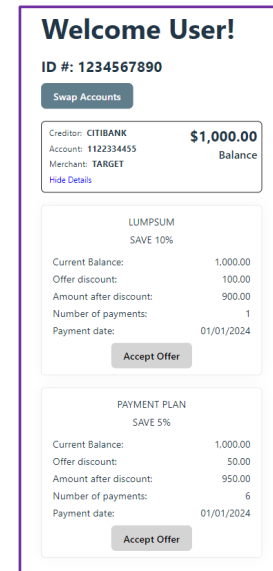


Case Study: Modifying React App Externally

Objective

Leadership has requested various enhancements to an existing consumer self-service channel through a change request. This platform is built in React and you are aware we do not have access to the source code. Instead, you have the opportunity to load a JavaScript file through index.html with the understanding that you can call upon functions within this file to manipulate the React app content. By integrating this JavaScript file, it will allow us to extend the app's capabilities and functionality to revitalize the presentation with a more modern approach. The presented React app attached to this case study will be the app to update. In this case study, there will be an A/B Test occurring to mobile users with a Control and Test variation, desktop users will be unaffected. Eligibility for the Test variation is the user's "ID #" ending with an even number or zero as the criteria. Control will be the user's "ID #" ending with an odd number. The user will have multiple IDs, in this example this user will have two ID #'s (not to be confused with Account number). The React app's local storage will hold various information needed for this change request.



The screenshot shows a user interface for a financial application. At the top, it says 'Welcome User!' followed by 'ID #: 1234567890'. Below this is a 'Swap Accounts' button. The main section displays account information: 'Creditor: CITIBANK', 'Account: 1122334455', and 'Merchant: TARGET'. A large balance of '\$1,000.00' is shown. Below the account info are two offer cards. The first is 'LUMP SUM SAVE 10%' with a current balance of 1,000.00, an offer discount of 100.00, and an amount after discount of 900.00. The second is 'PAYMENT PLAN SAVE 5%' with a current balance of 1,000.00, an offer discount of 50.00, and an amount after discount of 950.00. Both offers have a payment date of 01/01/2024 and an 'Accept Offer' button.

LUMP SUM SAVE 10%	
Current Balance:	1,000.00
Offer discount:	100.00
Amount after discount:	900.00
Number of payments:	1
Payment date:	01/01/2024

PAYMENT PLAN SAVE 5%	
Current Balance:	1,000.00
Offer discount:	50.00
Amount after discount:	950.00
Number of payments:	6
Payment date:	01/01/2024

This initial ask does not have a final presentation for the change requests and will be left to your creative resolution. Remember this is the Creative department's web development team. You will need to host this project online due to security policy for email content disallowing us from receiving your files. When hosting, the React app must live in the root of the domain you are utilizing (www.domain.com & casestudy.domain.com will work, however, www.domain.com/casestudy will not). You may utilize free hosting or paid hosting services if you do not already have one (we cannot suggest a service). If this is not an option, please upload your content to GitHub and supply your repo information to acquire a copy. Be advised, if editing content locally on your device, you may not be able to preview your work without bypassing your browser's CORS policy (you may research how to do this temporarily through Google); hosting this content online will not produce a CORS policy issue and will render the React app appropriately. Per the request, you may edit index.html to add your JavaScript file, however you may not edit any other of the React app files.

Helpful Tips

- The largest hurdle will be the initial attempt to have a JavaScript function modify content within the React app. Utilize various resources online to learn and accomplish this task such as Google, GPT platforms, etc.
- Note that you cannot target the React app's randomly generated classes or IDs and these values change each build and if the React app is rebuilt they will no longer function. Utilize actual class names, IDs, or other methods to target content.
- Some information not readily available will need to be located within a Local Storage object viewable through your browser's Developer Tools.

Case Study: Modifying React App Externally

- This case study is designed to test your problem solving skills and critical thinking, the change request content below is large and some content may be vague. Complete the list to the best of your understanding and capability.

Change Requests for Case Study

- Replace the “Welcome User!” header and alter the line after by adding the “User” text before the ID so the result is “User ID #: 1234567890”. Style as you would like, keep at least minimum font size being used for ID #.
- Alter the text from “Swap Accounts” to “Swap IDs” in the button to correct this error.
- Alter the “Swap Accounts” button color to Orange (exact color is your discretion).
- Remove the ability to “Show Details” or “Hide Details” in the informational panel by having the information be statically displayed (the presentation shown in “Show Details”) and removing the details toggle link.
- Alter the presentation within the informational panel’s balance so that (within example image above) the currency and balance display as “Balance **\$1000.00**” in a singular line below the rest of the information, using the same font size as Balance, and are aligned to the bottom-right as opposed to the top-right.
- The two offers will have a variety of change requests:
 - Manipulate the two offers (Lumpsum and Payment Plan) so they are side by side presentations, each taking up to 50% of the present width.
 - Replace the offer headings stating “LUMPSSUM” or “PAYMENT PLAN” and “SAVE X%” entirely with “**Save**” and “**\$X.XX**” on two lines (Save on first line, currency amount on second). The value of the currency will be existing “Offer discount” currency value. Bold the text for this portion and increase the font size to take 50-75% of the width with a background color of blue and text color of white going across the “header” of the offer.
 - Remove the Current Balance, Offer discount, Amount after discount and Number of payments information. In their place, add centered text stating “X monthly payment(s) of \$X.XX.” where “X monthly” is the number of payments and “\$X.XX” is the monthly payment plan amount. Center this text within the content block horizontally and vertically.
 - Retain payment schedule as is.
 - Change the Accept Offer button color to green (your discretion).
- If the result should leave some white space below the two offers, that is acceptable.
- Verify that swapping between IDs retains the changes so one is Test and one is Control.
- Verify that accepting an offer and returning to the previous page retains the changes so one is Test and one is Control.
- Verify that the Test presentation only affects mobile presentation and desktop retains Control.

You are welcome to supply a summary of comments or thoughts separately. Thank you!