LIVE | Educational Video Game Database Sprint 3 Retrospective

Team Roles:

Product Owner - Nilo Lisboa
Scrum Master - Komo Zhang
Developers - Yeon Chae (5 pts), Xiuyu Tang (7 pts), Zachary McDowell (3 pts)

Stakeholder:
Dr. Michael Rugh - michael.rugh@tamu.edu

Customer meeting date/time/place:

Mondays @ 6pm, online meetings on Zoom.

Link to:

Pivotal Tracker: https://www.pivotaltracker.com/n/projects/2690138
Github Repo: https://github.com/yeonchae62/LIVE
Heroku Deployment: https://evg-library-8a920fa9c3cb.herokuapp.com/
Code Climate Report: https://codeclimate.com/github/yeonchae62/LIVE

Dates of Sprint: March 18th 2024 - March 31th 2024

Documentation of Procedures:

[Login Functionality]
1. Implement User Management Page
2. Allow users to change roles of other users in management page

[Search Functionality]
3. Search bar on main page redirects to paginated search page
4. Searches for included terms in game columns
5. Orders games based on relevance

[User-oriented Visualization of the Content]
6. Display Images for games on the details page
7. Display Images for games on the index page
8. Display Images for games on the edit page and allow the user to edit the image link
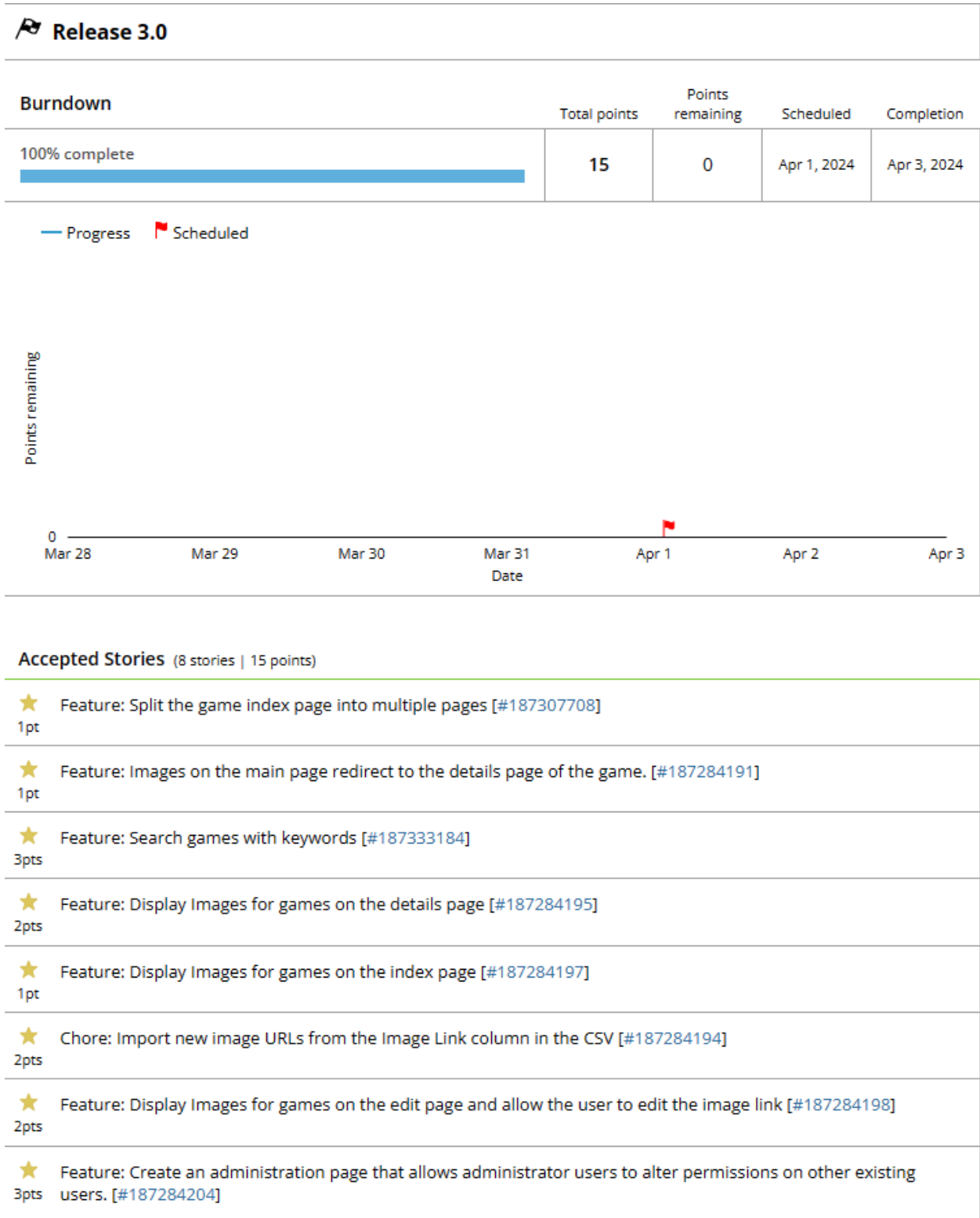
Sprint Goal:

We intend to expand upon our login functionality to provide different levels of access to different user roles. Once that is implemented, we will adjust the pages so that certain elements are only visible to users of specific roles, such as administrators being the only ones able to delete entries from the database. In an effort to improve site presentation, we will also embed image links onto the web pages so that games have strong visual references when being viewed on the main page, the index page, and the details page.

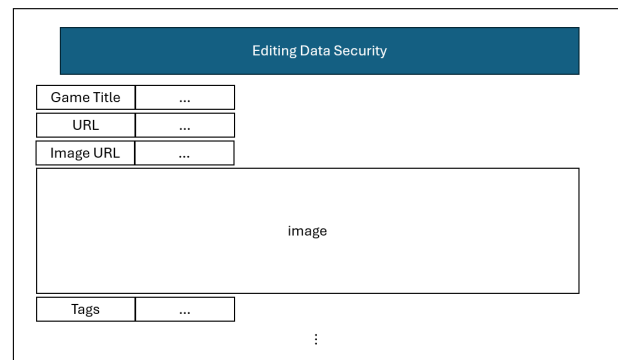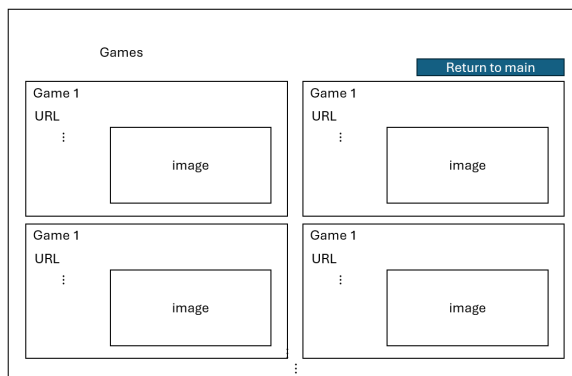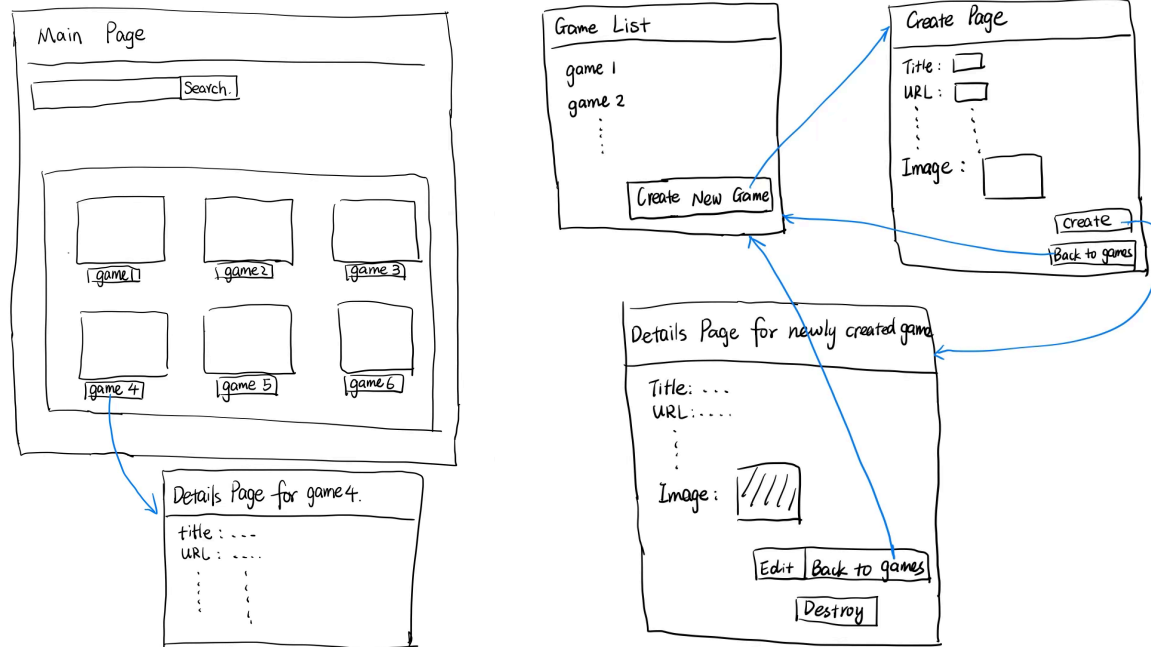## Sprint Achievements: All of the stories on the following list of Sprint Backlog Items
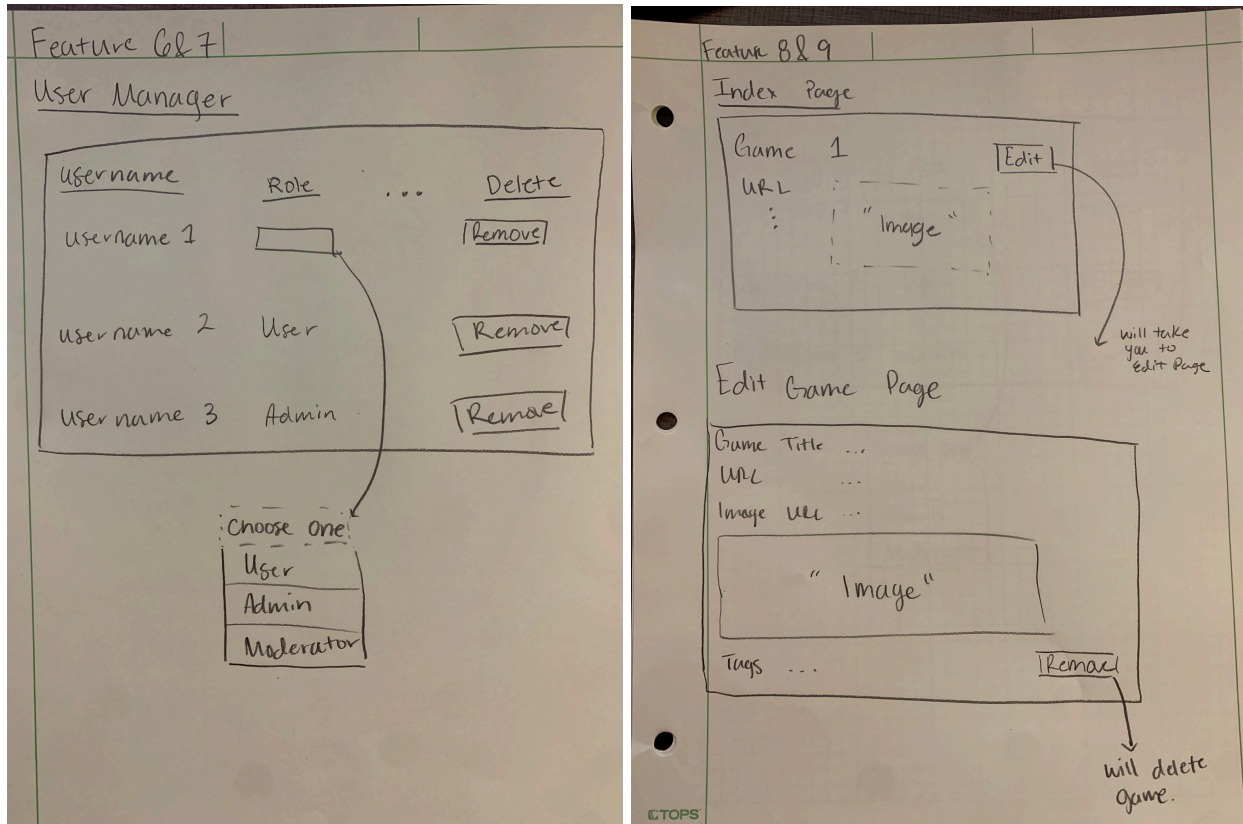
List of Sprint Backlog Items:

- Feature: Images on the main page redirect to the details page of the game.
- Chore: Import new image URLs from the Image Link column in the CSV.
- Feature: Add Image Link field to New Game page.
- Feature: Display Images for games on the details page.
- Feature: Display Images for games on the index page.
- Feature: Allow the user to edit the image link on a game's details page.
- - Feature: Allow users to create accounts of moderator and administrator levels.
  Instead of making users directly create accounts of moderator and administrator levels, we now set all new accounts to be "user" as a default role. If some of these new users want to be moderators or administrators, they need to ask an administrator to change the role for them.
- Feature: Create an administration page that allows administrator users to alter permissions on other existing users.
- - Feature: Display option to 'destroy' game or link to 'admin' page only to administrator users.
  We don't have enough time to implement this feature, so this feature is postponed to the next sprint.
- - Feature: Display option to 'edit' game only to administrator and moderator users.
  We don't have enough time to implement this feature, so this feature is postponed to the next sprint.
- + Feature: Split the game index page into multiple pages.

Burndown:

🏴 Release 3.0

Burndown		Total points	Points remaining	Scheduled	Completion
100% complete		15	0	Apr 1, 2024	Apr 3, 2024

— Progress 🚩 Scheduled

Accepted Stories (8 stories | 15 points)

⭐ 1pt	Feature: Split the game index page into multiple pages [#187307708]
⭐ 1pt	Feature: Images on the main page redirect to the details page of the game. [#187284191]
⭐ 3pts	Feature: Search games with keywords [#187333184]
⭐ 2pts	Feature: Display Images for games on the details page [#187284195]
⭐ 1pt	Feature: Display Images for games on the index page [#187284197]
⭐ 2pts	Chore: Import new image URLs from the Image Link column in the CSV [#187284194]
⭐ 2pts	Feature: Display Images for games on the edit page and allow the user to edit the image link [#187284198]
⭐ 3pts	Feature: Create an administration page that allows administrator users to alter permissions on other existing users. [#187284204]

Design Diagram:

Main Page

Search.

game 1   game 2   game 3

game 4   game 5   game 6

Details Page for game 4.

title : - - -
URL : - - - -

Game List

game 1
game 2
...

Create New Game

Create Page

Title :
URL :

Image :

create

Back to games

Details Page for newly created game

Title: ...
URL: .....

Image :

Edit | Back to games

Destroy

Games   Return to main

Game 1	Game 1
URL	URL
⋮ image	⋮ image

Game 1	Game 1
URL	URL
⋮ image	⋮ image

⋮

Editing Data Security	
Game Title	...
URL	...
Image URL	...
image	
Tags	...

⋮

Documentation of Changes:

- **Database:**

  The database for deployment is changed. Previously we used the table directly created on Heroku PostgreSQL. In this sprint, we reset the database and use the seed data to recreate the tables needed, such that we can add new columns to the table in an easier way.

- **Features:**

  We add two features. The first one is about the game index page. Previously it showed all games on a single page, which made it difficult for the user to go to the top or the bottom to reach those useful buttons. Now we split the single page into multiple pages and display only several games on one page. The second one is about the search button function. As our client requested, there was a search button on the main page which was designed to enable users to search games with keywords, but it was just a placeholder there. We implement this feature in Sprint 3. It now supports basic searching using exact string matches. To be specific, this function will search among some columns, currently including "game_title", "source", "dimensions", "publication_year",

"generalized_subject", "subject1", and "subject2", to find the exactly matched strings and order the result by relevance. The relevance is calculated by a function defined by ourselves and can be modified according to our client's needs later.

We have two features postponed to the next sprint, which are regarding the rights for users to edit or delete the games. In sprint 3, we created a new page for admins to manage the user roles, but we didn't have enough time to change the rights for different user roles. We postpone them to the last sprint and will try our best to finish them since these are critical for our client.

Code & Test Evaluation:
(a) Code & Test Quality:
SimpleCov Coverage: 100%
Code Climate Scores: (https://codeclimate.com/github/yeonchae62/LIVE)
    maintainability: A
    test coverage: 100%
    code smells: 0
    duplication: 0

(b) Code Style:
RuboCop inspected 57 files. After some autocorrections and manual modifications, there remains 1 offense in total.

BDD & TDD Coverage:
(a) Cucumber: 28 scenarios and 140 steps. All scenarios and steps passed, covering all features.

```
28 scenarios (28 passed)
140 steps (140 passed)
0m1.174s
Coverage report generated for Cucumber Features, RSpec to /Users/jianwendong/xiuyu/CSCE_606_Software_Engineering/LIVE/co
verage. 66 / 66 LOC (100.0%) covered.
```

(b) Rspec: 32 examples. All examples passed, covering all functionalities.

```
Finished in 0.78197 seconds (files took 3.53 seconds to load)
32 examples, 0 failures

JSON Coverage report generated for RSpec to /Users/jianwendong/xiuyu/CSCE_606_Software_Engineering/LIVE/coverage.
  66 / 66 LOC (100.0%) covered.
```

Customer Demo:

Nilo led the presentation of our sprint results to Dr. Rugh and his team. In particular, we demonstrated the newly implemented search function, the new formatting across the edit pages, game images that had been imported from the CSV, and the new user management screen that would allow website admins to monitor and alter user account roles. Dr. Rugh was very satisfied with the progress presented, especially with the search function facilitating navigation through the website.

He was excited to have the search functions developed further to include sorting, searching by column, or filtering results. Additionally, he requested a particular focus on delivering improved access controls on the website in this final sprint. Once handled, that would allow his team to maintain the website at a high level in preparation for more development teams to take over. This would also be a good state to leave the website in ahead of the Summer presentations his research team would like to do.