

React Native Project Assessment – RESTFul API

This document provides a summary of the available RESTful API endpoints .

API Overview

- **URL:** <https://comp2140a3.uqcloud.net/api>

Authentication

Anonymous access is disabled. Authentication via an JSON Web Token (JWT) is required for all endpoints. The JWT is provided via a column in Blackboard My Grades. Example API calling code is provided to get you started.

Form Endpoint

The `/form` endpoint allows management of form resources.

Form Fields

Field Name	Type	Size	Required	Description	Example Value
id	Integer	-	Yes (PK)	Auto-generated identifier	1
name	String	-	Yes	Name of the form	"Customer Feedback Form"
description	String	-	No	Detailed description of the form	"Form to collect customer feedback and ratings"
username	String	255	Yes	Owner of the form	Student username eg "s100000"

Form Endpoints

Method	Path	Description	Example
GET	/form	List all forms	GET /form
POST	/form	Create a new form	POST /form with JSON body

PATCH	/form	Update form(s)	PATCH /form?id=req.1 with JSON body
DELETE	/form	Delete form(s)	DELETE /form?id=req.1

Field Endpoint

The `/field` endpoint manages form field definitions.

Field Fields

Field Name	Type	Size	Required	Description	Example Value
id	Integer	-	Yes (PK)	Auto-generated identifier	1
form_id	Integer	-	No (FK)	Reference to form.id	1
name	String	-	Yes	Name of the field	"Email Address"
field_type	String	-	Yes	Type of the field	"text", "multiline", "dropdown", "location"
options	JSONB	-	No	Field configuration options	{"nameofdropdown": ["option1", "option2"]}
required	Boolean	-	Yes	Whether field is required	true
is_num	Boolean	-	Yes	Whether field contains numeric data	false
order_index	Integer	-	Yes	Display order of field	1
username	String	255	Yes	Owner of the field	Student username eg "s100000"

Field Endpoints

Method	Path	Description	Example
GET	/field	List all fields	GET /field?form_id=req.1
POST	/field	Create a new field	POST /field with JSON body
PATCH	/field	Update field(s)	PATCH /field?id=req.1 with JSON body
DELETE	/field	Delete field(s)	DELETE /field?id=req.1

Record Endpoint

The `/record` endpoint manages form submissions and data entries.

Record Fields

Field Name	Type	Size	Required	Description	Example Value
id	Integer	-	Yes (PK)	Auto-generated identifier	1
form_id	Integer	-	No (FK)	Reference to form.id	1
values	JSONB	-	No	Form field values as JSON	Eg {"email": " user@example.com ", "feedback": "Great service!", "rating": 5}
username	String	255	Yes	Owner of the record	Student username eg "s100000"

Record Endpoints

Method	Path	Description	Example
GET	/record	List all records	GET /record?form_id=eq.1
POST	/record	Create a new record	POST /record with JSON body
PATCH	/record	Update record(s)	PATCH /record?id=eq.1 with JSON body
DELETE	/record	Delete record(s)	DELETE /record?id=eq.1

Query Parameters

PostgreSQL supports various query parameters for filtering, ordering, and pagination:

Common Query Parameters

Parameter	Description	Example
select	Select specific columns	?select=id,name,description

order	Order results	?order=id.desc
limit	Limit number of results	?limit=10
offset	Pagination offset	?offset=20
eq	Equal to	?id=eq.1
gt	Greater than	?id=gt.5
lt	Less than	?id=lt.10
gte	Greater than or equal	?id=gte.5
lte	Less than or equal	?id=lte.10
like	LIKE operator	?name=like. <i>feedback</i>
ilike	Case-insensitive LIKE	?name=ilike. <i>feedback</i>
in	IN operator	?form_id=in.(1,2,3)
is	IS operator (null checks)	?description=is.null

Header Parameters

Header	Description	Example
Prefer: return=representation	Return the created/modified resource	Prefer: return=representation
Prefer: return=minimal	Return minimal response	Prefer: return=minimal
Prefer: return=none	Return no content	Prefer: return=none
Range	Pagination range	Range: 0-9
Range-Unit	Pagination unit	Range-Unit: items

Querying JSONB Fields in PostgREST

The API uses JSONB fields (`options` in field table and `values` in record table) to store flexible JSON data. PostgREST provides powerful operators for querying JSONB content.

See https://docs.postgrest.org/en/v12/references/api/tables_views.html#json-columns