

Project2 Project Document  
Advanced Web Development  
November 24th, 2023  
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# Overview

For my final project, I identified the Development Finance Corporation (DFC) as my business of choice. Due to its online loan portal, the DFC is a prime candidate for this project. They make it possible for Belizeans to apply for student loans directly from their website through the loan portal they have developed. I believe creating a loan portal similar to theirs would serve as the perfect practice for API development. A loan portal initially improved the DFC's capacity to do business by increasing the ease of submitting an application. With the use of My API I believe we can keep and improve the portal's functionality while opening the doors to internal use cases of the API.

## API Features:

My API offers several features. Firstly, we offer API security by enforcing the use of API keys, which can be associated with a variety of permissions. Secondly, we provide endpoints for user creation and verification. Lastly, the API offers form management by providing CRUD functionality for student loan application forms. This functionality is accomplished using a variety of endpoints.

These endpoints accept input only if it's formatted as JSON. At which point each endpoint performs its own validation and conducts the necessary process for each HTTP method.

## Endpoints Overview:

```
GET /applicants (Singleton)
GET /applicants/{id} (Singleton)
POST /applicants (Singleton)
PUT /applicants/{id} (Singleton)
DELETE /applicants/{id} (Singleton)

GET /applications (Singleton)
GET /applications/{id} (Singleton)
POST /applications (Singleton)
PUT /applications/{id} (Singleton)
DELETE /applications/{id} (Singleton)

GET /applicantverification/{id} (Singleton)
POST /applicantverification (Singleton)
PUT /applicantverification/{id} (Singleton)
DELETE /applicantverification/{id} (Singleton)

GET /contactinfo/{id} (Singleton)
POST /contactinfo (Singleton)
PUT /contactinfo/{id} (Singleton)
DELETE /contactinfo/{id} (Singleton)

GET /financialprofile/{id} (Singleton)
POST /financialprofile(Singleton)
PUT /financialprofile/{id} (Singleton)
DELETE /financialprofile/{id} (Singleton)

GET /futureacademicdetails/{id} (Singleton)
POST /futureacademicdetails(Singleton)
PUT /futureacademicdetails/{id} (Singleton)
DELETE /futureacademicdetails/{id} (Singleton)

GET /institution/{id} (Singleton)
POST /institution(Singleton)
PUT /institution/{id} (Singleton)
DELETE /institution/{id} (Singleton)
```

```
GET /pastacademicdetails/{id} (Singleton)
POST /pastacademicdetails(Singleton)
PUT /pastacademicdetails/{id} (Singleton)
DELETE /pastacademicdetails/{id} (Singleton)

GET /reference/{id} (Singleton)
POST /reference(Singleton)
PUT /reference/{id} (Singleton)
DELETE /reference/{id} (Singleton)

GET /studycost/{id} (Singleton)
POST /studycost (Singleton)
PUT /studycost/{id} (Singleton)
DELETE /studycost/{id} (Singleton)
```

These endpoints have been structured in a hierarchical manner. Access a group of applicants with the `/group` endpoint. To manipulate or access a specific applicant, use the `/id` suffix. The group endpoint is