Requirements Traceability Matrix

Requirement ID#	Requirement Name/ Description	TestCase	Pass/Fail
REQ-1	Ad-Free System The program/website must be ad-free with no pop up commercials such that the user is never interrupted	Test if a user account receives no ads	🟩
REQ-2	Aesthetic UI The website should be eye appealing and easy to navigate for any user	1. Provide another user access to the website and see if they are able to navigate through easily 2. Test each filter together and individually	🟩 🟥
REQ-2-2	Filtering Options The user should be able to filter their books by searching via author, title, or genre	Test each filter together and individually	🟥
REQ-2-2-1	Radio Button/Search Bar The user with will provided with radio buttons to filter via genre and will be provided a search bar to search via author/title	Test each filter together and individually	🟥
REQ-3	Design an OOP System	Debug the system to see if parameters are being passed correctly	🟩
REQ-4	Limit books per user A user is able to borrow at max 1 copy for each book with a maximum of 5 books	Test if a single user can sign out more than two specific ISBNs	🟩

		Test if a single user can sign out more than five books	
REQ-4-1	Use a SQL Database Utilize a SQL Database for inputting and saving user data	Test the Database for efficiency and security, mainly protecting against SQL injection	
REQ-5	Ensure the product runs on all operating systems Make sure the system can run on all operating systems so that no user encounters difficulty navigating the software	1. Test on different browsers of different operating systems 2. Use latest versions of each language utilized	
REQ-6	Bug-free system The website should be up to date and free of errors so that errors or failures won't damage the website	Use the application to test the systems functionality	
REQ-7	Create Staff/User Account Create a login system to login users based on their status within the system	Check if the user account is properly inserted into the database when registering Check if the user is presented with the correct view when being represented as either a customer or employee	
REQ-7-1	Age validation/Profanity Check Whenever a user borrows a book their age is validated to make sure they may	1. Check if any entered credentials follow a word pattern resembling profanity 2. Check if user is old enough to check out	

	borrow the current book	book	