Saleha Muzammil 20L-1192

readDocumentStaff:

This table represents the equivalence classes for the parameters of your function. Each row specifies a parameter, whether it's a valid or invalid class, and an associated test case.

Parameter	Class Type	Test Case
staff	Valid	"John Doe"
status	Valid	"Approved"
staff	Invalid (Non-string)	12345
staff	Invalid (Empty)	un
staff	Invalid (Null)	null
staff	Invalid (Undefined)	undefined
status	Invalid (Non-string)	45678
status	Invalid (Empty)	""
status	Invalid (Null)	null
status	Invalid (Undefined)	undefined

Login

Parameter	Class Type	Test Case
email	Valid	"john.doe@example.com"
role	Valid ("Academic Staff")	"Academic Staff"
role	Valid ("Non-Academic Staff")	"Non-Academic Staff"
role	Valid ("Student")	"Student"

role	Valid ("Staff")	"Staff"
role	Valid ("AR")	"AR"
password	Valid	"Password123"
email	Invalid (Malformed)	"john.doe"
email	Invalid (Empty)	""
email	Invalid (Null)	null
email	Invalid (Undefined)	undefined
role	Invalid (Not among valid roles)	"Engineer"
role	Invalid (Empty)	""
role	Invalid (Null)	null
role	Invalid (Undefined)	undefined
password	Invalid (Empty)	""
password	Invalid (Non-string)	12345
password	Invalid (Null)	null
password	Invalid (Undefined)	undefined

getPath:

Parameter	Class Type	Test Case
pathName	Valid (Non-empty string)	"validPathName"
pathName	Valid (Existing path name)	"existingPathName"

Invalid Equivalence Classes:

Parameter	Class Type	Test Case
pathName	Invalid (Empty string)	""
pathName	Invalid (Null)	null
pathName	Invalid (Undefined)	undefined
pathName	Invalid (Non-string)	123
pathName	Invalid (Non-existent path name)	"nonExistentPath"

read Rejected Documents:

Valid Equivalence Classes:

Parameter	Class Type	Test Case
requester	Valid (Non-empty string)	"requester@example.com"
requester	Valid (Existing email in db)	"existing.requester@example .com"

Parameter	Class Type	Test Case
requester	Invalid (Empty string)	""
requester	Invalid (Null)	null
requester	Invalid (Undefined)	undefined
requester	Invalid (Non-string)	1234
requester	Invalid (Non-existent email in db)	"nonexistent.requester@exa mple.com"

The valid equivalence classes assume that the requester must be a non-empty string that corresponds to an email format, which is present in the database. Invalid classes cover scenarios where the requester parameter is either not a string, an empty string, a non-existent email in the database, or is not provided at all (null or undefined). Each test case is an example of the kind of input that would fall into each equivalence class.

PathOnSubmit:

Valid Equivalence Classes:

Parameter	Class Type	Test Case
pathName	Valid (Non-empty string)	"validPathName"
noOfApprover	Valid (Positive integer)	3
Approvers	Valid (Non-empty array of strings)	["approver1@example.com", "approver2@example.com"]

Parameter	Class Type	Test Case
pathName	Invalid (Empty string)	""
pathName	Invalid (Null)	null
pathName	Invalid (Undefined)	undefined
noOfApprover	Invalid (Zero)	0

noOfApprover	Invalid (Negative integer)	-1
noOfApprover	Invalid (Non-integer)	"two"
noOfApprover	Invalid (Null)	null
noOfApprover	Invalid (Undefined)	undefined
Approvers	Invalid (Empty array)	0
Approvers	Invalid (Array with invalid emails)	["not_an_email", "also_not@"]
Approvers	Invalid (Null)	null
Approvers	Invalid (Undefined)	undefined

For the Approvers invalid class that includes non-email strings, it's assumed that the function expects email addresses. Each test case provides an example input that would fall into the respective equivalence class.

Upload_document_details

Valid Equivalence Classes:

Parameter	Class Type	Test Case
uri	Valid (Well-formed URL string)	"http://www.example.com/doc ument.pdf"
approvers	Valid (Non-empty array of strings)	["approver1@example.com", "approver2@example.com"]
requester	Valid (Proper email format)	"requester@example.com"
Request_Type	Valid (Non-empty string)	"Expense Report"

Parameter	Class Type	Test Case
url	Invalid (Malformed URL string)	"htp:/examplecom/document"

url	Invalid (Empty string)	""
url	Invalid (Null)	null
url	Invalid (Undefined)	undefined
approvers	Invalid (Empty array)	0
approvers	Invalid (Array with invalid emails)	["not_an_email", "also_not@"]
approvers	Invalid (Null)	null
approvers	Invalid (Undefined)	undefined
requester	Invalid (Malformed email format)	"requesteratexampledotcom"
requester	Invalid (Empty string)	""
requester	Invalid (Null)	null
requester	Invalid (Undefined)	undefined
Request_Type	Invalid (Empty string)	""
Request_Type	Invalid (Null)	null
Request_Type	Invalid (Undefined)	undefined

submitStaff

Parameter	Class Type	Test Case
doc_ld	Valid (Existing document URL in database)	"http://www.example.com/doc 1.pdf"

decision	Valid ("Approved" or "Rejected")	"Approved"
comment	Valid (Any non-empty string)	"Reviewed and approved"
staff	Valid (Existing staff email in Approvers)	"staff@example.com"

Parameter	Class Type	Test Case
doc_ld	Invalid (Non-existing URL)	"http://www.example.com/non existent.pdf"
doc_ld	Invalid (Empty string)	1111
doc_ld	Invalid (Null)	null
doc_ld	Invalid (Undefined)	undefined
decision	Invalid (Other than "Approved" or "Rejected")	"Pending"
decision	Invalid (Empty string)	""

decision	Invalid (Null)	null
decision	Invalid (Undefined)	undefined
comment	Invalid (Empty string)	""
comment	Invalid (Null)	null
comment	Invalid (Undefined)	undefined
staff	Invalid (Non-existing email in Approvers)	"nonstaff@example.com"
staff	Invalid (Empty string)	""
staff	Invalid (Null)	null
staff	Invalid (Undefined)	undefined