



SPOILED TOMATILLOS

Campbell Alden, Onaje Baxley, Lexy Brooks, Oliver Fishstein,
and Spencer Pozder

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Introduction

This study focuses on the Spoiled Tomatillos interfaces for both administrative users and end users in order to determine the usability of both interfaces and indicate areas of improvement. The study was conducted across six separate users each being asked to perform three distinct tasks depending on the interface type they were presented with. Two study participants were provided with the administrative portal and asked to perform a three tasks from a set of four allowing for some study overlap. These participants were provided with a brief overview of the Spoiled Tomatillos system to provide context. The remaining four study participants were presented with the end user site and asked to carry out three tasks from a set of six distinct tasks to again provide overlap in the study. Each study was filmed in order to study their interactions more in depth.

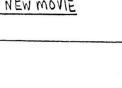
The following paper prototypes were built to provide a visual mock representation of the typical windows a user would see as they progress through system use cases. The views accessible to them are dependant upon their user-role. Prototypes for both administrative and end-user roles are shown below.

Figure 1: Admin Portal Homepage

Figure 2: Review Flagged CaseFigure 3: User Detail View

Figure 4: Add New Movie

ADD NEW MOVIE



NAME

DATE

CRITIC RATING

RESOLUTION

RATING

GENRE

SYNOPSIS

☒ STREAMING SERVICE

☐ HTTP

☒ ADD ADDITIONAL STREAMING SERVICE

UPLOAD NEW PHOTO

THE SIZE 0.7 KB

SUBMIT

CANCEL

Figure 5: Add Affiliate Code Search Page

ADD AFFILIATE CODE

Q SHREK




	SHREK (2001)	ADD CODE
	SHREK2 (2002)	ADD CODE
	SHREK 3 (2005)	

Figure 6: Add Affiliate Code Entry Page

ADD AFFILIATE CODE

MOVIE: SHREK (2001)

AFFILIATE NAME AFFILIATE CODE

AFFILIATE LINK

START DATE END DATE

CONFIRM CANCEL

Figure 7: Edit Existing Movie Search Page

EDIT EXISTING MOVIE

Q SHREK


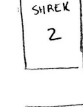


	SHREK (2001)	EDIT
	SHREK 2 (2003)	EDIT
	SHREK 3 (2005)	EDIT

Figure 8: Edit Existing Movie Page

EDIT EXISTING MOVIE



UPLOAD NEW PHOTO FILE SIZE 0-750

SHREK 1/21/2001 ***

NAME RELEASE DATE CRITE RANK

DIRECTOR BOB G

PRODUCTION RATING GENRE

ONCE UPON A TIME, THERE WAS AN AMAZING
OGRE WHO TELL IN LOVE WITH ANOTHER
OGRE FILMMA. THERE WAS A TALKING
DONKEY WHO WAVED A DRAGON

SYNOPSIS

HOLD

ACTIVITY

☐ ADD ADDITIONAL STREAMING SERVICE

SAVE CANCEL

End User Prototypes

Figure 9: Account Settings

A hand-drawn prototype of an 'Account Settings' page. The title 'Account Settings' is at the top. Below it is a profile picture placeholder with a 'Change Profile Image' button. To the right of the profile picture are input fields for 'Username' (containing 'User123'), 'Email' (containing 'example@abc.com'), 'First' name, and 'Last' name. Below these are fields for 'New Password' and 'Confirm New Password'. At the bottom, there is a 'Connect with Facebook' button and two buttons: 'Save Changes' and 'Cancel'. A gear icon is in the top right corner.

Figure 10: Create Account

A hand-drawn prototype of a 'Create Account' page. The title 'Create Account' is at the top. Below it are input fields for 'Email', 'Username', 'Password', and 'Confirm Password'. To the right of the 'Confirm Password' field is a small 'e' icon. Below these fields is a profile picture placeholder with a 'Browse' button. At the bottom is a 'Create Account' button.

Figure 11: Follow Your Facebook Friends

A hand-drawn prototype of a 'Follow Your Facebook Friends' page. The title 'Follow Your Facebook Friends' is at the top. Below it are three user cards. Each card has a profile picture placeholder, a username (Bob123, Jane27, John42), a name (Bob Smith, Jane Doe, John Doe), and a '+ Follow' button.

Figure 12: User Profile Following

A hand-drawn prototype of a 'User Profile Following' page. The title 'Following' is at the top. Below it is a grid of 15 user profile placeholders arranged in 3 rows and 5 columns. Each placeholder has a username below it: User12, Bob78, Alice513, Fred711, Jay5Q73L, SaraP123, and Giraffe4real.

Figure 13: Homepage

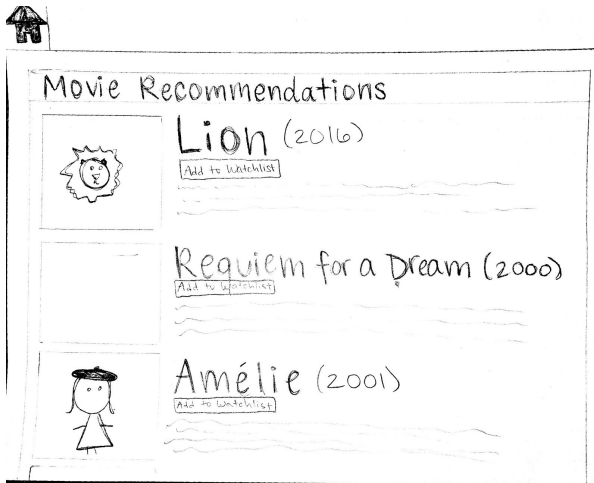


Figure 14: Login Page

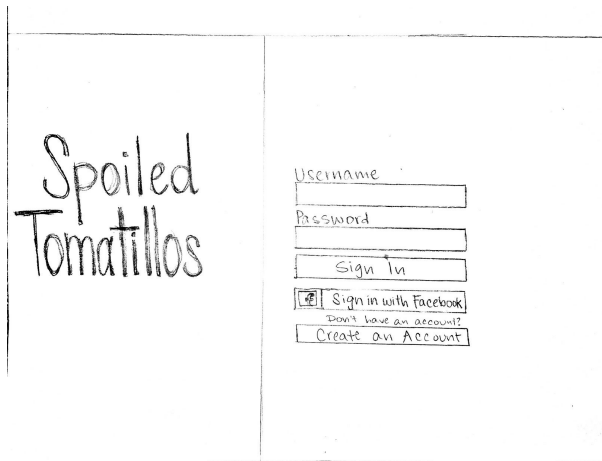


Figure 15: Movie Page

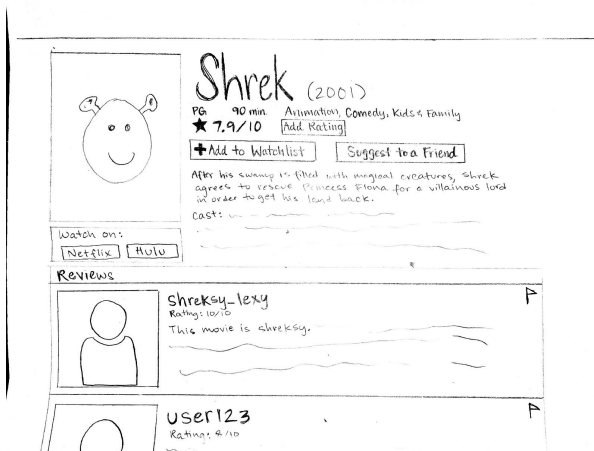


Figure 16: Notifications Page

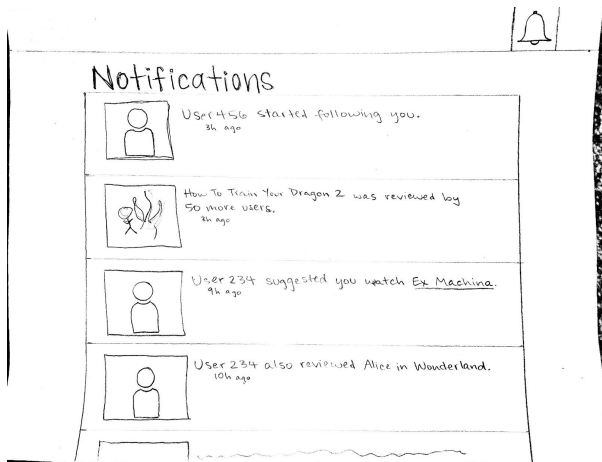


Figure 17: Movie Search Page

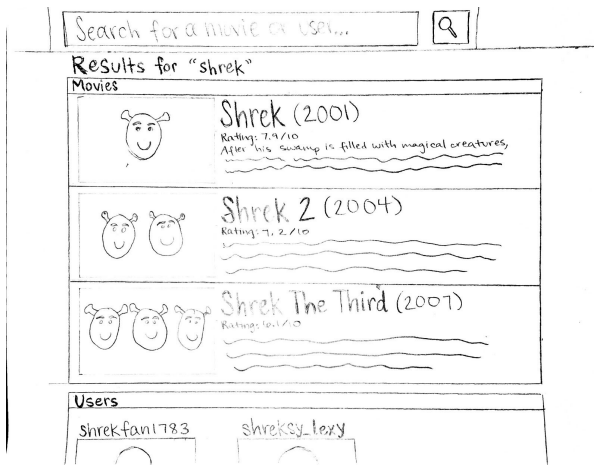
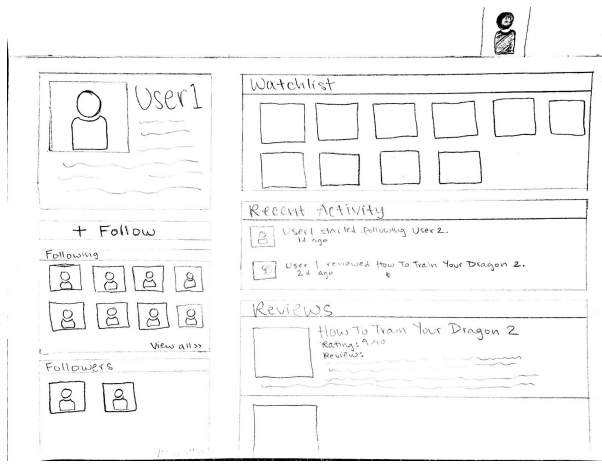


Figure 18: User Profile



Participants

Participant 1

Participant 1 is a twenty-two year old male attending Northeastern University. He is a fifth-year senior preparing to graduate with a degree in mechanical engineering and a minor in interactive media. Based on his previous technology experience, he considers himself to have an advanced technical competency. This participant was brought in to evaluate the administrator portal. While not previously experienced with the product, the participant was provided with a brief system overview to contextualized the administrative tasks he was asked to perform.

Participant 2

Participant 2 is a twenty-two year old male Northeastern University student. He is a fifth-year senior studying chemical engineering and engineering management. He was asked to participate in testing the administrator portal. Apart from a brief description of the tasks he would be asked to perform, the participant was not provided with any knowledge of the layout or connection between pages in the flow prior to the test.

Participant 3

Participant 3 is a twenty-six year old female. She is a working professional, having graduated from the University of Massachusetts with a Bachelor of Science degree in chemical engineering. Other than a mandatory programming course she took years ago in her studies, the participant has volunteered the self-perception that she is not technically inclined. The participant also does not use software other than an email client in her day-to-day tasks at work. She also has no prior experience or knowledge of the product. However, this participant is a frequent user of social media applications and regularly performs tasks from those applications using her phone. Because of her self-identification of not being technically inclined, it was determined that she would be best suited to perform end-user tasks as opposed to administrative ones.

Participant 4

Participant 4 is a twenty-one year old male, Northeastern University student studying supply chain management. He is also an international student, having learned Spanish and Mandarin languages before English, making the participant an ideal research candidate for individuals not exposed to English initially. The participant had no prior knowledge of the product, but does actively use other web-based social media platforms (though not in English), allowing him to provide a comparison point for the interface.

Participant 5

Participant 5 is a twenty year old female, Northeastern University student studying accounting. She has used many similar platforms to the one introduced for our application, making the initial ramp-up small compared to users with no prior context to work with. She was provided a feature-level overview, but no

context about the UI specifically, and was left to navigate and attempt to complete her tasks without other input.

Tasks

Administrative User

The users were asked to perform a series of tasks within the administrative portal mockups to evaluate their usability.

Edit an Existing Movie

The participant was given the Administrative Portal Homepage and asked to complete the task of editing the existing movie, Shrek 1. This task involved navigating to the Edit Existing Movie page by clicking a link and then searching for the movie. The user is then presented with the search results page and have to navigate into the specific movie page to edit. The user was then asked how they would go about editing the information.

Add an Affiliate Code

The participant was given the Administrative Portal Homepage and asked to complete the task of adding an affiliate code to the movie, Shrek 1. This task involved navigating to the Add Affiliate Code page by clicking a link and then searching for the movie. The user is then presented with the search results page and have to navigate into the specific movie page to add the affiliate code. The user was then asked how they would go about editing the information.

Review a Flagged Case

The participant was given the Administrative Portal Homepage and asked to complete the task of reviewing the most recent flagged case for UserID 10806. This task involved navigating to the Review Flagged Case page by finding the correct case in the User Case Management widget and navigating to review. The user is then presented with the Review Flagged Case page and asked to look through the information to determine if a user should be banned or suspended. The user is given the option to navigate to a User Detail View to view an aggregated of offenses. The user is then asked to select an option and close the case.

Add a New Movie

The participant was given the Administrative Portal Homepage and asked to complete the task of adding a new movie to the database. This task involved navigating to the Add New Movie page and entering form data. When finished entering data the user is asked to save that data.

End User

These participants were asked to perform a series of tasks using the web application's paper prototypes specific for end users. Their actions were studied to determine the viability of the interface and overall satisfaction of the end-user experience.

Account Creation

As a starting point, the participant was given the prototyped interface above for the Spoiled Tomatillos end-user login window. They were then asked to “create an account” without being provided further information explaining how to do so. After the exercise to perform was relayed, the participant’s thoughts and intuition on how to accomplish the task was recorded for study.

Navigate to a Movie Page

The participant was expected to start with the prototyped interface for the Spoiled Tomatillos end-user login window (Figure 14 above). Then, the participant was asked to “navigate to the Shrek movie.” After issuing this request, the conductor of the study did not give any additional information on how one might perform such navigation. Following, the participant’s aloud thoughts and actions on how to complete the exercise were recorded for study.

Check Notifications

To start the exercise, the participant was provided the prototyped interface for the Spoiled Tomatillos end-user login page (as previously shown). After being presented with this window, the participant was then asked to “check their notifications” without giving any other information explaining how to do so. Following, the participant spoke aloud about their thought process and feelings while performing the task. The entire process was recorded by the conductor of the study for extensive post-examination.

Go to a User Page and Check Who They Follow

To start the exercise, the participant was provided the prototyped interface for the Spoiled Tomatillos home page. They were told they are already logged in (as other tasks that deal specifically with login and user creation were investigated previously), and to immediately attempt to check their own profile for the list of users they follow. The list is their end goal, so the time required to complete this task is just the amount of time from when first introduced to the landing page to when they arrive at the list of followers, including any incorrect navigation along the way. The entire process was recorded by the conductor of the study for post-examination.

Connect To Facebook Account and Add Friends

To start the exercise, the participant was provided the prototyped interface for the Spoiled Tomatillos home (landing) page. They were told they are already logged in, and to immediately attempt to change their profile settings as to connect to an existing Facebook account, and subsequently add friends from facebook to their following list (an automatic interface following Facebook integration). After being given the opportunity to add these users to the following list, the task was complete. Thus, the timer for the task was of the time taken between arriving at the landing page, and adding any users to their list of users to follow, including any incorrect navigation along the way. The entire process was recorded by the conductor of the study for post-examination.

Edit Account Info

To start the exercise, the participant was provided the prototyped interface for the Spoiled Tomatillos home (landing) page. They were told they are already logged in, and to immediately attempt to change their profile settings (specifically, to add a first/last name to their profile) and save this new information to their profile. The task was complete as soon as these settings were saved, thus the time required for the task would be the time between when the user was first introduced to the home page, and when the save button was pressed on their profile page, including any mistakes along the way. The entire process was recorded by the conductor of the study for post-examination.

Test Results

Administrative User

Participant 1

The participant found the initial task of editing an existing movie extremely straightforward and followed the user flow without any questions on what to do. He was able to recognize how to edit the different fields of a movie immediately and understood the process to add or remove a streaming service through the drop down menu to choose a streaming service and plus/minus buttons to add and remove respectively.

The second task of adding an affiliate code was also straightforward for the user, but he found some fields confusing because he didn't understand what an affiliate was. After understanding what it meant, the participant felt that the process should be included in the edit existing movie page to allow for a "one stop shop" instead of having a separate flow.

The third task to review a flagged case was the most complex, but the participant was able to navigate through the flow with ease. Didn't initially understand what flag count meant under the User Case Management view and would prefer the term violation count. He liked that you could click to review a user's past cases through clicking the violation count, but mentioned a separate button indicating the ability to review a user's case history as an alternative. He didn't want the ability to click multiple links that brought him to the same place. A better design would incorporate that suggestion to make things easier to find and make a clear button. He felt that there was enough information to make a decision on how to reprimand a user and understood the flow from action to closing the case and like the ability to reopen the case at a later date. The user would like to see status as a column in the User Case Management view.

Participant 2

This participant was asked to add an affiliate code, review flagged content and add a new movie. They succeeded at each task quickly and ran into virtually no issues throughout the process. For the first task, the participant was presented with the administrative portal landing page (Figure 1). They were asked to navigate to and enter an affiliate code. For the first run, instead of going to the search page from the "Add affiliate code" link, the participant was brought directly to the affiliate code form (Figure 6). The participant understood how the codes would be entered and submitted the form in the expected way.

For the second task, they were asked to review a flagged user comment. This task is more complicated, however, the participant quickly understood the function and purpose behind each of the UI components and steps in the flow. First, he clicked the review button corresponding to the case id from the table and was brought to the user details page (Figure 2). He was momentarily confused on when viewing the case details because he thought he would have to “Open” the case. This confusion was dispelled after I informed him that the open case button was disabled. He reviewed the offending comment, and determined that it should be deleted and that the user should be suspended from our service for 1 week. He selected the correct radio and enter a 7 in the days dialog without prompting. He then clicked “Close Case” and was returned to the administrative landing page.

Finally, our participant was asked to add a new movie to the database. Again, he did not hesitate to select the correct link from the control panel on the left portion of the page. When presented with the new movie form (Figure 4), he immediately described how he would enter the data. The streaming services field did require some explanation, however, after an example (Netflix) he understood the field's purpose. He clicked submit and was returned to the administrative portal homepage.

End User

Participant 3

This participant was successful in performing the workflow necessary to complete the first task of navigating to the Shrek movie page. When presented with the initial login endpoint (Figure 14), the participant reasoned that because they don't already have an account that they would click on the “sign in with Facebook” button. After clicking that button, the participant volunteered information that they assumed they would have to enter their Facebook credentials and allow the Spoiled Tomatillos app consent to extract information via Facebook. After logging in, they were presented with the paper prototype for the home page (Figure 13). The participant then voiced that she would click on the bar at the top of the page and type in a search for “Shrek.” In doing so, she used her index finger to motion the action of clicking the top of the page. This search for Shrek presented her with the end-user prototype of the search result set for items matching “Shrek.” The participant then motioned with her finger again, while voicing that she would click on the top-most option of the list, which was in fact the original Shrek movie. She was then presented with the prototype for the Shrek movie page, thus completing her assigned task.

Participant three was then asked to exercise navigating the workflow for creating an account, while relaying her thought process. Again, she was initially presented with the paper prototype of the login window. This time, instead of clicking the “sign in with Facebook” button, she voiced that she would click the “Create an account” button. After doing so, she was presented with the account creation window (Figure 10). She then said that she would type in her personal information in accordance with the headers above all the open boxes (text fields). After entering that information, she tapped the “Create account” button at the bottom of the window. With that, the participant successfully completed the workflow for account creation.

The third and final exercise that participant three was given was to “check notifications.” Again, she was initially presented with the login window (Figure 14). The participant reasoned that based on the previous

exercise, she already possessed an existing account with the web site. Based on that reasoning, she said she would enter the same username and password that she'd entered in the account creation exercise within the text fields on the login page. Then, she tapped on the "Sign in" button. After doing so, she was presented with the home page prototype for end-users (Figure 13). Again, she assumed that by tapping on the top bar of the homepage, she could access her notifications based on the tab icon that looked like a bell. In doing so, the participant was presented with the prototype for listing all of a users' notifications, successfully accomplishing the assigned task.

Participant 4

This user was successful in completing every one of the tasks given to them. Specifically, the user was able to navigate to the page to view their own followers, change their settings so as to connect to a Facebook account, and change their settings in some other (basic) way, and save those new settings.

When presented the initial screen (the landing page for "Spoiled Tomatillos"), and initially given their task, the user was able to identify the correct navigation tab to select (the main page has no navigation implicitly, only the bar that is available in most main screens). The correct navigation tab (the user profile tab) was picked out immediately, as the user recognized the icon used as one associated with viewing one's personal information. Because the user was given some background information, and had used other social media service previously, he immediately looked toward the navigation section for a personal-information identifying link or icon. Once on the page for their user (Fig. 18), they did have to look around for the specific link that would bring them to their final destination (the list of users they follow). Identifying this link took the longest time of any navigation task, possibly because of its size (a small link at the bottom part of the box related to users being followed), but the overall navigation time was not a hindrance to the experience necessarily. Possible future iterations of this link could make it more readily available (such as making the entire area link to the list, rather than just a link in that box). After being shown their final page (Fig. 12), the participant felt they could continue to navigate beyond that (possibly to view information about one of the people they follow), or could navigate back.

Following that task, the user was more accustomed to the general setup for the site, and was easily able to identify the navigational steps required to complete their second task, namely to connect their account to an existing Facebook account. The required navigation was to click on the "gear" icon to view their account settings (Fig. 9), and then hit the button for associating with a Facebook account. The gear icon was easily identifiable to the user, and thus provided easy access to these settings. The user was then given a page showing the list of possible users they could follow from their facebook account friend list. While the user was given a chance to interact with this page, they chose not to add any immediately.

Finally, the user was given the task of changing one of their account settings, and saving this change. The navigation was identical to the previous task, so it was similarly easily completed. Once the user had navigated to the settings page, they easily identified which setting they wanted to change (their name), and were able to apply a new input to that form item, and knew to press the "Save Changes" button to confirm their changes. Overall, the user was adept with using the site, and found no tasks hard to complete.

Participant 5

This participant was able to complete all the same tasks as Participant 4, and similarly as well.

First, the user was asked to, starting from the initial landing page, navigate to their user profile, and view the list of users on the site that they follow. Overall, this task was completed easily, as the user was able to immediately identify the necessary navigation step to reach their profile page, and also which area of the profile page to check for the link to see their followers. The location of this information (on the left side of the page, under the immediate profile information) was noted to be one of the first places the user looked, as it was similar in topic to the information provided above it, and it was not included in more time-sensitive information located towards the center/right of the page (Fig. 18).

The user was similarly able to complete the second task, connecting their account to a Facebook account. The settings gear was easily identified as the correct navigational icon to click (especially when comparing with previous experiences the user had seen, on other sites), and the specific action they wanted to perform on the settings page was found to be readily available to the user. However, once the user had navigated to the page for following their facebook friends on the site, they decided they did not want to actually follow any of those people. This raised an important point for the design of this page (Fig. 11), as the page provided no clear way of continuing forward with the process of connecting to Facebook, especially if the user decides not to interact with any of the users provided by the service. The only current navigation (the back arrow) does not provide the required information that the connection service will still occur, even if no friends are immediately followed. Thus, later work should be done to provide other possible ways to continue from this page (specifically, “Finish” and “Do Later” buttons).

Finally, the user was given the task of navigating from the landing page to the settings page, changing a user setting for their profile, and then saving this change. The navigation required was identified easily by the participant, and the page they went to was easily identified as a form requiring both input (by clicking a form input), and a submission using the “Save Changes” button. Overall, the user found navigation easy, but was not entirely sure what the purpose of the site was as a whole, though with their limited view of the system this could be up to their lack of other interaction with the site.

Discussion

Administrative User

From the administrative user study, we were able to see that our interfaces provided intuitive processes to complete the various task but some modifications would make the process clearer and reduce the amount of flows the user needs to learn to complete tasks. A major modification would be integrating the Add Affiliate Code (Fig. 5 & 6) flow directly into the movie addition and editing process. This would entail moving the form data to the existing Add New Movie (Fig. 4) and Edit Existing Movie (Fig. 7) pages. This allows for the removal of the Add Affiliate Code link from the main Admin Portal (Fig. 1) and the removal of the Add Affiliate Code Search Results page (Fig. 5) instead making that part of the Edit Existing Movie flow.

Other feedback centered around the User Case Management task. For the initial view on the Admin Portal (Fig. 1), the addition of a Case Status column would be helpful along with having the Flag Count field

corresponding to the flags for a specific case and an additional violation count corresponding to a user's total violations. The actual Review Flagged Case page (Fig. 2) had little issues other than feedback that multiple links shouldn't lead to the same place. In order to reduce the ambiguity, the addition of a Review User History button would enable the process of getting to a User Detail View page (Fig. 3) less confusing because the initial flow gave the ability to click multiple fields to bring a user there.

One final piece of feedback came from the Add New Movie task (Fig. 4). Some of the fields were unintuitive and a more interactive or descriptive input fields for the streaming service section would likely reduce the size of the learning curve for new administrative users. Again, moving the affiliate code flow to this page would help eliminate the need for a separate user flow.

End User

Based on the tests conducted for the end-user study, it may be concluded that the prototyped interfaces for the Spoiled Tomatillos application are generally easy-to-use from the perspective of an end user. Overall, the participants who took part in our end user study found the workflows to be complete and user-friendly, as evidenced by their ability to accomplish all the assigned tasks. Apart from workflows, our participants seemed generally pleased with the concrete design decisions, and provided specific positive feedback on the dual-pane login window (Figure 14).

While the dual-pane design was a success for the login window, we also received important negative feedback with respect to its workflow. Participant 3 noted that account creation was not entirely straight-forward, in that the current workflow of the login page already has two text fields present for a username and password. She noted that it was unclear whether she should first enter her desired username and password into those text boxes and then click "create account," or if she should skip entering those fields and start the process by clicking the "create account" button first. That being said, the participant did complete the entire exercise in under 1 minute and also rated the user-experience a 5 (out of 5). This tells us that while the presence of the text boxes were confusing, it was an extremely minor hiccup, so much so that she didn't think it took away from a 5-rated user experience. One way to improve upon this experience would be to remove the text boxes from the login screen, effectively giving the end-user three distinct options: sign-in, sign-in with Facebook, and create account.

Two additional workflows in particular proved to be extremely intuitive. Starting from the login landing (Figure 14), the process of searching for a particular movie page and checking end-user notifications yielded excellent results. The participants navigated the site exactly as predicted, and it took less than 30 seconds to complete each workflow. Both of these workflows were given a participants' user-experience rating of 5. No complaints were raised by participants after completing either of these tasks. This information tells us that these workflows, and their designs, are sound and provide a solid foundation when it comes time to develop the actual software system. Therefore, it will be important for us to stick to our prototype's layout of placing a search bar at the top of the home page (Figure 13).

Note: For this assignment, usability studies were conducted and reported on by Campbell Alden, Onaje Baxley, Oliver Fishstein, and Spencer Pozder, UI mockups were created by Oliver Fishstein and Lexy Brooks.