EECS2311 - Section Z - Team 5 - Take Home Assignment

Syed Mustafa Jamal Richard Carmichael Alex Fulop-Boca Youwei Qin Rocco Fernando Gadista Abdelrahman Merdan

1) User stories

Iteration 1	
User Story	Main Developer, Developers
View popular PC Games	Rocco, Richard
As a pc gamer, I would like to see all popular games that are available to purchase and its information.	
View any PC game	Richard, Youwei
I'd like to search for any game that comes to my mind and see if there's any info on it.	
View Game Description	Youwei, Rocco
As a pc gamer, I would like to see basic info about the game, so I know what type of game it is.	
View Critic Reviews	Alex
I would like to see critic reviews so I can know if the game is good.	
View System Requirements	Mustafa, Youwei, Richard, Rocco
I would like to see the system requirements recommended to run the game, so I can tell if my computer can run the game.	

Iteration 2	
User Story	Main Developer, Developers
Account	Youwei, Richard, Rocco, Mustafa
I'd like to create an account so that I can review games and engage the community.	
Write and View Other User Reviews	Abdelrahman, Richard, Alex
I'd like to write reviews for games, and view other user reviews.	
React to User Reviews	Alex, Rocco, Richard
I'd like to comment and engage in civilized discussion with other users.	
My Reviewed Games	Rocco, Abdelrahman
I'd like to see the list of games I've reviewed, and view my reviews.	
Friends	Mustafa, Youwei
I'd like to be able to add a friend and remove friends to My Friends.	

2) People assigned to test user stories:

View popular PC Games - Mustafa View any PC Game - Mustafa View Game Description - Richard View Critic Reviews - Rocco View System Requirements - Alex

Account - Abdelrahman
Write and View Other User Reviews - Rocco
React to User Reviews - Youwei
My Reviewed Games - Alex
Friends - Richard

Rocco

Iteration 1 User Story: View Critic Reviews

Test 1: View Metacritic reviews that are available for a game.

i) User opens the program and is greeted to the homepage where they can view a variety of

games.

ii) User clicks on a game at the homepage or searches for a game that has Metacritic reviews

available. Triple-A produced games such as Grand Theft Auto V, Baldur's Gate 3, and Elden Ring

usually have these types of reviews.

iii) On the game page, the user is able to view the overall critic score and read all critic reviews

by hovering their mouse and clicking on the label with the embedded link, "Read Critic

Reviews". This redirects them to the game's Metacritic page where all the reviews are.

iv) User exits program.

Result: Success

Bugs Encountered: 0

Test 2: View Metacritic reviews that are unavailable for a game.

i) User opens the program and is greeted to the homepage where they can view a variety of

games.

ii) User clicks on a game at the homepage or searches for a game that has no Metacritic reviews

available. Indie games, and PC exclusive games usually don't have Metacritic reviews such as

Counter Strike 2 and The Outlast Trials.

iii) On the game page, the user is able to see that the overall critic score is "N/A" which indicates

that the Metacritic reviews are unavailable.

iv) User exits program.

Result: Success

Test 3: View Metacritic reviews that are available/unavailable for any game during a session.

i) User opens the program and is greeted to the homepage where they can view a variety of games.

ii) User clicks on a game at the homepage or searches for a game that either has Metacritic reviews or none available.

iii) On the game page, the user is able to view the overall critic score, and view all critic reviews by clicking the link if available. Otherwise, the overall critic score will say "N/A" indicating that it's unavailable.

iv) User exits the game page.

v) User repeats steps ii-iv as much as they desire until they decide to exit the program.

Result: Success
Bugs Encountered: 2

Problem Report 1	
Reported by: Rocco Gadista	Date Reported: March 24, 2024
Program: MyGamingList	Release Number: 2 Version: Latest main branch

Configuration:

Hardware:

CPU: Intel Core i7-9700k 4.7 GHz

RAM: Corsair 16 GB DDR4 3200 MHz C16GPU: Nvidia Geforce RTX 2070 Super

- Display: 2560 x 1440

Software:

- OS: Windows 10 x64 based system

Java Development v17.0.2

- APIGuardian v1.1.2

- Bson v4.11.1

Jackson v2.16.1

- Slf4j v2.0.12

Report type: Coding/Logic issue

Reproducible: Yes

Severity: Low Priority: Medium

Summary: Metacritic reviews for all viewed games in a session open.

Description:

When a user views multiple games that have critic reviews in a session. The Metacritic pages for all viewed games will open in addition to the game the user is currently on when they click "Read Critic Reviews".

How to Reproduce:

- i) View any game that has an overall critic score and critic reviews.
- ii) Exit the game page, and view another game that has an overall critic score and critic reviews.
- iii) Click "Read Critic Reviews" on the current game page, it'll then open both the previous game's metacritic page and the current game's metacritic page. This effect stacks as more games are being viewed.

Suggested Fix: Take a look at the method responsible for loading game info for the game page (i.e. GUIGame.loadGame).

Status: Open

Resolution: Pending

Problem Report 2	
Reported by: Rocco Gadista	Date Reported: March 24, 2024
Program: MyGamingList	Release Number: 2 Version: Latest main branch

Configuration:

Hardware:

CPU: Intel Core i7-9700k 4.7 GHzRAM: 16 GB DDR4 3200 MHz C16GPU: GeForce RTX 2070 Super

Display: 2560 x 1440

Software:

- OS: Windows 10 x64 based system

- Java Development v17.0.2

- APIGuardian v1.1.2

- Bson v4.11.1

- Jackson v2.16.1

- Slf4j v2.0.12

Report type: Coding/Logic, and GUI issue

Reproducible: Yes

Severity: Low Priority: Medium

Summary: Games that have no critic reviews show the previously viewed game's critic score and reviews (if available).

Description:

When a user views a game that has no critic score after viewing a game that does have Metacritic reviews. If they decide to hover their mouse pointer on the critic score label, the program will now show the overall critic score and the link to the critic reviews for the previous game.

How to Reproduce:

- i) View any game that has Metacritic reviews.
- ii) Exit the game page, and view another game that has no Metacritic reviews.

iii) Hover your mouse to the critic score label.

iv) The label will now change and show the previous viewed game's critic score and reviews.

Suggested Fix: Take a look at the method responsible for loading game info for the game page (i.e. GUIGame.loadGame).

Status: Open

Resolution: Pending

Iteration 2 User Story: Write and View Other User Reviews

Test 1: Only view user reviews that are available for any game without logging in during a

session.

i) User opens the program and is greeted to the homepage where they can view a variety of

games.

ii) User clicks on a game at the homepage or searches for a game that either has user reviews or

none available.

iii) On the game page, the user clicks on the "Reviews" button to be able to view all available

user reviews for games.

iv) On the game's reviews page, the user will be able to see all reviews that the community

made if there are any. Otherwise, the user will see nothing. If the user tries to write a review,

they'll be prompted to log in.

iv) User exits the reviews page, and the game page.

v) User repeats steps ii-iv as much as they desire until they exit the program.

Result: Success

Test 2: User is able to write a review for any game while logged in during a session.

i) User opens the program and logs in their account.

ii) User clicks on a game at the homepage or searches for a game that either has user reviews or

none available.

iii) On the game page, the user clicks on the "Reviews" button.

iv) On the game's reviews page, the user will click on the "REVIEW" button.

v) The user will be prompted a window to ask if they recommend the game, to enter the score,

and to write the review itself.

vi) Once the user is done writing the review, they will click on the "Finalize Review" button.

vii) The reviews page will update with the user's review to clearly show to the user that the

review process went through.

viii) User exits the reviews page, and the game page.

ix) User repeats steps ii-viii as much as they desire until they log out and exit the program.

Result: Failed - Step VII) Review page doesn't update.

Bugs Encountered: 2

Test 3: Logged in user is unable to write a review immediately after reviewing the game during

the current session.

i) The logged in user writes a review for a game they haven't reviewed already.

ii) After they finalized the review and return to the game's review page, when they try to click

the "REVIEW" button, a message will appear saying that they are unable to review the game

anymore.

iii) The logged in user repeats step i-ii as much as they desire until they log out and exit the

program.

Result: Failed - Step II) Display message doesn't appear.

Bugs Encountered: 1

Test 4: User is unable to write a review for any game they've already reviewed while logged in

during a session.

i) User opens the program and logs in their account.

ii) User clicks on a game at the homepage or searches for a game that they've already had a

review for.

iii) On the game page, the user clicks on the "Reviews" button.

iv) On the game's reviews page, the user will click on the "REVIEW" button.

v) A message will be prompted to the user indicating that they've already reviewed the game

and can't review it anymore.

vi) User exits the reviews page, and the game page.

vii) User repeats steps ii-vi as much as they desire until they log out and exit the program.

Result: Failed - Step V) Display message doesn't appear.

Bugs Encountered: 1 (same bug as in test 3)

Test 5: User is able to write/view reviews in supported foreign languages. (Supports Chinese,

Japanese, Vietnamese, Swedish, and any other languages that uses the

English/Latin/Arabic/Cyrillic/Greek alphabet)

i) User opens the program and logs in their account.

ii) User clicks on a game at the homepage or searches for a game that they've already had a

review for.

iii) On the game page, the user clicks on the "Reviews" button.

iv) On the game's reviews page, the user will be able to see reviews that are in a foreign

language if there are any.

- v) If the user chooses to write a review in a foreign language such as Chinese, the review process will be the same and the same behavior can be expected from tests 2, 3, and 4.
- vi) User exits the reviews page, and the game page.

vii) User repeats steps ii-vi as much as they desire until they exit the program.

Result: Success
Bugs Encountered: 1

Problem Report 1	
Reported by: Rocco Gadista	Date Reported: March 24, 2024
Program: MyGamingList	Release Number: 2 Version: Latest main branch

Configuration:

Hardware:

CPU: Intel Core i7-9700k 4.7 GHzRAM: 16 GB DDR4 3200 MHz C16GPU: GeForce RTX 2070 Super

Display: 2560 x 1440

Software:

- OS: Windows 10 x64 based system

- Java Development v17.0.2

- APIGuardian v1.1.2

- Bson v4.11.1

- Jackson v2.16.1

- Slf4j v2.0.12

Report type: GUI issue

Reproducible: Yes

Severity: Medium Priority: High

Summary: Reviews Page doesn't update after reviewing a game.

Description:

After a user reviews a game, the Reviews page won't update with the user's review being added.

How to Reproduce:

- i) Log in to an account.
- ii) Review a game that the account hasn't reviewed yet.
- iii) After clicking finalize review, it'll be apparent that the reviews page has not been updated with the new review that has been recently created.

Suggested Fix: Going back to the games page, then clicking the reviews button again shows the newly added review. Therefore, code should be implemented to refresh the games page after the user finalizes the review.

Status: Open

Resolution: Pending

Problem Report 2	
Reported by: Alex Fulop-Boca	Date Reported: March 24, 2024
Program: MyGamingList	Release Number: 2 Version: Latest main branch

Configuration:

Hardware:

CPU: Intel Core i9-13900H 2.6 GHz
RAM: 32GB DDR5 5200 MHz C40
GPU: GeForce RTX 4070 Laptop GPU

Display: 2560 x 1440

Software:

- OS: Windows 11 x64 based system

- Java Development v17.0.2

- APIGuardian v1.1.2

- Bson v4.11.1

- Jackson v2.16.1

- Slf4j v2.0.12

Report type: GUI issue

Reproducible: Yes (for only Alex's system)

Severity: Low Priority: High

Summary: Writing a review doesn't show all elements.

Description:

When the user clicks on the "REVIEW" button to write a review, the prompt doesn't show the element to set the score.

How to Reproduce:

- i) Log in to an account.
- ii) Review a game that the account hasn't reviewed yet.
- iii) When the write review window is prompted, not all elements are shown such as the score.

Suggested Fix: Could be the size of the window that's giving the issue. Therefore, change the default size it opens to. As this effect can be achieved to a user that doesn't experience this problem if they resize the window to be bigger.

Status: Open

Resolution: Pending

Problem Report 3	
Reported by: Rocco Gadista	Date Reported: March 24, 2024
Program: MyGamingList	Release Number: 2 Version: Latest main branch

Configuration:

Hardware:

CPU: Intel Core i7-9700k 4.7 GHz
 RAM: 16 GB DDR4 3200 MHz C16
 GPU: GeForce RTX 2070 Super

- Display: 2560 x 1440

Software:

- OS: Windows 10 x64 based system
- Java Development v17.0.2
- APIGuardian v1.1.2
- Bson v4.11.1
- Jackson v2.16.1
- Slf4j v2.0.12

Report type: GUI issue

Reproducible: Yes

Severity: High Priority: High

Summary: No display message to show that the user is unable to review.

Description:

When a user tries to review a game that they already reviewed, the prompt to write a new review still appears. No display message appears despite behind the scenes, the program didn't let the user review. Only a system.out message appears after they try to finalize a review.

How to Reproduce:

- i) Log in to an account.
- ii) Review a game that the account already reviewed.
- iii) See that the write review window still appears, and nothing seems to happen when you finalize the review. Instead, a system.out message will appear indicating the review didn't go through.

Suggested Fix: Add a button listener for the "REVIEW" button that checks if the user had reviewed the game already.

Status: Open

Resolution: Pending

Problem Report 4	
Reported by: Rocco Gadista	Date Reported: March 24, 2024
Program: MyGamingList	Release Number: 2 Version: Latest main branch

Configuration:

Hardware:

CPU: Intel Core i7-9700k 4.7 GHz
 RAM: 16 GB DDR4 3200 MHz C16
 GPU: GeForce RTX 2070 Super

- Display: 2560 x 1440

Software:

- OS: Windows 10 x64 based system

- Java Development v17.0.2

- APIGuardian v1.1.2

- Bson v4.11.1

- Jackson v2.16.1

- Slf4j v2.0.12

Report type: GUI issue

Reproducible: Yes

Severity: High Priority: High

Summary: Writing a review in a supported foreign language shows squares.

Description:

While a user reviews a game in a supported foreign language that uses a different alphabet other than English/Latin. Instead of seeing the appropriate character, squares are shown.

How to Reproduce:

- i) Log in to an account.
- ii) Review a game that the account hasn't reviewed yet.
- iii) Start typing in a language that uses the Arabic, Chinese, or Japanese alphabet.
- iv) See that the characters being typed are squares.

Suggested Fix: Other GUI elements are able to view these languages without any problems such as the reviews page, games page, and homepage. Therefore, changing the font to the one that the other menus use should fix the problem.

Status: Open

Resolution: Pending

Code Review for User Story 4	
Reviewed by: Rocco Gadista	
Program: MyGamingList	Release Number: 2 Version: Latest main branch

File(s): GameData.java, Game.java, GUIGame.java

Author(s): Rocco, Abdelrahman, Youwei, Richard, Alex, Mustafa

File: GameData.java

Function: private static Bson updateMetacritic(JsonNode)

Type of Smell(s): Dispensable - Comments

Feedback:

Many of the comments are describing what the code is exactly doing. This is unnecessary as the code is already clear enough to determine what is being done. Consider removing these comments as they are not needed.

File: GUIGame.java

Function: public static void loadGame(int)

Type of Smell(s): Dispensable - Comments, Bloaters - Long Method

Feedback:

Comments are describing what the code is exactly doing. This is unnecessary as the code is already clear enough to determine what is being done. Consider removing these comments as they are not needed.

The loadGame method is over 30 lines long. Could be difficult to track and maintain in the long run. Consider splitting the code into separate methods for each significant operation.

Code Review for User Story 7

Reviewed by: Rocco Gadista

Program: MyGamingList Release Number: 2

Version: Latest main branch

FIle(s): GameData.java, Game.java, Review.java, GUINewUserReview.java

Author(s): Rocco, Abdelrahman, Richard, Alex

File: GameData.java

Function: private static Bson updateMetacritic(JsonNode)

Type of Smell(s): Dispensable - Comments

Feedback:

Many of the comments are describing what the code is exactly doing. This is unnecessary as the code is already clear enough to determine what is being done. Consider removing these comments as they are not needed.

File: GameData.java

Function: public static boolean noAppReviews(int)

Type of Smell(s): Dispensable - Comments

Feedback:

Comments are describing what the code is exactly doing. This is unnecessary as the code is already clear enough to determine what is being done. Consider removing these comments as they are not needed.

File: Review.java

Function: public static boolean noAppReviews(int)

Type of Smell(s): Dispensable - Duplicate code

Feedback:

Method is identical to the public static boolean method found in GameData.java. Consider removing this method, and calling the static method noAppReviews(int) in GameData.java.

Function: public static boolean CheckUpdateGame(int)

Type of Smell(s): Dispensable - Duplicate code

Feedback:

Method is similar in function to the public static boolean method noAppDetails(int). Consider removing this method, and calling the static method noAppReviews(int) in GameData.java.

Function: public static boolean AlreadyReviewed(Game, String)

Type of Smell(s): Dispensable - Dead Code

Feedback:

The boolean variable, in, is never used. There are also snippets of code commented out. Consider removing this code as the program does not need it.

Function: public static void review game(String, Game, int, String, String)

Type of Smell(s): Dispensable - Dead Code, Dispensable - Comments

Feedback:

Snippets of code are commented out. Consider removing this code as the program does not need it.

Comments explain what the code does despite the code being clear enough to understand the operation being performed. Consider removing these comments.

Functions:

- private static Bson UpdateNumReview(Game)
- private static Bson UpdateCommentReview(Game, String, int, String, String)
- private static Document find user(String)
- private static Document find_game(Game)
- private static Bson addUserReview(Game, String, int, String, String)

Type of Smell: Dispensable - Comments

Feedback:

Comment explains what the code does despite the code being clear enough to understand the operation being performed. Consider removing these comments.

Function: public static void main(String[])

Type of Smell: Dispensable - Dead Code

Feedback:

Huge chunk of code is commented out. Consider removing this block of code for clarity.

File: GUINewUserReview.java

Function: public GUINewUserReview(Game)

Type of Smell(s): Dispensable - Dead Code, Dispensable - Comments

Feedback:

Snippets of code are commented out. Consider removing these comments as the program does not need it.

Comments are either auto-generated or inform developers of outdated statuses for a method. Consider removing these comments for clarity.

Richard

View Game Description

Tests

- 1. View game description
- a) Select a game from the homepage
- b) Verify the description is easily readable
- c) Cross reference the description with same game from the steam store (https://store.steampowered.com)

Test is passed if application game description matches steam game description

- 2. Search test
- a) Use search bar to select a valid steam game
- b) Verify the description is easily readable
- c) Cross reference the description with same game from the steam store (https://store.steampowered.com)

Test is passed if application game description matches steam game description

- 3. Login test
- a) Login to application
- b) Select a game from the homepage or using the search bar
- c) Verify the description is easily readable
- d) Cross reference the description with same game from the steam store (https://store.steampowered.com)

Test is passed if application game description matches steam game description

Problem Report	
Reported by: Richard Carmichael	Date Reported: 24.mar.2024
Program: MyGamingList	Release & Version: 2.0
Report Type: design	
Reproducible: yes	

Severity: low

Description:
Text in game page descriptions is partially hidden on the right side

Steps to Reproduce:
View any game page

Recommendation:
Change the default window size or modify GUI for that page

Status: open

Resolution: Pending

Friends

Tests

Before Testing:

Create 2 new user accounts through the login button (any unused usernames). These will be referred to as account 1 and account 2

Before each test:

Login as account 1

- 1. Add / Remove friend
- a) Through the "friends" button, ensure account 1 friends list is empty
- b) Add account 2 as friend via the "friends" and "add friend" buttons
- c) Check friends list to verify account 2 was added
- d) Login to account 2 to ensure consistency between accounts
- e) Unfriend account 1 from account 2 friends list
- f) Check friends list to verify account 1 was removed
- g) Login to account 1 to ensure consistency between accounts

Test passed if friend was added and removed successfully and consistently on both accounts

- 2. Remove invalid friend
- a) friend account 2 via the "friends" and "add friend" buttons
- b) select "remove friend" and enter no username
- c) Exit menu
- d) select "remove friend" and enter invalid username (any account that is not currently friended)
- e) Using "remove friend", unfriend account 2 twice
- f) Check friends list to verify account 2 was removed
- g) Login to account 2 and check friends list to ensure consistency

Test passed if valid error messages were given, and no unusual behavior occurred

- 3. Remove friend menu
- a) friend account 2 via the "friends" and "add friend" buttons
- b) Open the "remove friend" dialogue and enter account 2 username but cancel the action
- c) Check friends list to verify account 2 was not unfriended
- d) Login to account 2 and check friends list to ensure consistency

Test passed if friends relation remains after canceled action

- 4. Add friend twice
- a) friend account 2 via the "friends" and "add friend" buttons
- b) Attempt to friend account 2 again
- c) Verify no duplicate friends or other unusual activity
- d) Login to account 2 and check friends list to ensure consistency

Test passed if valid error messages were given, and no unusual behavior occurred

- 5. Add self as friend
- a) Attempt to friend account 1 via the "friends" and "add friend" buttons
- b) Verify no unusual activity

Test passed if valid error messages were given, and no unusual behavior occurred

Problem Report		
Reported by: Richard Carmichael	Date Reported: 24.mar.2024	
Program: MyGamingList	Release & Version: 2.0	
Report Type: design	,	
Reproducible: yes		
Severity: low	Priority: med	
Description: Prompt to remove friend provides Yes/No/Cancel as options where only one negative option is required		
Steps to Reproduce: Attempt to remove friend		
Recommendation: Modify JOption Panel to only allow a Yes/No response		
Status: open		
Resolution: Pending		

Code smells

removed.

View Game Description

Code Smell Report		
Reviewed by: Richard Carmichael	Date Reviewed: 24.mar.2024	
Program: MyGamingList	Release & Version: 2.0	
File: GameData.java		
Problem Type: Dispensibles - Duplicate Code, Dispensibles - Comments		
Feedback:		
The methods updateAppDetails and addApp do pretty much the same thing and share significant amounts of code, they should be combined into one method.		
There are quite a few redundant comments explaining easily understandable code which should be		

Code Smell Report		
Reviewed by: Richard Carmichael	Date Reviewed: 24.mar.2024	
Program: MyGamingList	Release & Version: 2.0	

FIIe: Game.java

Problem Type: Bloaters - Long Parameter List, Dispensables - Dead Code, Inconsistent Names

Feedback:

The Game method requires quite a few parameters which, if possible, should be shortened.

The bottom of the class contains what looks like a test method commented out, if this is not necessary for the program, it should be removed.

The variables "sum_of_all_reviews" and "num_of_reviews" do not follow the standard variable nomenclature and should be renamed accordingly.

Code Smell Report	
Reviewed by: Richard Carmichael	Date Reviewed: 24.mar.2024
Program: MyGamingList	Release & Version: 2.0

FIIe: GUIGame.java

Problem Type: Dispensables - Dead Code, Poor Organization

Feedback:

There is a commented out block of code in the middle of the class which should be removed if not necessary.

Overall, the class is unorganized and should be cleaned up.

A few blocks of code are marked as temp or unfinished and these comments should be removed and/or problems addressed.

Friends

Code Smell Report

Reviewed by: Richard Carmichael	Date Reviewed: 24.mar.2024
Program: MyGamingList	Release & Version: 2.0

FIIe: UsersImpl.java

Problem Type: Dispensables - Dead Code, Dispensibles - Comments

Feedback:

At the start of the class, a declaration and a few lines of code are commented out and should be removed if no longer necessary.

There are a few redundant comments for easily readable or simple code.

Code Smell Report	
Reviewed by: Richard Carmichael	Date Reviewed: 24.mar.2024
Program: MyGamingList	Release & Version: 2.0

FIIe: GUIMyFriends.java

Problem Type: Dispensables - Dead Code, Dispensibles - Comments, Inconsistent Names

Feedback:

There is a significant amount of dead code in this class: in the segment that populates the scroll pane there is an unused action listener created for each entry, there is commented out test code in the first button listener, and there is some code that supposedly "does not work yet but isn't breaking anything" which should either be implemented or removed.

There are significant amounts of comments for simple sections of code which should definitely be removed .

There is a variable "highRatedVertical" for an object "friendsScrollPane" which should be renamed as the current name makes little sense.

Overall

There is duplicate code for various GUI methods such as scroll panes and button listeners. Ideally, this would be combined into a GUITools or similar class though the small project size means that this is not a significant issue.

Abdelrahman

Account

Part 1: End - 2 - End Manuel Test

Test 1: Create an account with a unique username and log in where all fields are filled correctly and log out.

1) User opens the program and clicks on the log in button on the top left corner.

2) The User clicks the Sign-Up button to create an account.

3) The User enters a unique username and a password with 4 or more characters and clicks Create Account.

4) The user should now be logged in, where the log in button should now say log out.

5) The user should click on My Reviews, where the top of the page should say the "username of the account

"Reviews.

6) The user should click on Friends, where the top of the page should say the "username of the account "- My

Friends

7) The user should click the log out button, where the log out button should now say log in.

Result: Success

Bugs Encountered: 0

Test 2: Create an account with a username that is already used where the sign up should fail.

1) User opens the program and clicks on the log in button on the top left corner.

2) The User clicks the Sign-Up button to create an account.

3) The User enters the Username used in Test 1 and a password with 4 or more characters and clicks Create

Account.

4) The username field changes to say that "Username already exist" and the user isn't logged in.

5) The user clicks back, then cancels, where the button on the top right corner says log in.

Result: Success

Test 3: Create an account with a unique username and a password that is less than 4 characters long and log in.

1) User opens the program and clicks on the log in button on the top left corner.

2) The User clicks the Sign-Up button to create an account.

3) The User enters a unique username, and a password with less than 4 characters and clicks Create Account.

4) The username field changes to say that "Password length must be between 4-16" and the user isn't logged in.

5) The user clicks back, then cancels, where the button on the top right corner says log in.

Result: Success

Bugs Encountered: 0

Test 4: Create an account with an empty username field.

1) The User clicks the Sign-Up button to create an account.

2) The User enters an empty string for the username, and a password with 4 or more characters and clicks Create

Account.

3) The username field changes to say that "Username already exist" and the user isn't logged in.

4) The user clicks back, then cancels, where the button on the top right corner says log in.

Result: Success

Test 5: Log in with an account with reviews, then logout and check the My Reviews tab and Friends tab to see if the

information is still there.

1) User opens the program and clicks on the log in button on the top left corner.

2) The User signs in to a user with reviews.

3) The user should click on My Reviews, where the top of the page should say the "username of the account

"Reviews and there is a list of games that the user has reviewed with the comments.

4) The user clicks the home tab on the top left, then logs out.

5) The user should click on My Reviews, where the user should be prompted to log in.

Result: Success

Bugs Encountered: 0

Test 6: Log in with an account with reviews, then logout and log in to an account with no reviews.

1) User opens the program and clicks on the log in button on the top left corner.

2) The User signs in to a user with reviews.

3) The user should click on My Reviews, where the top of the page should say the "username of the account

"Reviews and there is a list of games that the user has reviewed with the comments.

4) The user clicks the home tab on the top left, then logs out.

5) The user signs in to a user with no reviews.

6) The user should click on My Reviews, where the top of the page should say the "username of the account

"Reviews and the rest of the page is blank.

Result: Success

Test 7: Log in with an account that exists, then logout and create a new account.

- 1) User opens the program and clicks on the log in button on the top left corner.
- 2) The User signs in to a user that has already been created.
- 3) The user should click on My Reviews, where the top of the page should say the "username of the account "Reviews and there is a list of games that the user has reviewed with the comments.
- 4) The user clicks the home tab on the top left, then logs out.
- 5) The User clicks the Sign-Up button to create an account.
- 6) The User enters a unique username and a password with 4 or more characters and clicks Create Account.
- 7) The user should now be logged in, where the log in button should now say log out.
- 8) The user should click on My Reviews, where the top of the page should say the "username of the account "Reviews and the rest of the page is blank.

Result: Fail, the user doesn't sign in with the new user created. Instead, the user that is logged in is the same as the previous user that logged out.

Part 2: Code Review

Bugs:

Problem Report		
Reported by: Abdelrahman Merdan	Date Reported: March 24, 2024	
Program: MyGamingList	Release Number: 2	
	Version: Latest main branch	

Configuration:

Hardware:

CPU: Intel Core i9-9900H 3.6 GHzRAM: 32GB DDR5 5200 MHz C40

GPU: GeForce RTX 2070Display: 2560x1440

Software:

• OS: Windows 11 x64 based system

• Java Development v17.0.2

• APIGuardian v1.1.2

Bson v4.11.1

• Jackson v2.16.1

• Slf4j v2.0.12

Report type: Coding/Logic issue

Reproducible: Yes

Severity: High Priority: High

Description:

When a user signs into an account, then logs out and creates a new account, the new account isn't logged in. Instead, the previous user is logged in without inputting their password.

How to Reproduce:

- 1) Login to an account that was previously created.
- 2) Log out and create a new account.
- 3) Click the My Review tab, where the name displayed is the previous user with all their reviews.

Suggested Fix:

This error could occur due to the sign-up function not passing the correct values to the GUI to log in. Therefore, when a user has already logged in and tries to create an account after, the GUI uses the stored value from the previous login to sign in. This can be fixed by changing the signup function to make sure it passes the proper values to the GUI. This could also be a problem with the GUI where it doesn't replace the user details with the user who signs up. This can be fixed by changing the GUI code to make sure it always replaces the user information when a user logs in.

Status: Open

Resolution: Pending

Code Smells:

Code Review			
Reviewed by: Abdelrahman Merdan	Date Reviewed: March 25, 2024		
Author: Youwei Qin			
Program: MyGamingList	Release Number: 2		
	Version: Latest main branch		
File: UsersImpl.java			
Function(s):			
public boolean createAccount(User user)			
public void updateFriend(String username, String friendName, String operation)			
public List <string> listFriend(String username)</string>			
private User documentToUser(Document doc)	private User documentToUser(Document doc)		
private Document userToDocument(User user)	private Document userToDocument(User user)		
public static User getUser(String string)			
Review type: Code Smell			
Type of Smell: Comments			
Severity: Low	Priority: Low		
Description :			
Missing a comment explaining the purpose of the functions			
Suggested Fix:			
Add a comment explaining what each function does.			

Section 1 - End-2-end manual test cases:

User Story 1 - View System Requirements

<u>Important Note:</u> If the user logs in it won't impact how the game loads but I just added it because it might come up during testing. This covers all the corner and general cases.

-Before All Cases: Running the application

<u>Test Cases 0, 1, 2:</u> Finding a game via the Most Played Games:

- 0) On the main page under **Most Played** click **Counter-Strike 2**-Look at the box titled Minimum to find the system requirements of the game
- On the main page under Most Played click Dota 2
 Look at the box titled Minimum to find the system requirements of the game
- On the main page under Most Played click Rust
 -Look at the box titled Minimum to find the system requirements of the game

<u>Test Cases 3, 4, 5</u>: Finding a game via the Popular Released Games:

- On the main page under Popular Release click Stardew Valley
 -Look at the box titled Minimum to find the system requirements of the game
- 4) On the main page under Popular Release click Elden Ring
 -Look at the box titled Minimum to find the system requirements of the game
- 5) On the main page under Popular Release click Palworld-Look at the box titled Minimum to find the system requirements of the game

Test Cases 6, 7, 8: Finding a game via the Searching for a Game via Search Bar:

- 6) On the main page click on the **search bar** and type in **Last Epoch**-Look at the box titled Minimum to find the system requirements of the game
- On the main page click on the search bar and type in War Thunder
 Look at the box titled Minimum to find the system requirements of the game
- 8) On the main page click on the **search bar** and type in **Lethal Company**-Look at the box titled Minimum to find the system requirements of the game

Before end-to-end test cases 9 to 17

- -Click the Login button on the top right beside the search feature
- -Click the Username field and type in your username

- -Click the Password field and type in a password
- -Click login

<u>Test Cases 9, 10, 11:</u> Finding a game via the User Logged in and Most Played Games:

- 9) On the main page under **Most Played** click **Counter-Strike 2**-Look at the box titled Minimum to find the system requirements of the game
- 10) On the main page under Most Played click Dota 2-Look at the box titled Minimum to find the system requirements of the game
- 11) On the main page under Most Played click Rust-Look at the box titled Minimum to find the system requirements of the game

<u>Test Cases 12, 13, 14:</u> Finding a game via the User Logged in and searching a game via a search bar.

- 12) On the main page under **Popular Release** click **Stardew Valley**-Look at the box titled Minimum to find the system requirements of the game
- 13) On the main page under **Popular Release** click **Elden Ring**-Look at the box titled Minimum to find the system requirements of the game
- 14) On the main page under Popular Release click Palworld-Look at the box titled Minimum to find the system requirements of the game

<u>Test Cases 15, 16, 17</u>: Finding a game via the User Logged in and Popular Release Games:

- 15) On the main page click on the **search bar** and type in **Last Epoch**-Look at the box titled Minimum to find the system requirements of the game
- 16) On the main page click on the search bar and type in War ThunderLook at the box titled Minimum to find the system requirements of the game
- 17) On the main page click on the **search bar** and type in **Lethal Company**-Look at the box titled Minimum to find the system requirements of the game

Note: For all the end-to-end test cases,

Result: Success
Bugs Encountered: 0

User Story 2 - My Reviewed Games

Important Note: The end-to-end test cases will differ from user story 1 since the feature requires a user. Each case will have a different user with different reviews, which will be mentioned alongside the test case number. The number of comments is irrelevant for our purposes since the focus is only on the review itself. We will need to add/write a review in some cases to check if it is listed in the My Reviews after it has been completed and this will have some overlap with the other user story. For our purposes, we take a look at two users, and go through the test cases for each user - so the test cases build off each other. I felt this way was easier for the tester to keep track and to notice what they have done and what they will do next and to see if the correct information and features are displayed and accurate instead of taking a more abstract approach. I have included a generic user, to show how it would work as well if that is easier to understand. Also, the end-to-end test cases cover all the corner and general cases.

Before all end-to-end test cases

- -Running the application
- -Clicking the My Reviews button on the top
- -Logging in with a username and a password then click login (if you don't have an account then sign up (covered by another user story))
 - -Then click the My Reviews button on the top again
 - -Now you can see your user's reviews

Tests 1, 2, 3: Checking the user's reviews before adding a review for a game

- 1) Username: Fish Password: Fish Reviews done already N/A
 - a) On top of the review box is your username fish
 - b) On the right of it is the back button clicking on it returns you to the main screen
 - c) There should be an empty review box since there are no reviews
- 2) Username: Username- Password: Password- Reviews done already Unturned
 - a) On top of the review box is your username Username
 - b) On the right of it is the back button clicking on it returns you to the main screen
 - c) There should be 1 review for a game Unturned
 - d) On the top left it contains the name of the game the user left a review for (Unturned)
 - e) On the top middle, it says if it is recommended or not (it is recommended)
 - f) To the top right, it tells you the users score out of 10 (was an 8 for this one)
 - g) Then in the white box, it tells you the text of the review ("Love me block game")
 - h) Then it has a show/hide comments to the bottom left of the review (has no comments for the review)
 - i) Then has an Add comment to add a comment to the review (not part of the user story
- 3) Generic user, with some username and password and some review (0 or more)
 - a) On top of the review box is your username -
 - b) On the right of it is the back button clicking on it returns you to the main screen
 - c) There should be a review box which will have some number of reviews, where if there are no reviews it is empty, if it has been reviewed it will show the name of the review, the recommendation you gave it, the score, and the text in it, in addition to the comments that people may or may not have left for the review.

Important Note: The user can only write 1 review for a game, so we will focus on leaving a review for different games.

<u>Tests 4, 5, 6</u>: Adding a review for a game with the user logged in and checking it to show up under the My Reviews page.

- 4) Username: Fish Password: Fish Review: Ready or Not- Reviews done already N/A
 - a) Click the home button on the top left and go back to the main page.
 - b) Then under popular releases scroll down until you find the game Ready or Not
 - c) Click on Ready or Not.
 - d) To the right of the description of the game, click review.
 - e) Then click review again on the top right beside the back button.
 - f) Then click on the "Would you recommend this game to others" checkbox to the left to recommend it.
 - g) To the right of the "Would you recommend this game to others, there is a Please provide a rating out of 10 where there is a clickable up arrow and a clickable down arrow to change to score beside the number, click the up arrow twice for a score of 7.
 - h) Below those options, is a comment field where you can type out a comment about the game Click the box and type in "The game is good but it could be better."
 - i) Then on the button click the Finalize Review.
 - j) Now click on the My Reviews button at the top of the application.
 - k) Now the review is shown on the screen where the name is Ready or Not, it is recommended, the score is 7, the comment is "The game is good but it could be better." and has no comments when the Show/hide comment is clicked.
- 5) Username: Username- Password: Password- Review: Nier Automata Reviews done already Unturned
 - a) Click the home button on the top left and go back to the main page.
 - b) Then under popular releases scroll down until you find the game NieR Automata.
 - c) Click on NieR Automata.
 - d) To the right of the description of the game, click review.
 - e) Then click review again on the top right beside the back button.
 - f) Then on the "Would you recommend this game to others" checkbox to the left if you want to recommend it: don't the checkbox.
 - g) To the right of the "Would you recommend this game to others, there is a Please provide a rating out of 10 where there is a clickable up arrow and a clickable down arrow to change to score beside the number, click the up-down twice for a score of 3.
 - h) Below those options, is a comment field where you can type out a comment about the game Click the box and type in "The game was a disappointment."
 - i) Then on the button click the Finalize Review.
 - j) Now click on the My Reviews button at the top of the application.
 - k) Now the review is shown on the screen under the previous review Untured where the name is NieR; Automata, it is not recommended, the score is 3, the comment is "The game was a disappointment." and has no comments when the Show/hide comment is clicked.

- 6) Generic user, with some username and password and reviewing some random game
 - a) Click the home button on the top left and go back to the main page.
 - b) Find the game you are looking for which is either under popular releases, most played, or by the search bar
 - c) Click on the game if it was the first two options and if it was by the search bar press enter
 - d) To the right of the description of the game, click review.
 - e) Then click review again on the top right beside the back button.
 - f) Then on the "Would you recommend this game to others" checkbox to the left if you want to recommend it and don't click it if you don't want to
 - g) To the right of the "Would you recommend this game to others, there is a Please provide a rating out of 10 where there is a clickable up arrow and a clickable down arrow to change to score beside the number: click the arrows to adjust the score you want
 - h) Below those options, is a comment field where you can type out a comment about the game Click the box and type in the comment you want to leave then on the button click the Finalize Review.
 - i) Now click on the My Reviews button at the top of the application.
 - j) Now the review is shown on the screen under the reviews which you may or may not have is your new review with your name of the game, recommendation, score, text about the review, and no comments since you just made the review

<u>Test 7, 8:</u> Adding a review for multiple games for a user and then checking that it shows under the My Review page.

- 7) Username: Fish Password: Fish Review: DayZ Review: Dead by Daylight Reviews done already Unturned
 - a) Click the home button on the top left and go back to the main page.
 - b) Then under Most Played scroll down until you find the game DayZ
 - c) Click on DayZ
 - d) To the right of the description of the game, click review.
 - e) Then click review again on the top right beside the back button.
 - f) Then click on the "Would you recommend this game to others" checkbox to the left to recommend it.
 - g) To the right of the "Would you recommend this game to others, there is a Please provide a rating out of 10 where there is a clickable up arrow and a clickable down arrow to change to score beside the number, click the up arrow three times for a score of 8.
 - h) Below those options, is a comment field where you can type out a comment about the game Click the box and type in "The game is awesome for a few minor things."
 - i) Then on the button click the Finalize Review.
 - j) Now click on the My Reviews button at the top of the application.
 - k) Now the review is shown on the screen where the name is DayZ, under our Ready or Not review and it is recommended, the score is 8, the comment is "The game is awesome for a few minor things." and has no comments when the Show/hide comment is clicked.
 - I) Click the home button on the top left and go back to the main page.
 - m) Then under Most Played scroll down until you find the game Dead by Daylight
 - n) Click on Dead by Daylight
 - o) To the right of the description of the game, click review.
 - p) Then click review again on the top right beside the back button.

- q) Then don't click on the "Would you recommend this game to others" checkbox to the left to not recommend it.
- r) To the right of the "Would you recommend this game to others, there is a Please provide a rating out of 10 where there is a clickable up arrow and a clickable down arrow to change to score beside the number, click the down arrow three times for a score of 2.
- s) Below those options, is a comment field where you can type out a comment about the game Click the box and type in "The community is trash and toxic, don't play this game."
- t) Then on the button click the Finalize Review.
- u) Now click on the My Reviews button at the top of the application.
- v) Now the review is shown on the screen where the name is Dead by Daylight, under our DayZ review and it is not recommended, the score is 2, and the comment is "The community is trash and toxic, don't play this game." and has no comments when the Show/hide comment is clicked.
- 8) Generic User, with some username and password and reviewing some random game
 - a) Complete end-to-end test case 6) for a specific number of times which is more than 1

Note: For all the end-to-end test cases,

Result: Success
Bugs Encountered: 1

Clarity for the bug: There is a GUI bug when you write a new user review, the pop-up box only shows the "Would you recommend this game to others" and the comment field and finalize review options only, and is missing the please provide a rating out of ten option upon initialization. Once you resize the box and make it larger, it fits on the GUI. I encapsulate the bug below in the document. The bug was encountered in all test cases when writing a new review which is tests 4-8.

Important Note: For the sake of clarity and ease of reading, we focus only on one user since for the other user the same idea holds and the end-to-end test case is quite lengthy so one should suffice.

Section 2 - Reporting any bugs or code smells in the program.

User Story 1 - View System Requirements - No bugs in the program and no code smells.

User Story 2 - My Reviewed Games

Bugs:

Problem Report		
Reported by: Alex Fulop-Boca	Date Reported: March 24, 2024	
Program: MyGamingList	Release Number: 2 Version: Latest main branch	

Configuration:

Hardware:

CPU: Intel Core i9-13900H 2.6 GHz
RAM: 32GB DDR5 5200 MHz C40
GPU: GeForce RTX 4070 Laptop GPU

- Display: 2560 x 1440

Software:

- OS: Windows 11 x64 based system
- Java Development v17.0.2
- APIGuardian v1.1.2
- Bson v4.11.1
- Jackson v2.16.1
- Slf4j v2.0.12

Report type: GUI issue

Reproducible: Yes (for only my system)

Severity: Low Priority: High

Summary: Writing a review doesn't show all elements.

Description:

When the user clicks on the "REVIEW" button to write a review, the prompt doesn't show the element to set the score.

How to Reproduce:

- i) Log in to an account.
- ii) Review a game that the account hasn't reviewed yet.
- iii) When the write review window is prompted, not all elements are shown such as the score.

Suggested Fix: Could be the size of the window that's giving the issue. Therefore, change the default size it opens to. As this effect can be achieved to a user that doesn't experience this problem if they resize the window to be bigger.

Status: Open

Resolution: Pending

Code smells:

Code Smell Report		
Reviewed by: Alex Fulop-Boca		
Program: MyGamingList	Release Number: 2 Version: Latest main branch	
File(s): GUIGame.java		
Author(s): Rocco, Abdelrahman, Richard, Alex,		

File: GUIGame.java

Function: public static void loadUserReviews(JPanel cardPane, String username) public static void userReview(Object reviews, List<Object> comments, String user)

Type of Smell(s): Dispensable - Comments, Bloaters - Long Method, in addition to Unused Code.

Feedback:

Several comments in the loadUserReviews method have no use "//review()" and add nothing to the program and should be removed for clarity and ease of reading

The userReview method is quite long and should be broken down into more focused methods to improve readability and maintainability.

The is some unused code "//reviewBox.add(Box.createRigidArea(new Dimension(0, 20)));" which has no function or purpose and should be deleted to avoid confusion.

Youwei

- Iteration 2 User story: react to user reviews (Add Comments).

Section 1: Tests for User Story

Test 1: A Chinese gamer wants to add comments in Mandarin for Dota 2.

- 1) The user clicked on the "Login in" button, entered his username and password.
- 2) Clicked "Login in".
- 3) Clicked "Dota 2" from "Most Played"
- 4) Clicked "Reviews".
- 5) Clicked "Add a comment".
- 6) Made a comment "我觉得很好玩" and clicked "OK".
- 7) Clicked on "Home"
- 8) Clicked "Dota 2" from "Most Played"
- 9) Click "Show" from "Show/Hide comments"
- 10) The comment "我觉得很好玩" has showed.

Result: Success

Bugs Encountered: 0

Test 2: A gamer wants to add a really long comment for Counter-Strike 2.

- 1) The user clicked on the "Login in" button, entered his username and password.
- 2) Clicked "Login in".
- 3) Clicked "Counter-Strike 2" from "Most Played"
- 4) Clicked "Reviews".
- 5) Clicked "Add a comment".
- 6) Made a comment "Counter-Strike 2, the highly anticipated sequel to the iconic first-person shooter franchise, delivers an intensified experience that both honors its roots and pushes boundaries in the genre. Developed by Valve Corporation, Counter-Strike 2 retains the core elements that made its predecessor a global

phenomenon while introducing innovative features and improvements across the

board," and clicked "OK".

7) Clicked on "Home".

8) Clicked "Counter-Strike 2" from "Most Played".

9) Click "Show" from "Show/Hide comments".

Result: Failed

Bugs Encountered: 1

Test 3: A gamer wants to add a comment for Dragon's Dogma 2 from the Popular

Releases and wants to see if his comment could be shown and hidden.

1) The user clicked on the "Login in" button, entered his username and password.

2) Clicked "Login in".

3) Clicked "Dragon's Dogma 2" from "Popular Releases".

4) Clicked "Reviews".

5) Clicked "Add a comment".

6) Made a comment "Nice game." and clicked "OK".

7) Clicked on "Home".

8) Clicked "Dragon's Dogma 2" from "Popular Releases".

9) Click "Show" from "Show/Hide comments".

10) Click "Hide" from "Show/Hide comments".

Result: Success

Bugs Encountered: 1

Test 4: A gamer wants to add a comment for Team Fortress 2 from the Most played and see if

his comments are added or not.

1) The user clicked on the "Login in" button, entered his username and password.

2) Clicked "Login in".

- 3) Clicked "Team Fortress 2" from "Most played".
- 4) Clicked "Reviews".
- 5) Clicked "Add a comment".
- 6) Made a comment "Interesting game." and clicked "OK".
- 7) Clicked on "Home".
- 8) Clicked "Team Fortress 2" from "Most played".

Result: Failed

Bugs Encountered: 2

Test 5: A gamer wants to add a comment for War Thunder from the Most played and wants to see his comments shown immediately after he made the comment.

- 1) The user clicked on the "Login in" button, entered his username and password.
- 2) Clicked "Login in".
- 3) Clicked "War Thunder" from "Most played".
- 4) Clicked "Reviews".
- 5) Clicked "Add a comment".
- 6) Made a comment "Interesting game." and clicked "OK".
- 7) Click "Show" from "Show/Hide comments".

Result: Failed

Bugs Encountered: 3

Section 2: Bugs report

Bugs - Problem Report		
Reported by: Youwei Qin	Date Reported: March 24, 2024	
Program: MyGamingList	Release Number: 2 Version: Latest main branch	
Configuration:		

Hardware:

- CPU: Apple 8-core CPU

- RAM: 16 GB

GPU: 10-core GPU GPUDisplay: 2560 × 1664

Software:

- OS: MacOS Sonoma 14.3.1 (23D60)

- Java Development v17.0.2
- APIGuardian v1.1.2
- Bson v4.11.1Jackson v2.16.1
- Slf4j v2.0.12

Bug 1 (From Test 2)

Report type: GUI issue

Reproducible: Yes

Severity: Medium Priority: High

Summary: The comment is not shown completely.

Description: The gamer added a really long comment for Counter-Strike 2, but it only showed one line in the comment box.

How to Reproduce:

- 1) Clicked "Add a comment".
- 2) Made a comment "Counter-Strike 2, the highly anticipated sequel to the iconic first-person shooter franchise, delivers an intensified experience that both honors its roots and pushes boundaries in the genre. Developed by Valve Corporation, Counter-Strike 2 retains the core elements that made its predecessor a global phenomenon while introducing innovative features and improvements across the board." and clicked "OK".

Suggested Fix: Modify GUI for that page.

Status: Open

Bug 2 (From Test 4)

Report type: GUI issue

Reproducible: Yes

Severity: Medium Priority: High

Summary: There is no "Show/Hide comment" for Team Fortress 2.

Description: A gamer wants to add a comment for Team Fortress 2 from the Most played and see if his comments are added or not.

How to Reproduce:

Click "Team Fortress 2" from "Most played". And there is no "Show/Hide comment" on that page.

Suggested Fix: Modify GUI for this page

Status: Open

Bug 3 (From Test 5)

Report type: GUI issue

Reproducible: Yes

Severity: Low Priority: High

Summary: The comment is not shown immediately

Description: A gamer wants to add a comment for War Thunder from the Most played and wants to see his comments shown immediately after he made the comment.

How to Reproduce:

1) Clicked "Add a comment".

2) Made a comment "Interesting game." and clicked "OK".

3) Click "Show" from "Show/Hide comments".

Suggested Fix: Add functions to automatically update the comments.

Status: Open

Resolution: Pending

Section 3: Code Review

Code Review					
Reviewed by:		Date Reviewed: March 24,2024			
Youwei Qin					
Author:					
Program:		Release Number:2			
MyGamingL	ist	Version: Latest main branch			
File: GameData.java					
Functions:	Type of Smell:	Severit y:	Priorit y:	Description:	Suggestions:
public final static ObjectMap per map = new ObjectMap per();	Global Data	Low	Low	Map is a shared variable also used in UserImpl class.	It should be in an upper class.
public static String getName(in t id){};	Method invocation	Mediu m	Low	Method invocation 'getString' may produce 'NullPointerExceptio n'	add throw NullPointerExcepti on
public static Game getGame(in t id) {};	Method invocation	Mediu m	Low	Method invocation 'toJson' may produce 'NullPointerExceptio n'	add throw NullPointerExcepti on
private static Bson updateRevi ew()	Improper Names	Low	Low	int UserReview = 0; int NumberofReview = 0; The UserReview and NumberofReview does not match Java naming convention	Change to userReview, numberOfReview

Mustafa

View popular PC Games

User Story: As a pc gamer, I would like to see all popular games that are available to

purchase and its information.

<u>Test 1</u>: View popular games available currently during the session the application is open

i) User opens the program and sees the homepage, with the most played games on the left and

the popular releases on the right

ii) Scroll on either box to see more options. The User can also change the size of the application

like any other window.

Result: Passed | Bugs Encountered: 0

Test 2: View the information page of a game in the popular releases or most played

i) User opens the program and sees the homepage, with the most played games on the left and

the popular releases on the right

ii) User clicks a game they want to see the information for and it shows the page for that game

iii) After the user is done viewing a game, they can click the Home button in the top left and go

back to the homepage. The user can repeat step ii. and step iii. to view other games.

Result: Passed | Bugs Encountered: 0

View any PC Game

User Story: I'd like to search for any game that comes to my mind and see if there's any

info on it.

General first step:

After opening the program, User would be on the home page.

Navigate to the top right search box to type a game

<u>Test 1</u>: Search a game that exists using the search bar

i) User would type the desired game's name they are looking for, as an example, the user could

be looking for "Palword"

ii) After pressing enter, User would see the information on the game they searched

iii) When the user is done, they can either close the program, navigate back to the home menu

through the Home button, or search for a different game

Result: Passed | Bugs Encountered: 1

<u>Test 2</u>: Trying to search a game that does not exist or is not on the application

i) User would type the desired game's name they are looking for, as an example, the user could

be looking for "Minecraft"

ii) Since the game does not exist, it will not load any page

iii) The User can type a different game, or see that there is no page change and type a different

game's name

Result: Passed | **Bugs Encountered**: 0

<u>Test 3</u>: Search a game with different spelling/caps/characters/roman numeral vs number

i) User would type the desired game's name they are looking for, as an example, the user could

be looking for "Dota 2", in this case they would just type "dota 2"

ii) The page is expected to load, showing that it is not case sensitive

iii) The User can type a different game, or see that there is no page change and type a different

game's name

Result: Passed | Bugs Encountered: 1

Problem Report 1

Reported by: Syed Mustafa Jamal Date Reported: 24, March, 2024

Program: MyGamingList Release & Version: 2.0

Report Type: Coding

Reproducible: Yes

Severity: Low Priority: Med

Description:

Games with brackets or ™ in the name do not get searched up

Steps to Reproduce:

Search up a game, such as NieR:Automata $^{\text{TM}}$ or HELLDIVERS $^{\text{TM}}$

Game does not show up

Recommendation:

Ideally the best fix to most issues regarding search is to have a live search/auto fill that allows the user to see what searches are showing up as they type. So if they type "nier" they would see NieR:Automata TM as an option.

Status: open

Resolution: Pending

Problem Report 2		
Reported by: Syed Mustafa Jamal	Date Reported: 24, March, 2024	
Program: MyGamingList	Release & Version: 2.0	
Report Type: Coding		
Reproducible: Yes		
Severity: Low	Priority: Med	
Description:		
Games with () do not show up even wher	n typed correctly	
Steps to Reproduce:		
Search up a game, such as dead space (2008)		
Game does not show up		

Recommendation:

A specific case would need to be made on the section of code for the search function, likely it is caused by an issue with regex filter

Status: open

Resolution: Pending

Code Review:

Code Smell Report for User Story 1 - Most played	
Reviewed by: Syed Mustafa Jamal	Date Reviewed: 24, March, 2024
Program: MyGamingList	Release & Version: 2.0

FIle: MostPlayed.java

Problem Type: Dispensables - Exception Handling, Method Length, Error Handling

Feedback:

Exception Handling:

The catch blocks with "catch InterruptedException" and "catch IOException" just print the stack trace. This is generally not a good practice because it doesn't provide any meaningful error handling or recovery strategy. It's better to handle exceptions by logging them or throwing a custom exception.

Method Length:

The constructor is responsible for several tasks, including making an HTTP request, processing the response, and populating the ids list. It's generally a good practice to keep constructors lightweight and focused on initializing the object. The logic for making HTTP requests and processing responses could be moved to separate methods for better organization and readability.

Error Handling:

If the JSON response cannot be parsed successfully, the code doesn't handle this scenario. It assumes that the JSON structure is always as expected. It's good practice to include error handling for JSON parsing, such as checking for null values or unexpected JSON structures.

Code Smell Report for User Story 2 - Popular releases		
Reviewed by: Syed Mustafa Jamal	Date Reviewed: 24, March, 2024	
Program: MyGamingList	Release & Version: 2.0	
File: PopReleases.java		
Problem Type: Dispensables - Exception Handling, Method Length, Error Handling		

Feedback:

Most of the same Code Smell problems for MostPlayed are the same for this one.

Code Smell Report for User Story 2 - Search any game		
Reviewed by: Syed Mustafa Jamal	Date Reviewed: 24, March, 2024	
Program: MyGamingList	Release & Version: 2.0	

FIle: GUIMain.java

Problem Type: Bloaters - Large Constructor, Dispensables - Error Handling, FocusEvent, Comments

Feedback:

Large Constructor

The constructor of the GUIMain class is quite large and appears to be doing a lot of initialization work. This violates the Single Responsibility Principle, which states that a class should have only one reason to change. Consider breaking down the constructor into smaller, more focused methods to improve readability and maintainability.

Error Handling

It doesn't provide any feedback to the user if the search fails. Consider displaying a message or handling the error more gracefully to improve the user experience.

FocusEvent:

headerSearchBox currently relies on text prompts, which might not provide the best User experience. Using placeholder text instead of prompts to indicate the purpose of the search box.

Comments:

While there are some comments in the code, they are few and could be more descriptive. Consider adding more comments to explain the purpose of complex logic or to provide context

Some parts of the code are also commented out. If they are still needed for testing then have a comment stating so, otherwise it should be removed.