

Specification of REST API (Microservices Contract)

Version: v1
Service: Gateway
Visibility: Public
Domain: Ingress-gateway
Serialized Data/Content-Type: json/xml

API	Description
/api/v1/users	Users service URL
/api/v1/account	Account service URL
/api/v1/transaction	Transaction service URL

Version: v1
Service: Users
Visibility: Private
Domain: Users
Serialized Data/Content-Type: json/xml

API	Description	Request Body/Parameters	Response Body	HTTP Response Code	Error Codes	Request Example	Response Example
PUT - /api/v1/user/login	Login	JSON:{"user_id": user_id}	Hash of user context suitable for passing to	200	500	PUT https://host:5000/api/v1/user/login	{"UserContext": ""}

			other calls				
PUT - /api/v1/user/logoff	Logoff	JSON: {"jwt": token}	None	200	500	PUT https://host:5000/api/v1/user/logoff	{ Message: ok }
PUT - /api/v1/user/	UPDATE one user	Body: { lname: string, fname: string, address: string, contact_no: int, dob: date }	OK response	200	500	PUT https://host:5000/api/v1/user/	{ Message: ok }
POST - /api/v1/user/	CREATE one user	Body: { lname: string, fname: string, address: string, contact_no: int, dob: date } Params: None	{ "user_id": string }	200	500	POST https://host:5000/api/v1/user	{ ResponseMetadata: { ... etc. } }

DELETE - /api/v1/user/	DELETE one user		JSON of respo nse from aws	200	500	DELETE https://host:5000/api/v1/user/	{ ResponseMetadata: { ... etc. }}
GET - /api/v1/user/	GET one user		JSON of User entity	200	500	GET https://host:5000/api/v1/user/	{User Object}

Version: v1
Service: Account
Visibility: Private
Domain: Bank Accounts
Serialized Data/Content-Type: json/xml

API	Description	Request Body/Parameters	Response Body	HTTP Response Code	Error Codes	Request Example	Response Example
-----	-------------	-------------------------	---------------	--------------------	-------------	-----------------	------------------

GET - /api/v1/a ccount/	Retrieve one account	Param: acc_num Header: User-context token	None	200	500	GET https://host:5001/api/ v1/account/	{ acc_num: string, Acc_type: string, Balance:string }
POST - /api/v1/a ccount	Insert one record in the account s table	Body: { acc_num: String, user_id: String,Acc_ty pe: String,Balanc e: double } Header: Account-cont ext token	OK respon se	200	500	PUT https://host:5001/api/ v1/account/	{ Message: ok }
DELETE - /api/v1/a ccount/	DELETE one account	Header: User-context token Param: acc_num	JSON of respon se from aws	200	500	DELETE https://host:5001/api/ v1/account/	{ ResponseMet adata: { ... etc. }}

Version: v1

Service: Transaction

Visibility: Private

Domain: Simple Banking Transactions

Serialized Data/Content-Type: json/xml

API	Description	Request Body/Parameters	Response Body	HTTP Response Code	Error Codes	Request Example	Response Example
-----	-------------	-------------------------	---------------	--------------------	-------------	-----------------	------------------

GET - /api/v1/transaction/	Retrieve one transaction	Param: txn_id Header: User-context token	None	200	500	GET https://host:5001/api/v1/transaction/	{ txn_id: string, txn_type: string }
POST - /api/v1/transaction	Insert one transaction	Body: { txn_id: string, txn_detail: string, user_id: String } Header: Transaction-context token	OK response	200	500	PUT https://host:5001/api/v1/transaction/	{ Message: ok }

Version: v1
Service: db
Visibility: Private
Domain: Datastore
Serialized Data/Content-Type: json/xml

API	Description	Request Body/Parameters	Response Body	HTTP Response Code	Error Code	Request Example	Response Example
-----	-------------	-------------------------	---------------	--------------------	------------	-----------------	------------------

Cod de e s

GET - /api/v1/datastore/read	Read an object	Param: object-type, object-key	JSON of aws response	200	500	GET https://host:5002/api/v1/datastore/read?objtype=user&objkey=123	{ "Count": 1, "Items": [{ "email": "sholmes@bakers.org", "fname": "Sherlock", "lname": "Holmes", "user_id": "9b235bcb-0d10-415f-ab9f-9ce23da2a119" }], "ResponseMetadata": { "HTTPHeaders": { "connection": "keep-alive", "content-length": "165", "content-type": "application/x-amz-json-1.0", "date": "Sat, 12 Sep 2020 18:16:15 GMT", "server": "Server", "x-amz-crc32": "196980578", "x-amzn-requestid": "AOGKN903DF66VLU3GEBEE08DK3VV4KQNSO5AEMVJF66Q9ASUAAJG" }, "HTTPStatusCode": 200, "RequestId": "AOGKN903DF66VLU3GEBEE08DK3VV4KQNSO5AEMVJF66Q9ASUAAJG", "RetryAttempts": 0 }, "ScannedCount": 1 }
POST - /api/v1/datastore/write	Write an object	Body: objtype, object-key(s)	ID of new entity	200	500	POST https://host:5002/api/v1/datastore/write	{ "user_id": "9b235bcb-0d10-415f-ab9f-9ce23da2a119" }

DELETE = /api/v1/datastore/delete	Delete an object	Param: objtype, object-key	JSON of aws response	200	500	DELETE https://host:5000/api/v1/datastore/delete?objtype=user&objkey=123	{ "ResponseMetadata": { "HTTPHeaders": { "connection": "keep-alive", "content-length": "2", "content-type": "application/x-amz-json-1.0", "date": "Sat, 12 Sep 2020 18:13:04 GMT", "server": "Server", "x-amz-crc32": "2745614147", "x-amzn-requestid": "N7R6LO93FFBDH1A5GRRL55LBS7VV4KQNSO5AEMVJF66Q9ASUAAJG" }, "HTTPStatusCode": 200, "RequestId": "N7R6LO93FFBDH1A5GRRL55LBS7VV4KQNSO5AEMVJF66Q9ASUAAJG", "RetryAttempts": 0 } }
PUT - /api/v1/datastore/update	Update an object	Params : objtype, objkey Body: object-key(s)	JSON of aws response	200	500	PUT https://host:5002/api/v1/datastore/update?objtype=user&objkey=	{ "ResponseMetadata": { "HTTPHeaders": { "connection": "keep-alive", "content-length": "2", "content-type": "application/x-amz-json-1.0", "date": "Sat, 12 Sep 2020 18:13:04 GMT", "server": "Server", "x-amz-crc32": "2745614147", "x-amzn-requestid": "N7R6LO93FFBDH1A5GRRL55LBS7VV4KQNSO5AEMVJF66Q9ASUAAJG" }, "HTTPStatusCode": 200, "RequestId": "N7R6LO93FFBDH1A5GRRL55LBS7VV4KQNSO5AEMVJF66Q9ASUAAJG", "RetryAttempts": 0 } }