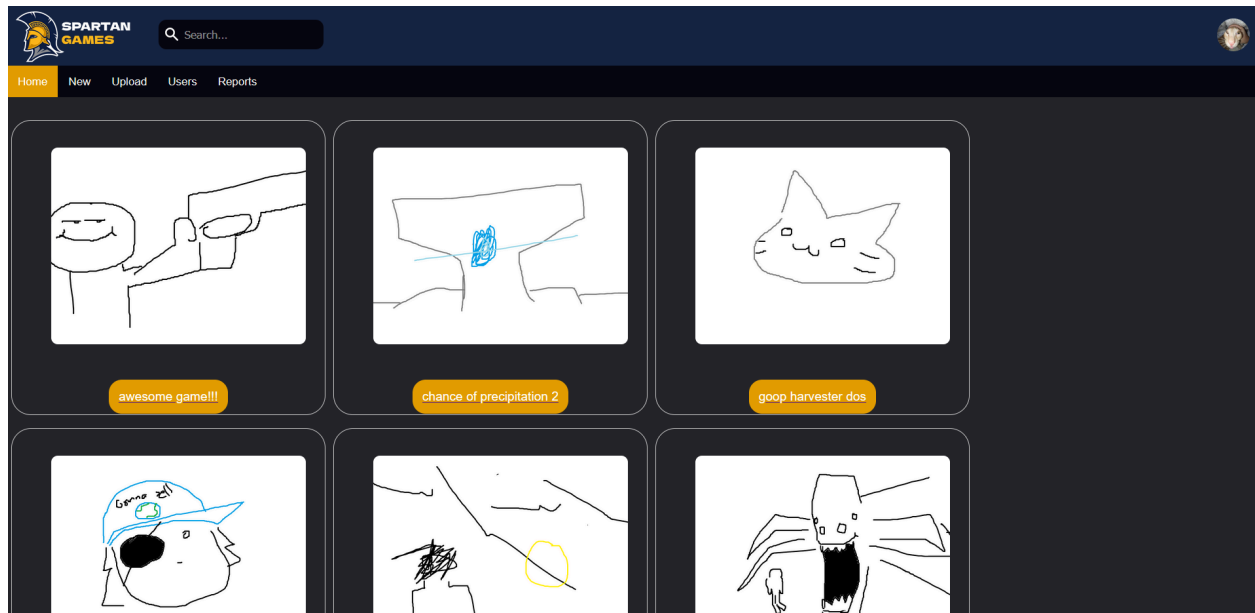
Create Account

Username:

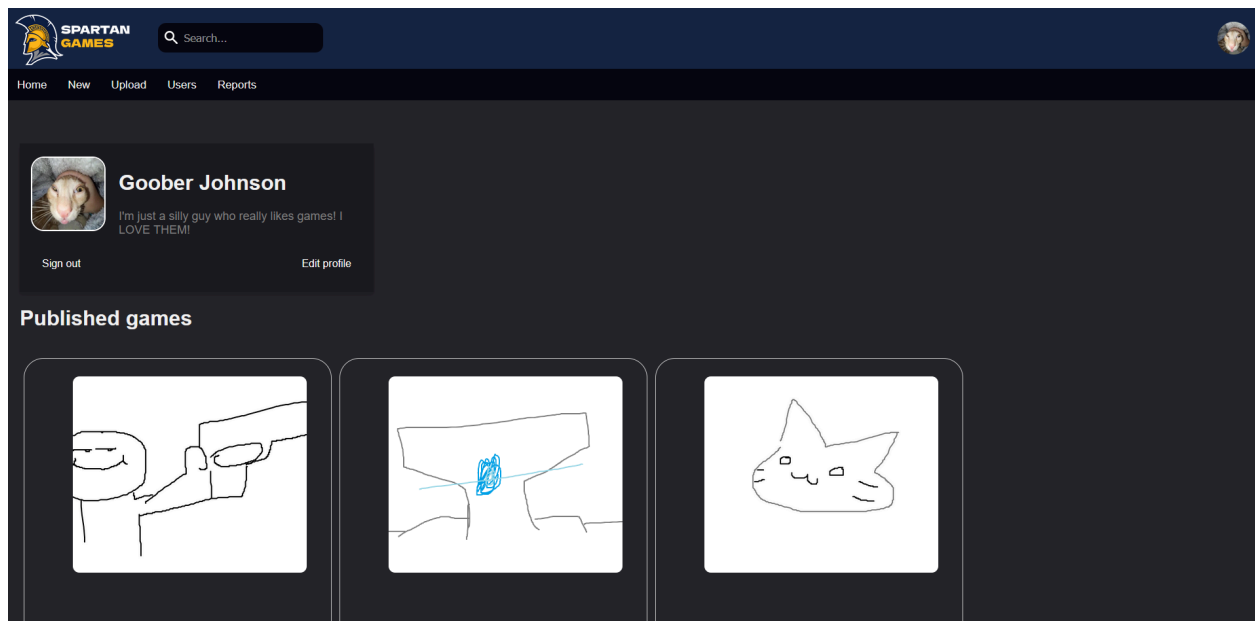
Password:

Email (optional):

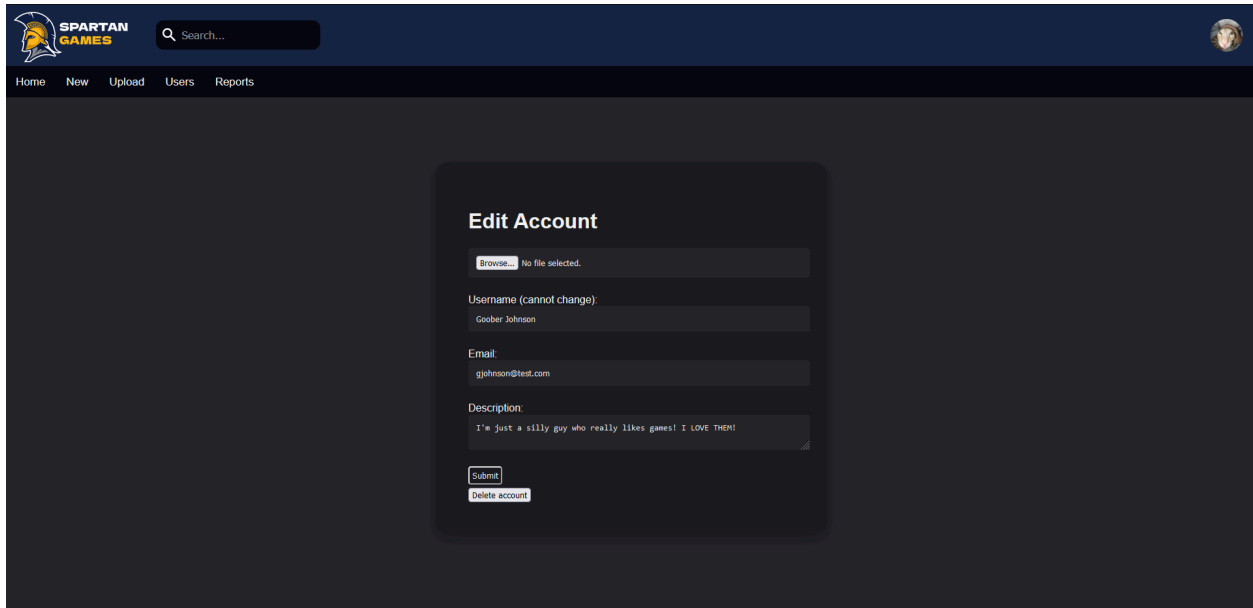
Home page - Kevin



User profile - Kevin



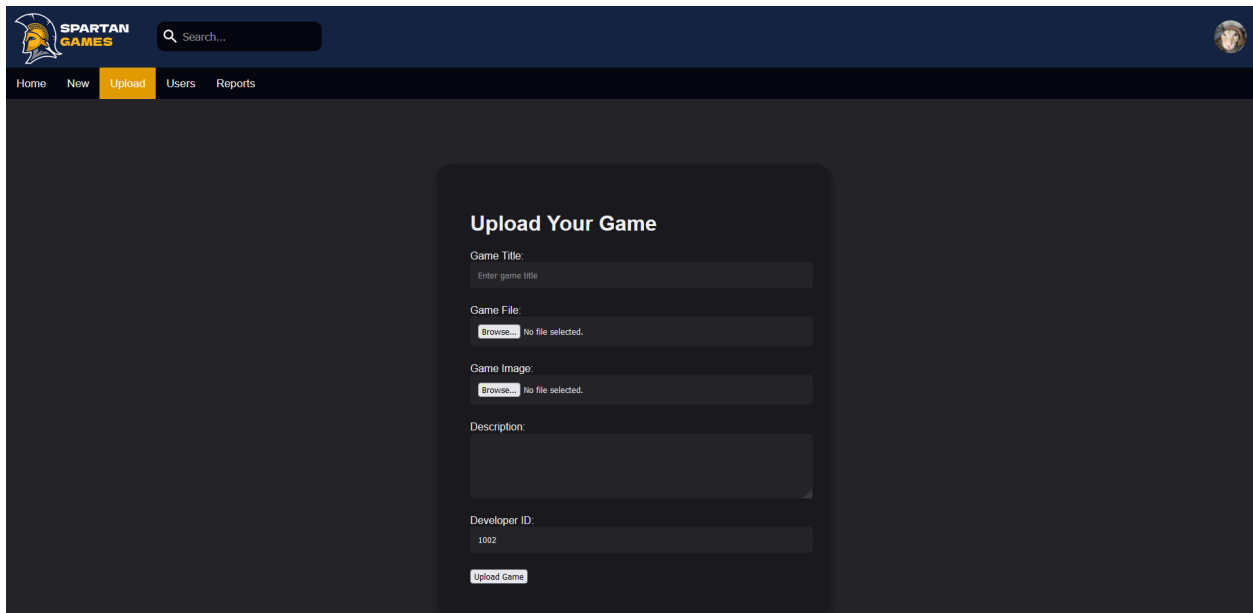
Edit profile - Kevin



The screenshot shows the 'Edit Account' page on the SPARTAN GAMES website. The header includes the logo, a search bar, and navigation links. The main content area contains a form with the following fields:

- Profile Picture:** A 'Browse...' button with the text 'no file selected.'
- Username (cannot change):** A text field containing 'Goobar Johnson'.
- Email:** A text field containing 'gjohnson@test.com'.
- Description:** A text area containing 'I'm just a silly guy who really likes games! I LOVE THEM!'.
- Buttons:** 'Submit' and 'Delete account'.

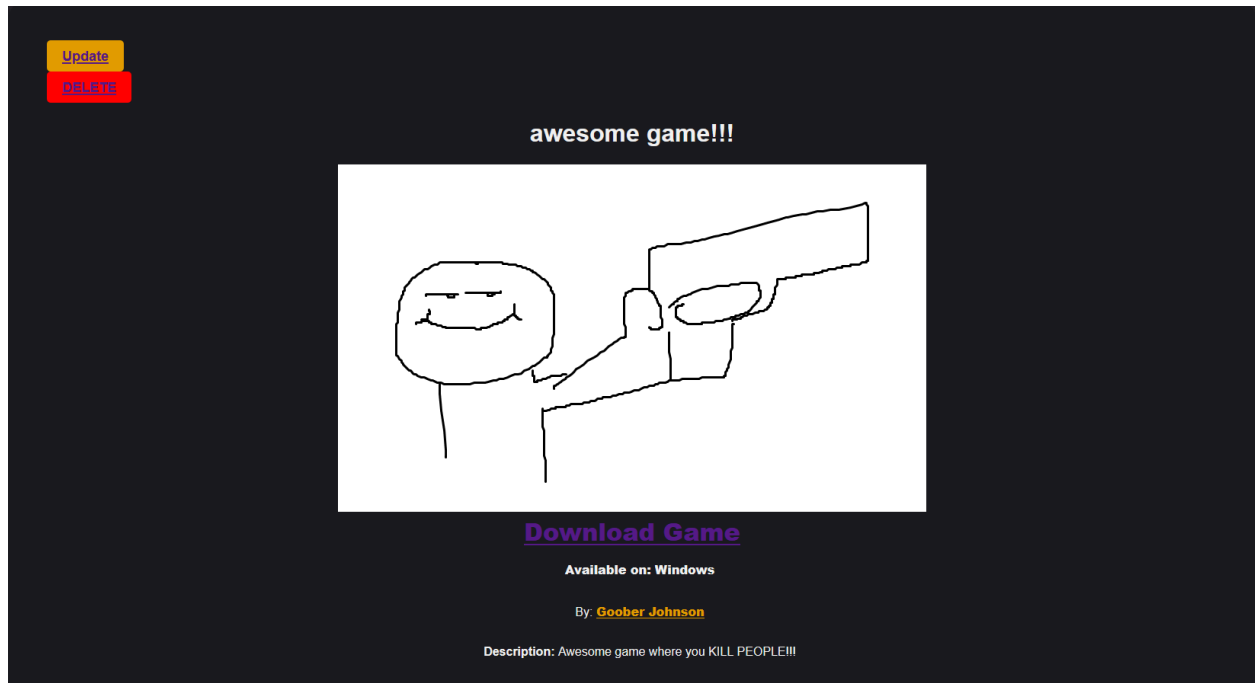
Game upload - Rahul



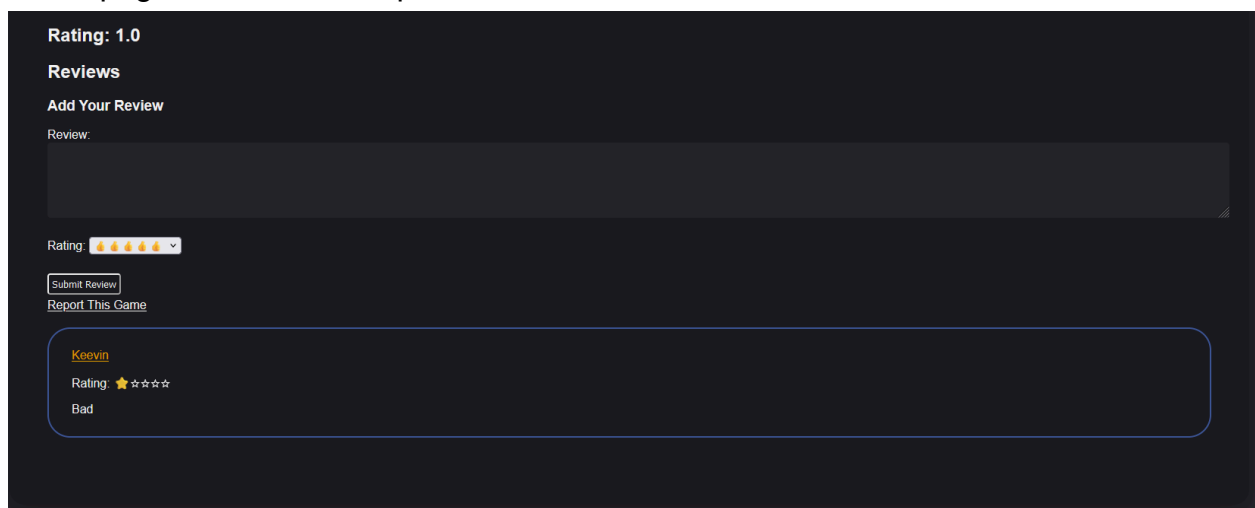
The screenshot shows the 'Upload Your Game' page on the SPARTAN GAMES website. The header includes the logo, a search bar, and navigation links. The main content area contains a form with the following fields:

- Game Title:** A text field with placeholder text 'Enter game title'.
- Game File:** A 'Browse...' button with the text 'no file selected.'
- Game Image:** A 'Browse...' button with the text 'no file selected.'
- Description:** A text area.
- Developer ID:** A text field containing '1002'.
- Buttons:** 'Upload Game'.


Game page - Rahul



Game page, reviews and reports - Kevin + Rahul



Game update - Rahul



Search...

[Home](#) [New](#) [Upload](#) [Users](#) [Reports](#)

Update Your Game

Game Title:
awesome game!!!

Game Description:
Awesome game where you KILL PEOPLE!!!


Update Game File:
 No file selected.

Update Thumbnail:
 No file selected.


Users list - Kevin

SPARTAN GAMES			Search...
Home New Upload Users Reports			
Username	Role	ID	
TestUser1	USER	3	
Goober Johnson	ADMIN	1002	
NewTestUser2	USER	1202	
TestUser3	USER	1252	
SkinnyFish	USER	1452	
Hat Man	USER	1453	

Reports list - Kevin



Search...



[Home](#)[New](#)[Upload](#)[Users](#)[Reports](#)

Report ID	User ID	Content ID	Content Type	Reason	Status
2	1002	1	GAME	Ifaksj	PENDING
3	1002	1	GAME	A virus that broke my computer :(PENDING
52	1453	154	GAME	The goops looked at me weird when I took them to the incinerator.	PENDING
102	1502	152	GAME	Virus	PENDING

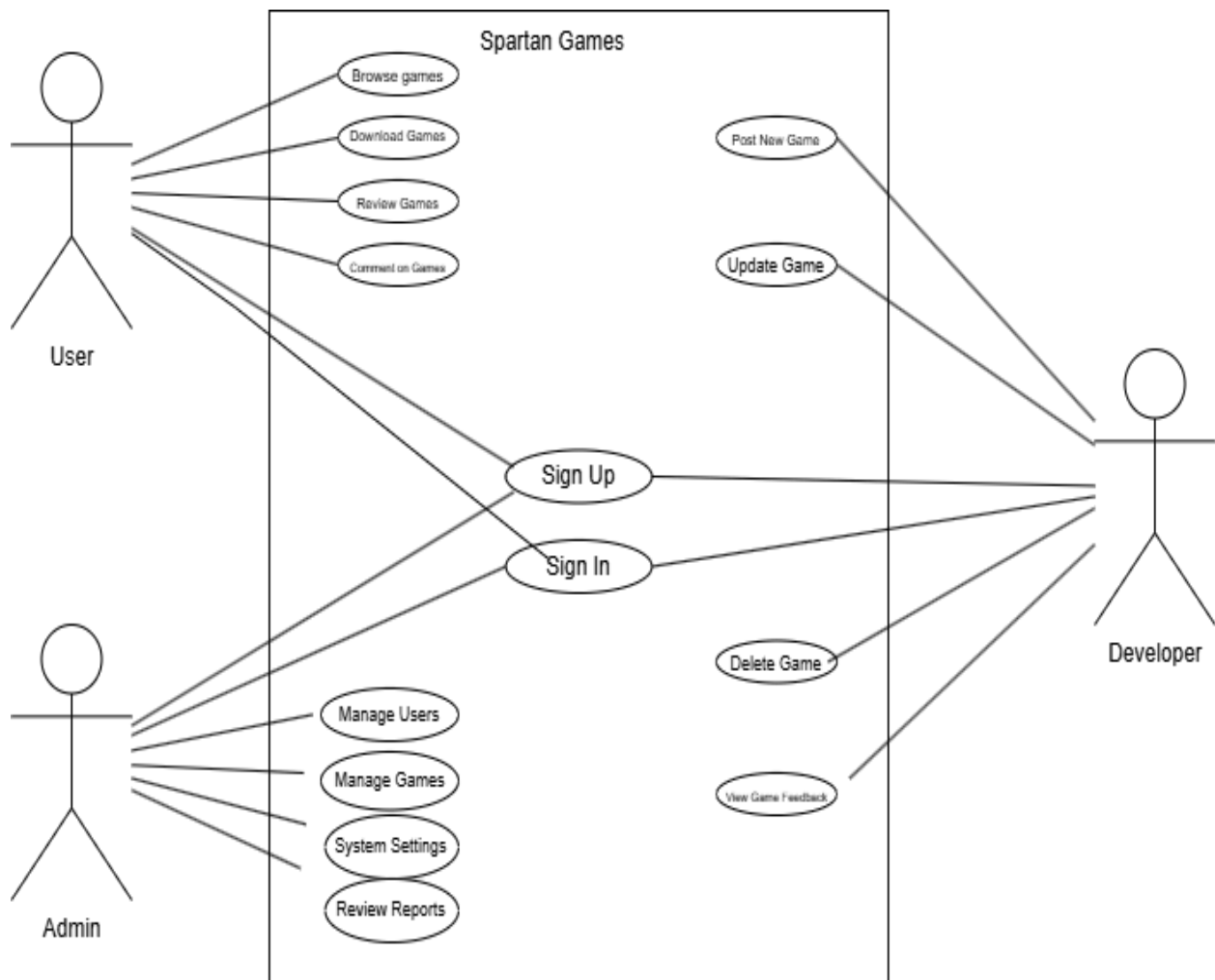
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1. Project Overview

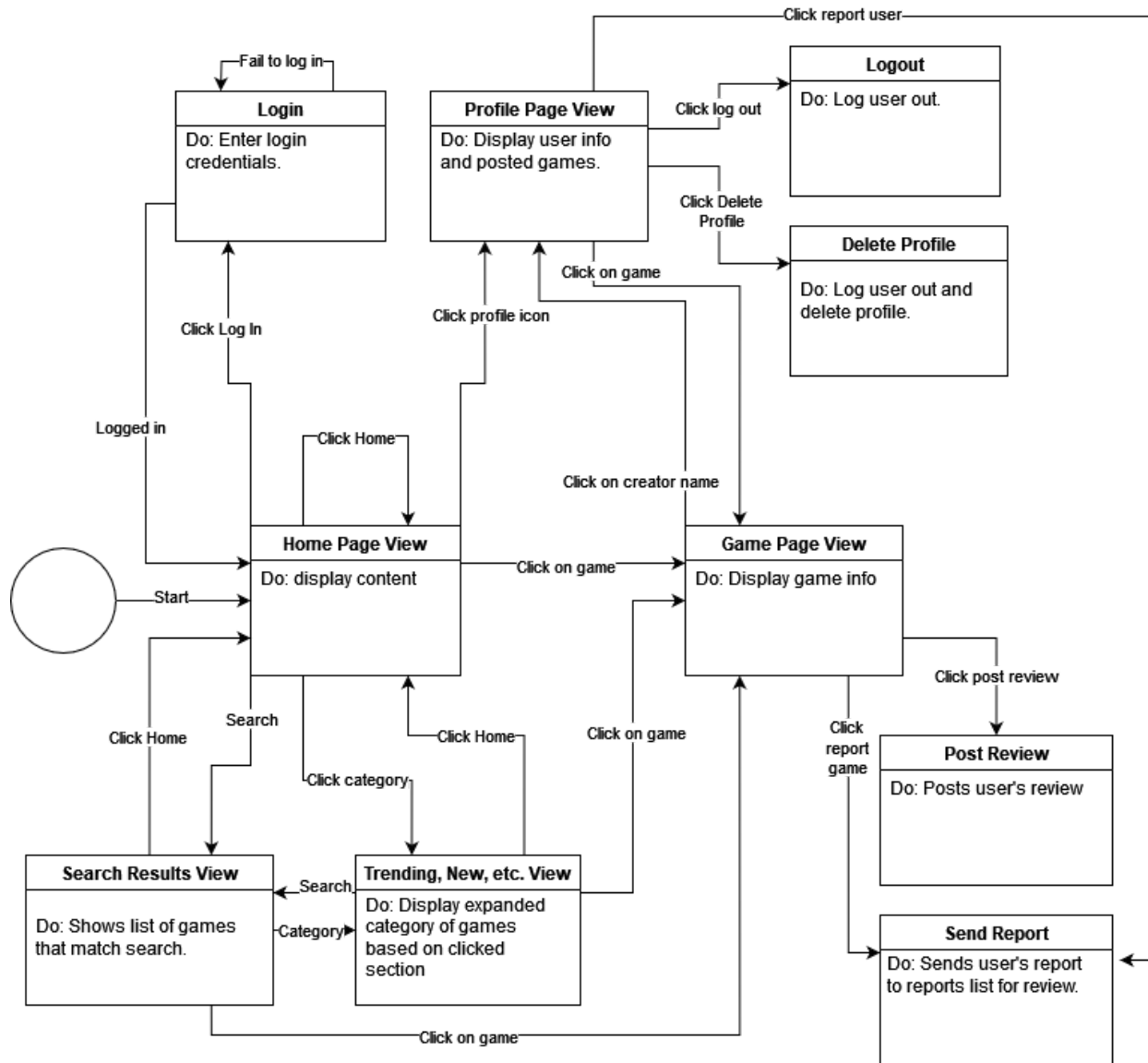
The goal of the Spartan Games web application is to allow users to share and download games, displaying recommended games on the home screen and allowing users to review and comment on games. Every user is able to upload their own game, and they will be considered a developer for games they upload. Uploaded games and user/game reports go to an admin for review. Admins can also view and manage the users and site data.

2. Use-case Model



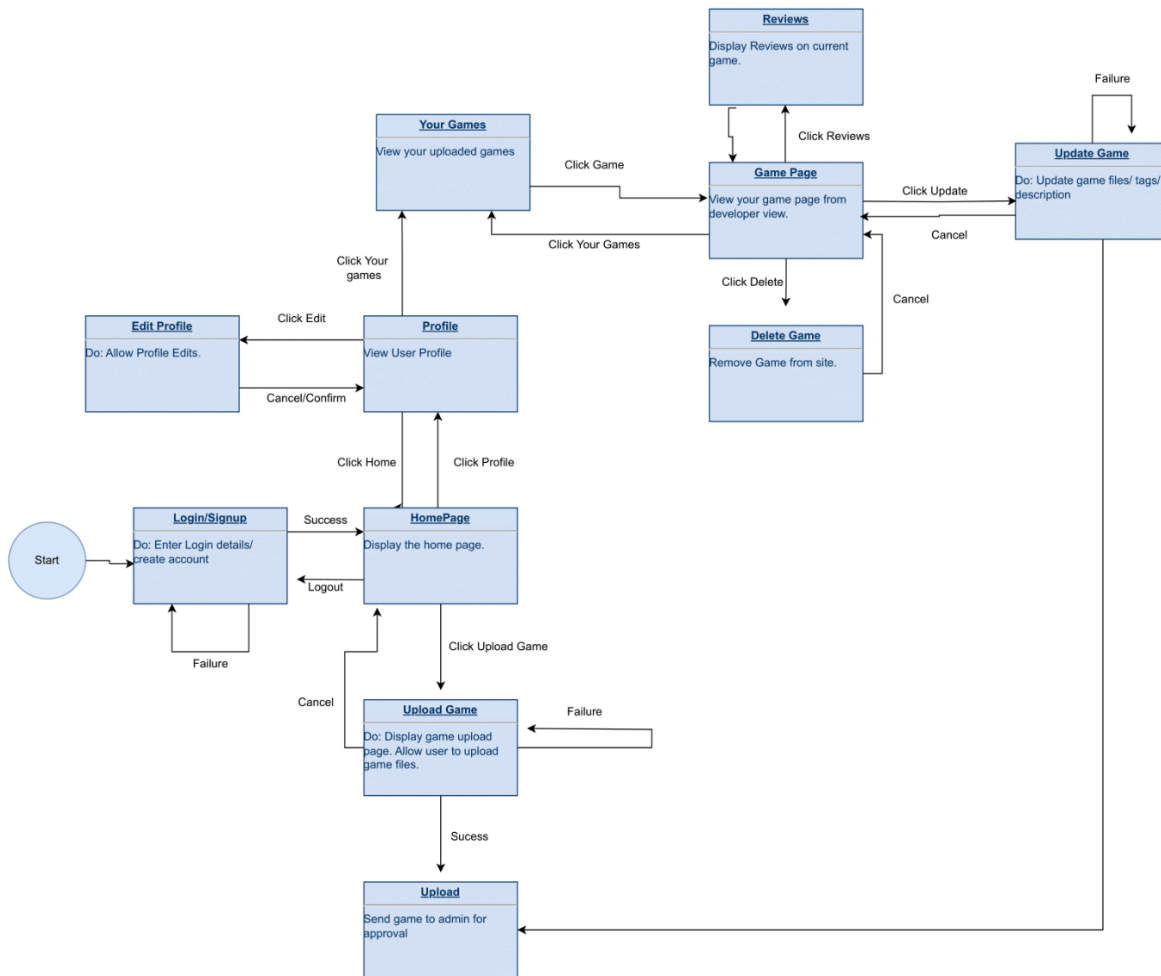
3. State Machine Diagrams

a. User - Kevin Ludwig

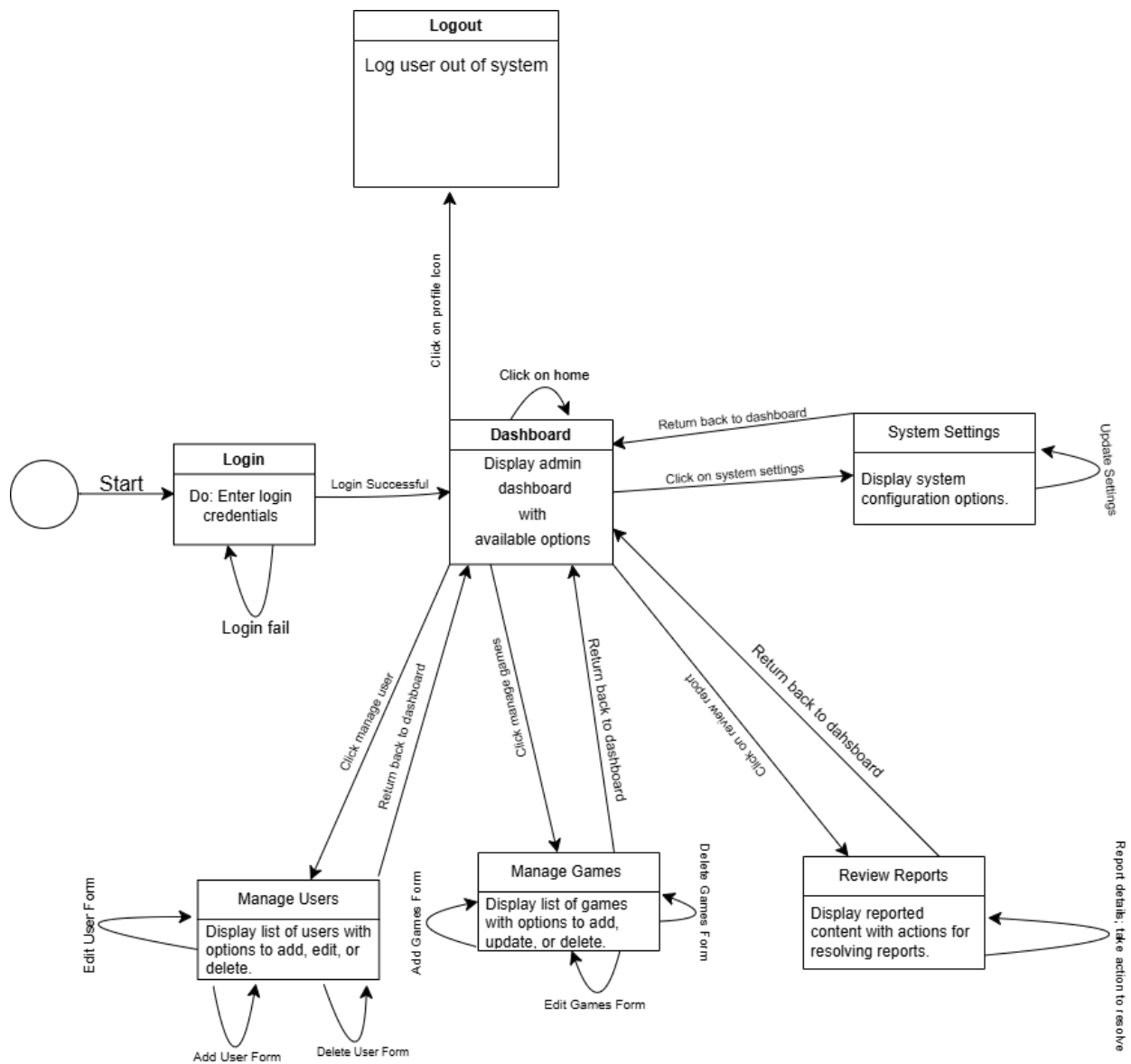


Update: Reduced trending, new, etc. pages to just new for the sake of simplicity.

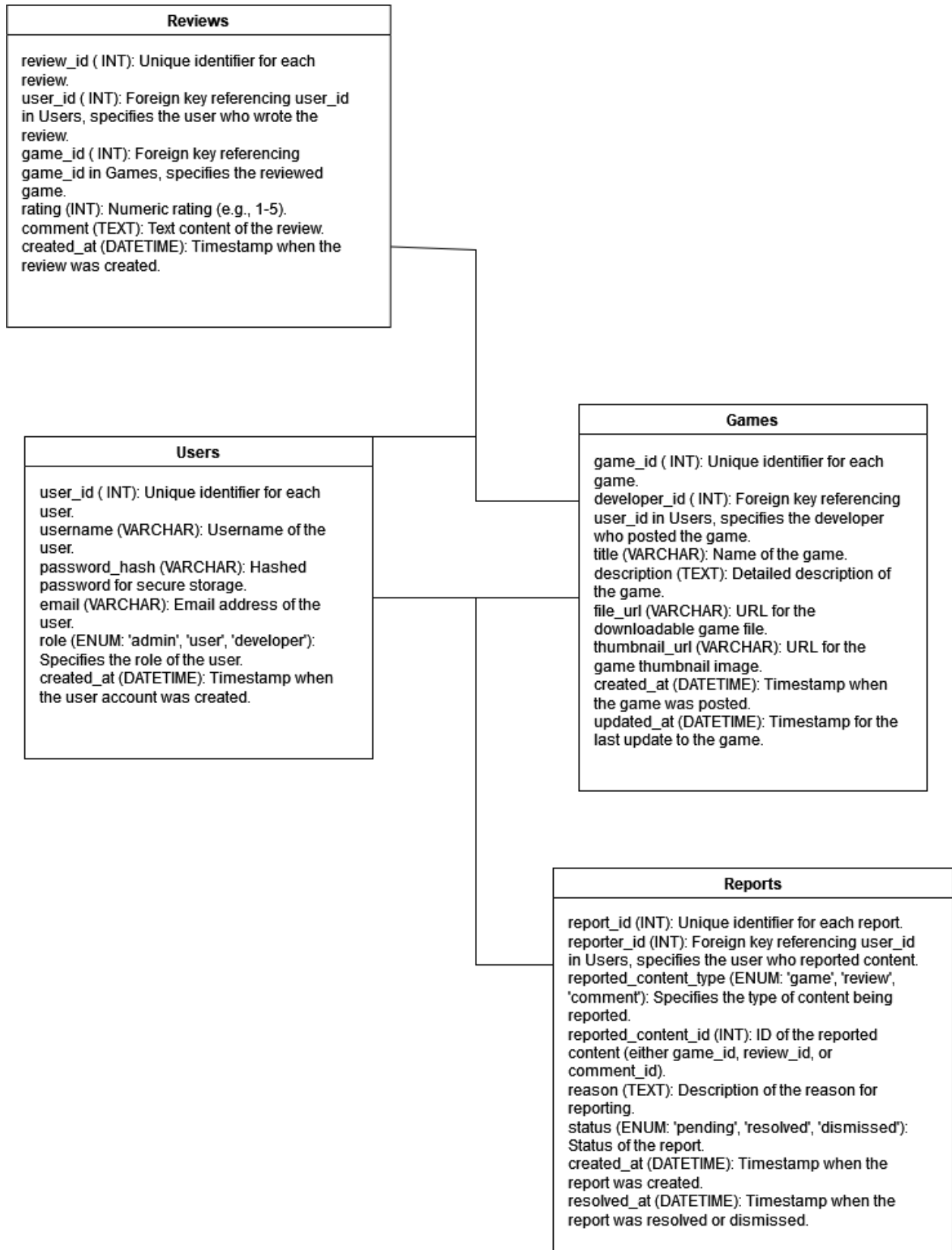
b. Developer - *Rahul Yadav*



c. Admin - *Richard Antwi-Bediako*



4. Database Schema



5. Software Architecture - MVC

