

* API Testing *

Onversion between client and server Via XML Request and Response XML.

- whenever we receive will or usl from software Development Team, we are going to Request that file and if Response is True then we are going to check Data Base.

API Testing, is software Testing that validate Application magraming Interface.

The purpose of ApI Testing is to check the-> Functionally

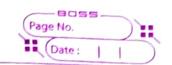
2) Reliability
3) Performance
4) Security of mogramming Interface. Includes -

Api Testing Tool selection

work How

ApI method

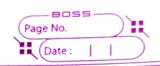
Adut Of Api



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	0-		
	URL= Uniform Re	source	Identifier.
	URN= uniform Re	source	Mame.
1			
	URI = that uses .	the UR	N scheme.
-	3 1	2 1	
-	All the API	end	point are
	appent in front	Base	UTI.
-			
-	Tool selection		
	O creating Test		
	2 Automoution Test	4/	
	(3) Debugging	1	}
-	a Continuous Inte	gration	1 - 1
-	SOAP UI		Postman.
>	(1000)	4	
	motoral like and		to test only
	Protocol like SOAP, Rest, Graphal.		API
-	TOOL OLLINGE.	, *F)	
)	It provide pata	2001	Ceating
	Driven Testing		feature of
-	J	1	
>	Soap of & Groovy	Jo	ivo script
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5] what are the HTTP Methods			
	Supported by Rest-			
→	Supported by Rest-			
	GET-			
	Grandret is a used yoto Request Data			
	from specified Resource.			
1 1	Mark of the state of the section of			
2	Past to proper a feet to the top of the			
	Post is used to send pare			
	to server for (mation of updation	20		
	the Resource.	J		
	TOUR TOUR TOUR TOUR TOUR TOUR TOUR TOUR			
3	PUT- MAR WRITE IN 10			
	put is used to update a si	e a fic		
	Resource into seewer in the			
6	Delete - 10 , yAo			
,	Delete & used to Remove o			
7 1	Specific Resource from server.			
(1. I The Man with Lorden I			
3	what are the protocols used in			
)	Apz Teoting -2			
	O H TTP			
	2 REST			
	3 SOAP			
	9 JMs Manager Land			
	5 UDDI			
·				



which Tools we use for API Testing? (u) postman. 3 can we use Get Request ? insted NO, GET Request is used to applicate

Put Request is used to applicate

Specific Resource

Specific Resource Specific Resource to the server. 6 What are the components of HITP Requests?
HTTP Request have 5 component i) HTTP Method 2) Uniform Resource Jolen Hifier. HTTP Version like (HTTP VIII) 1) Request Header

S Request Body

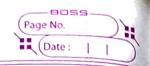


what is Difference Between HTTP and HTTPS-HTTP -> 1) It is Hypertext Transfer protocol. 2) Lessonpsécuren son aux 3) It uses port 80 by Defaulto 4) HTTP website doesn't use Fnomphion. so not unced settling - tours of Does not emprove search Ranking in beach is a condition of HTTPS Dt is hyper Text Transfer uproto(0)

with secure against such attack. It uses port 443 by perault. HTTPS Juses Data Encryption. HELPS to Improve search Ranking slower than HTTP. -(21)



what is a Restful web services?
There are Two Types of web services-
(1) SOAP (web) services
2 Restful web services.
12.12.11. 21.2.11.11
SOAP (Simple Object Access protocol)
-> SOAP is a XML Based Method
which is used in web services.
out it sportly the state it has
Restful web services -
@ In Rest Architecture HTTP
method is used.
6) Restful web services perine
urly Response in Uson Format.
what are the major challenges
Faced Puring ApI Testing?
challenges we faces punna API
Testing.
Oparameter selection 11
@ parameter Combination
3 call sequencing
a nutput venification and validation.
(5) A major challenge in providing
input volues which are very difficult
because GUI is not available
- COUNTY TO THE TOTAL TO THE TOTAL T



what are the major challenges Faced During API Testing
Chaukenges we Faces puring API Testing : down in its in) parameter selection. 2) paramèter combination 3) cau sequencing

4) output verification and validation

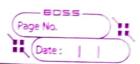
5) A major challenge is providing input values, which are very Difficult Becoming Gullis not available. Entered web semicon con what exactly needs to verify in Api Teling. @ we will verify the accuracy Formal puring Apr. Total 40 @ we will check HTTP status code. @ we will check Response time (4) Error (codes in) case ApI Returns any paternoses 1000 (2) 1 we lase igoing to wheles hupathonization! (6) Non- Functional Testing usuch a performance testing security Testing.



	what is difference	Betweensop	
	and Rest Apz.	Suprilent 19A	
	SOAPHAPINI	Rest API	
1)) simple object OI	Rest stands as	
-	access protocol		
		state Transfer	
	1 The nerguest is to	1202 ACCIPIC	
2	2 soaprisma DR	Rest is a mobilecture	
4	1 1000000000000 ADIA 1	pattern.	
	soap can work 3 f	Rest permit different	
- 11	with xml format d	different data format	_
	Soap Passed XML (1) plain Text	
		@ HTML	2
		3 XML	
		G JSON	
	Bc	ato most profesed	
	10 m Fe	emat is Jon.	
	tobi eta	46100000	
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L	what are the major	challenges faced	
1	During ApI Testing-	- 100 cm 1000	
-	1) parameter solver	200 101 + 100 H	
	2 parameter com	bination - 2011	
	3 coursequencino	AXON - FOR	
	a output venificat		
	@ major challeng		
	input values whi		
	Difficult becoming		
	J	,	



Explain different status code in Teotang-2 > Means Request is ox. 200 > New Resource is realed. 201 > The Request is Accept 202 Accepted for processing but not processed completely Yet No content -> othis code is used to show that the Request is processed Successfully by server and not Returning any content. client Error-400 -> Bad Request 401 -> unauthorized 402 -> payment Required 403 - For Braden 404 -> page Not found Method Not allowed 405-> 406 - not acceptable proxy Authentication Required 408 -> Request Time out!



	Converse
_	Servor Error-
	(30)
	500 -> Internal server Error
	SOI - NOT Complemented
	302 Sada Carteria
	Server (inquesidable
	Gateway Timeans
	505 -> HTTP Version Not supported
	33111
9	Cohort are the Types of Bugs you can
	TOWN DUTING API TOURS
>	17 30 0011 01
	ii) Duplicate or Missing Functionalities
	iii) unused flags.
	12) Performance.
	v) Emproper Emorg.
(1)	Dis- Advantence as Ani
	Dis-Advantages of Api-
	1) Creating API is rime consuming.
	a horson scale à necessary
	3 maintenance cost à high
	G can Grash when testing API.
	Dis-Advantage of web services.
2	Dis-Advantage of web services.
	(1) It Does not Access from Browser.
4	2 HTTP protocol is not relicuble.
4	3 Does not offee any guarantee
4	of Relivery of Response.
\parallel	

		TO THE TOWN !
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0	All webservices are	All APIS are not
	API yourles	web services.
	Censessa Pelle	EDUND ETT 8 02
2	It support XML	Responses are furmante
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		Type formatter into
* 9	some son so whi	XML, JSOH or any other
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3	you need a soap	- is socially
1.574	protocol to send or	It is light weight
	Receive Data over the	rochitecture.
	Herwork, therefore it	STANCESSON CONTRACTOR
-	does not have light	T myoramit (V 1884)
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	-14A 30 0	Applicants - Sid O
Û	It uses XML- RPL	ApI can be used
	soap, Rest for	for any style of
	communication	communication.
	and product and a	(a) seen temain
S	It provide support	provide support for
	only fer the HITTP	HTTPS protocol
. 1	protocol	un Response head
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