Test Plan - SpotiBot

CS408 Software Testing - Spring 2018

https://github.com/pujamittal/cs408

#1: Login

1. Functional

A. Login 001, Login Successful, Critical

B. Open Messenger chat. SpotiBot prompts user to click to log in to Spotify. New tab opens and prompts user to log in. User enters correct credentials.

C. Login is successful and user is redirected to SpotiBot. SpotiBot prompts user to make a playlist.

2. Equivalence Class

A. Login 002, Login Unsuccessful, Important

B. Open Messenger chat. SpotiBot prompts user to click to log in to Spotify. New tab opens and prompts user to log in. User enters incorrect credentials.

C. Login should be unsuccessful and Spotify login prompts user to enter credentials again.

A. Login 003, Login Unsuccessful, Critical

B. Open Messenger chat. SpotiBot prompts user to click to log in to Spotify. New tab opens and prompts user to log in. User closes tab without entering credentials.

C. User is redirected back to SpotiBot and SpotiBot tells user “Login was unsuccessful. Try again?” and prompts user to click to log in to Spotify.

#2: Options

1. Functional

A. Options 001, User Types “playlist”, Important
B. User is logged in successfully. User gets prompt: “Type "playlist" to create a new playlist, "top" to get your top songs, or "stats" to get your listening history stats.” User types “playlist”.
C. SpotiBot prompts user with starting a new playlist by asking “Do you want to include moods?”

A. Options 002, User Types “top”, Important
B. User is logged in successfully. User gets prompt: “Type "playlist" to create a new playlist, "top" to get your top songs, or "stats" to get your listening history stats.” User types “top”.
C. SpotiBot prompts user with starting a top playlist by asking “How many months? (1-6)”

A. Options 003, User Types “stats”, Important
B. User is logged in successfully. User gets prompt: “Type "playlist" to create a new playlist, "top" to get your top songs, or "stats" to get your listening history stats.” User types “stats”.
C. SpotiBot says “Here are your listening history stats!” and displays listening history stats.

2. Equivalence Class

A. Options 004, User Types Incorrect Input, Critical
B. User is logged in successfully. User gets prompt: “Type "playlist" to create a new playlist, "top" to get your top songs, or "stats" to get your listening history stats.” User types anything besides “playlist”, “top”, or “stats”.

C. SpotiBot sends message “I'm sorry! I don't understand what you typed.” and then “Type "playlist" to create a new playlist, "top" to get your top songs, or "stats" to get your listening history stats.”

#3: Top Playlist Number of Songs

For these tests, user is successfully logged in and user gets prompt: “Type "playlist" to create a new playlist, "top" to get your top songs, or "stats" to get your listening history stats.”

1. Functional

A. Top Playlist Number of Songs 001, User Types Valid Input, Critical
B. User types “top”. SpotiBot asks user “How many songs? (1-100)”. User types “10”.
C. SpotiBot moves on to next prompt and asks “How many months? (1-6)”

2. Equivalence Class

A. Top Playlist Number of Songs 002, Non-Numeric Number Entry, Critical
B. User types “top”. SpotiBot asks user “How many songs? (1-100)”. User provides non-numerical input.
C. User gets prompt “Sorry, I didn't understand that. Please try again!” and is asked again “How many songs? (1-100)”

A. Top Playlist Number of Songs 003, Number Entry Less Than One, Critical
B. User types “top”. SpotiBot asks user “How many songs? (1-100)”. User types -1.
C. User gets prompt “Sorry, I didn't understand that. Please try again!” and is asked again “How many songs? (1-100)”

3. Boundary Value

A. Top Playlist Number of Songs 004, Number is One Critical

B. User types “top”. SpotiBot asks user “How many songs? (1-100)”. User types “0”.

C. User gets prompt “Sorry, I didn't understand that. Please try again!” and is asked again “How many songs? (1-100)”

A. Top Playlist Number of Songs 005, Number is One Hundred, Critical

B. User types “top”. SpotiBot asks user “How many songs? (1-100)”. User provides non-numerical input. User types “101”.

C. User gets prompt “Sorry, I didn't understand that. Please try again!” and is asked again “How many songs? (1-100)”

#4: Top Playlist Time Period

For these tests, user is successfully logged in and user gets prompt: “Type "playlist" to create a new playlist, "top" to get your top songs, or "stats" to get your listening history stats.” User types “top” and SpotiBot asks user “How many songs? (1-100)”. User inputs “10”.

1. Functional

A. Top Playlist Time Period 001, User Types Valid Input, Critical

B. SpotiBot asks user “How many months? (1-6)”. User types “2”.

C. SpotiBot gives user a playlist link of the top 10 songs from the past 2 months.

2. Equivalence Class

A. Top Playlist Time Period 002, Non-Numeric Number Entry, Critical

B. SpotiBot asks user “How many months? (1-6)”. User provides non-numerical input.

C. User gets prompt “Sorry, I didn't understand that. Please try again!” and is asked again “How many months? (1-6)”

A. Top Playlist Time Period 003, Number Entry Less Than One, Critical

B. SpotiBot asks user “How many months? (1-6)”. User types “-1”.

C. User gets prompt “Sorry, I didn't understand that. Please try again!” and is asked again “How many months? (1-6)”

3. Boundary Value

A. Top Playlist Time Period 004, Number is One, Critical

B. User types “top”. SpotiBot asks user “How many songs? (1-6)”. User types “0”.

C. User gets prompt “Sorry, I didn't understand that. Please try again!” and is asked again “How many months? (1-6)”

A. Top Playlist Time Period 005, Number is One Hundred, Critical

B. User types “top”. SpotiBot asks user “How many songs? (1-6)”. User provides non-numerical input. User types “7”.

C. User gets prompt “Sorry, I didn't understand that. Please try again!” and is asked again “How many months? (1-6)”

#5: Mood(s)

For these tests, user is successfully logged in and user gets prompt: “Type "playlist" to create a new playlist, "top" to get your top songs, or "stats" to get your listening history stats.” User types “playlist”.

1. Functional

A. Moods 001, User Types “yes”, Critical

B. SpotiBot asks user “Do you want to include moods?” User types “yes”

C. SpotiBot asks user “Pick from these moods: [MOODS]. Example: "sleep, focus, workout"

A. Moods 002, User Types “nah”, Critical
B. SpotiBot asks user “Do you want to include moods?” User types “nah”
C. SpotiBot moves to next prompt and user is asked “Do you want to include certain genres?”

2. Equivalence Class

A. Moods 003, User Types Invalid Input, Workaround
B. SpotiBot asks user “Do you want to include moods?” User types input that is not “yes” or “nah”
C. SpotiBot moves to next prompt and user is asked “Do you want to include certain genres?”

A. Moods 004, User Selects Valid Moods, Workaround
B. SpotiBot asks user “Do you want to include moods?” User types “yes”
SpotiBot asks user “Pick from these moods: [MOODS]. Example: "sleep, focus, workout"
User types “sleep, focus”
C. SpotiBot saves moods “sleep” and “focus” and moves to next prompt. The user is asked “Do you want to include certain genres?”

A. Moods 005, User Selects One Valid Mood and One Invalid Mood, Workaround
B. SpotiBot asks user “Do you want to include moods?” User types “yes”
SpotiBot asks user “Pick from these moods: [MOODS]. Example: "sleep, focus, workout"
User types “sleep, football”
C. SpotiBot saves mood “sleep” and ignores “football” because it’s invalid. SpotiBot moves to next prompt. The user is asked “Do you want to include certain genres?”

#6: Genre(s)

For these tests, user is successfully logged in and user gets prompt: “Type "playlist" to create a new playlist, "top" to get your top songs, or "stats" to get your listening history stats.” User types “playlist”. SpotiBot asks user “Do you want to include moods?” User types “nah”

1. Functional

A. Genres 001, User Types “yes”, Critical
B. SpotiBot asks user “Do you want to include certain genres? User types “yes”
C. SpotiBot asks user “Pick from these genres: [GENRES]. Example: "pop, rock"”

A. Genres 002, User Types “nah”, Critical
B. SpotiBot asks user “Do you want to include certain genres?” User types “nah”
C. SpotiBot moves to next prompt and user is asked “Do you want to include any specific artists?”

2. Equivalence Class

A. Genres 003, User Types Invalid Input, Workaround
B. SpotiBot asks user “Do you want to include certain genres?” User types input that is not “yes” or “nah”
C. SpotiBot moves to next prompt and user is asked “Do you want to include certain genres?”

A. Genres 004, User Selects Valid Genres, Workaround
B. SpotiBot asks user “Do you want to include certain genres?” User types “yes”
SpotiBot asks user “Pick from these genres: [GENRES]. Example: "pop, rock"” user types “pop, rock”

C. SpotiBot saves moods “pop” and “rock” and moves to next prompt. The user is asked “Do you want to include any specific artists?”

A. Genres 005, User Selects One Valid Genre and One Invalid Genre, Workaround
B. SpotiBot asks user “Do you want to include certain genres?” User types “yes” SpotiBot asks user “Pick from these genres: [GENRES]. Example: "pop, rock"” user types “pop, radish”
C. SpotiBot saves mood “sleep” and ignores “radish” because it’s invalid. SpotiBot moves to next prompt. The user is asked “Do you want to include any specific artists?”

#7: Get Playlist Based on Artist(s)

For these tests, user is successfully logged in and user gets prompt: “Type "playlist" to create a new playlist, "top" to get your top songs, or "stats" to get your listening history stats.” User types “playlist”. SpotiBot asks user “Do you want to include moods?” User types “nah”. SpotiBot asks user “Do you want to include certain genres?” User types “nah”

1. Functional

A. Artists 001, User Types “yes”, Critical
B. SpotiBot asks user “Do you want to include certain artists? User types “yes”
C. SpotiBot asks user “Please provide artist(s) you would like to have it based upon" Example: “The Wombats, Chance The Rapper”

A. Artists 002, User Types “nah”, Critical
B. SpotiBot asks user “Do you want to include certain artists?” User types “nah”
C. SpotiBot moves to next prompt and user is asked “Do you want to include any specific songs?”

2. Equivalence Class

A. Artists 003, User Types Invalid Input, Workaround
B. SpotiBot asks user “Do you want to include certain artists?” User types input that is not “yes” or “nah”
C. SpotiBot moves to next prompt and user is asked “Do you want to include certain songs?”

A. Artists 004, User Selects Valid Artists, Workaround
B. SpotiBot asks user “Do you want to include certain artists?” User types “yes” SpotiBot asks user “Please provide artist(s) you would like to have it based upon” Example: “Kanye West”. User types “Kanye West, Chance the Rapper”
C. SpotiBot saves artists “Kanye West” and “Chance the Rapper” and moves to next prompt.

A. Artists 005, User Selects One Valid and One Invalid Artist, Workaround
B. SpotiBot asks user “Do you want to include certain artists?” User types “yes” SpotiBot asks user “Please provide artist(s) you would like to have it based upon” Example: “Kanye West”. User types “Kanye West, Brandon the Rapper”
C. SpotiBot saves artist “Kanye West” and ignores “Brandon the Rapper” because that’s invalid. SpotiBot moves to next prompt.

#8: Get Playlist Based on Song(s)

For these tests, user is successfully logged in and user gets prompt: “Type "playlist" to create a new playlist, "top" to get your top songs, or "stats" to get your listening history stats.” User types “playlist”. SpotiBot asks user “Do you want to include moods?” User types “nah”. SpotiBot asks user “Do you want to include certain genres?” User types “nah” SpotiBot asks user “Do you want to include any specific artists?”. User types “nah”

1. Functional

A. Songs 001, User Types “yes”, Critical

B. SpotiBot asks user “Do you want to include certain songs?” User types “yes”

C. SpotiBot asks user “Type the name(s) of the song(s) and the artist.

Example: "Million Reasons by Lady Gaga, Uptown Funk by Bruno Mars"

A. Songs 002, User Types “nah”, Critical

B. SpotiBot asks user “Do you want to include certain songs?” User types “nah”

C. SpotiBot moves to next prompt and user is asked “Do you want to include any of your own playlists?”

2. Equivalence Class

A. Songs 003, User Types Invalid Input, Workaround

B. SpotiBot asks user “Do you want to include certain songs?” User types input that is not “yes” or “nah”

C. SpotiBot moves to next prompt and user is asked “Do you want to include any of your own playlists?”

A. Songs 004, User Selects Valid Songs, Workaround

B. SpotiBot asks user “Do you want to include certain songs?” User types “yes”

SpotiBot asks user “Type the name(s) of the song(s) and the artist.

Example: "Million Reasons by Lady Gaga, Uptown Funk by Bruno Mars"

User types "Million Reasons by Lady Gaga, Uptown Funk by Bruno Mars"

C. SpotiBot saves songs “Million Reasons by Lady Gaga” and “Uptown Funk by Bruno Mars” and moves to next prompt.

A. Songs 005, User Selects One Valid and One Invalid Song, Workaround

B. SpotiBot asks user “Do you want to include certain songs?” User types “yes”

SpotiBot asks user “Type the name(s) of the song(s) and the artist.

Example: "Million Reasons by Lady Gaga, Uptown Funk by Bruno Mars"
User types "Million Reasons by Lady Gaga, Uptown Funk by Bruno Mars"

C. SpotiBot saves song “Uptown Funk by Bruno Mars” and ignores “Million Reasons by Lady Gaga” because that’s invalid. SpotiBot moves to next prompt.

#9: Get Playlist Based on Own Playlist(s)

For these tests, user is successfully logged in and user gets prompt: “Type "playlist" to create a new playlist, "top" to get your top songs, or "stats" to get your listening history stats.” User types “playlist”. SpotiBot asks user “Do you want to include moods?” User types “nah”. SpotiBot asks user “Do you want to include certain genres?” User types “nah” SpotiBot asks user “Do you want to include any specific artists?”. User types “nah” SpotiBot asks user “Do you want to include any specific songs?” User types “nah”.

1. Functional

A. Playlists 001, User Types “yes”, Critical
B. SpotiBot asks user “Do you want to include any of your own playlists?” User types “yes”
C. SpotiBot asks user “Type the name(s) of the public playlists you want to include”.
Example: User playlist: “Workout Jams"

A. Playlists 002, User Types “nah”, Critical
B. SpotiBot calls the Spotify APi and server side with provided logic
C. SpotiBot provides a playlist link

2. Equivalence Class

A. Playlists 003, User Types Invalid Input, Workaround

B. SpotiBot asks user “Do you want to include any of your own playlists” User types input that is not “yes” or “nah”

C. SpotiBot provides a playlist link without the playlists option

3. Boundary Value

A. Playlists 004, Playlist Does not Exist, Workaround

B. SpotiBot asks user “Do you want to include any of your own playlists”, User types yes then inputs playlists that do not exist or are not public.

C. SpotiBot reports that it could not locate that playlist and reiterates the question.

#10: Get Stats

For these tests, user is successfully logged in and user gets prompt: “Type "playlist" to create a new playlist, "top" to get your top songs, or "stats" to get your listening history stats.” The user types “stats”

1. Functional

A. Stats 001, User Provides Incorrect Request Form, Important

B. Input "Request String" in the some invalid form after showing intent for stats, e.g. “give me stats”

C. Bot responds with "Sorry! That isn't a command we recognize, did you mean “stats”?

A. Stats 002, User Provides Correct Request Form, Critical

B. Input "Request String" which is of the valid form "request stats"

C. User is provided with the correct answer from their spotify account, provided it is linked

2. Equivalence Class

A. Stats 003, User Provides String Content After Request, Critical

B. Input "Request String" begins in the valid form but contains n string and numerical digits after the request

C. The extra input is ignored and the request is treated as normal, statement is sent that the digits are ignored

3. Boundary Value

A. Stats 004, User has a Spotify Account Registered but has no Music, Workaround

B. Input "Request String" is correct in valid form

C. Report back to the user that they have not listened to music on spotify before, and we cannot fill the request

#11: All Use

These tests exist the the context of a user following all prompts to a tee but the API connection is limited due to connectivity, server errors, or rate limiting.

1. Functional

A. AllUse 001, API Connection Error (200 - 503), Workaround

B. User inputs some random string in a valid form, but spotify API is unresponsive

C. Gracefully tell the user that there has been a connection error and to try again in a few minutes.

A. AllUse 002, API Calls Over Used and Rate Limited (429 Error), Workaround

B. User Inputs a valid request which calls the spotify api, however the bot has been overused in a certain period exceeding our call allowance.

C. Gracefully tell user that due to increased demand the response is unavailable and to try again in a few minutes.