

Coding Assignment: Financial Assistance Scheme Management System (FASMS)

A collection of requests to interact with the Django Backend created for the FASMS.

POST Admin Login

`http://localhost:5000/api/admin/login/`



Login using the username and password of the admin user to receive a token for authentication purposes.

Body formdata

username	admin
password	000000

POST Admin Logout

`http://localhost:5000/api/admin/logout/`

Send a POST request with the token as the header, backend deletes the token from the database to end current session.

HEADERS

Authorization	Token c3bafda2f2b6a4eaa541090dab9b7a053d77c849
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GET List Applicants

`http://localhost:5000/api/applicants`

Sends a GET request to list all applicants within the database, alongside with their details.

HEADERS

Authorization

POST Create Applicant

http://localhost:5000/api/applicants/

Create an applicant in the database, with the JSON format of the request containing the NRIC, name, sex, date_of_birth, marital_status, retrenchment_status, retrenchment_date, address, contact_info, current_education, monthly_income, completed_national_service, and household_members, which includes the above fields alongside the relationship_to_applicant field.

HEADERS

Authorization

Body raw (json)

json

```
{
  "nric": "S992243I",
  "name": "Jenny Bull",
  "sex": "Female",
  "date_of_birth": "1920-01-01",
  "marital_status": "Married",
  "employment_status": "Unemployed",
  "retrenchment_date": null,
  "address": {
    "postal_code": "111222",
    "unit_number": "1",
    "address_line_1": "1 Main Rd",
    "address_line_2": ""
  },
  "contact_info": "81100499",
  "current_education": "not in education",
  "monthly_income": 500,
  "completed_national_service": false,
  "household_members": [
    {
      "nric": "T9112113I",
      "name": "Sally Bull",
      "sex": "Female",
      "date_of_birth": "2023-05-15",
      "marital_status": "Single",
      "employment_status": "Unemployed",
      "address": {
```

```
    "postal_code": "111222",
    "unit_number": "1",
    "address_line_1": "1 Main Rd",
    "address_line_2": ""
  },
  "contact_info": "23011119",
  "relationship_to_applicant": "Child",
  "current_education": "pre-primary",
  "monthly_income": 0,
  "completed_national_service": false
}
]
```

PATCH Update Applicant

<http://localhost:5000/api/applicants/ec03f428-640c-470b-96bb-c7fcfb6599b/>

Updates fields of the Applicant, which modifies the people table as well.

HEADERS

Authorization

Body raw (json)

json

```
{
  "nric": "S122243I",
  "name": "Jolly Bull",
  "sex": "Female",
  "date_of_birth": "1930-01-01",
  "marital_status": "Married",
  "employment_status": "Unemployed",
  "retrenchment_date": null,
  "address": {
    "postal_code": "211222",
    "unit_number": "1",
    "address_line_1": "1 Main Rd",
    "address_line_2": ""
  },
  "contact_info": "81111499",
  "current_education": "not in education",
  "monthly_income": 500,
  "completed_national_service": false,
  "household_members": [
    {
      "nric": "T9111113I",
      "name": "Sally Bull",
```

```
{
  "sex": "Female",
  "date_of_birth": "2023-05-15",
  "marital_status": "Single",

  "employment_status": "Unemployed",
  "address": {
    "postal_code": "211222",
    "unit_number": "1",
    "address_line_1": "1 Main Rd",
    "address_line_2": ""
  },
  "contact_info": "23311119",
  "relationship_to_applicant": "Child",
  "current_education": "pre-primary",
  "monthly_income": 0,
  "completed_national_service": false
}
```

DELETE Delete Applicant

<http://localhost:5000/api/applicants/37af9d63-fecb-4746-87d8-ff2b3df63524/>

Removes the specified applicant from the applicant table, NOT the people table.

HEADERS

Authorization

GET List Schemes

<http://localhost:5000/api/schemes/>

List all schemes in the database.

HEADERS

Authorization

POST Create Scheme

<http://localhost:5000/api/schemes/>

Create a new scheme with the fields `scheme_name`, `description`, `eligibility_criteria` and `benefits`. The `eligibility_criteria` includes `criterion_type`, which should match a criterion type in the backend, and `criterion_value`, which is compared to

the value of the applicant. The `additional_conditions` field is not currently used, but should the criterion be more complex (\geq sign etc), the field could be utilised for more precise control over the specific criterion.

HEADERS

Authorization

Body raw (json)

json

```
{
  "scheme_name": "Edusave Account",
  "description": "Provides $230 to $290 annually for approved fees and programmes for students",
  "eligibility_criteria": [
    {
      "criterion_type": "household_member_education",
      "criterion_value": "primary",
      "additional_conditions": ""
    },
    {
      "criterion_type": "household_member_age",
      "criterion_value": ">7",
      "additional_conditions": ""
    },
    {
      "criterion_type": "household_member_age",
      "criterion_value": "<16",
      "additional_conditions": ""
    }
  ],
  "benefits": [
    {
      "benefit_type": "Financial Assistance",
      "description": "$230 annually for primary students",
      "conditions": ""
    },
    {
      "benefit_type": "Financial Assistance",
      "description": "$290 annually for secondary students",
      "conditions": ""
    }
  ]
}
```

GET Eligible Schemes (for applicant)

<http://localhost:5000/api/schemes/eligible?applicant=be92c248-31ca-4c23-9145-93be998144fd>

List the eligible schemes for a specific applicant, based on the schemes that he or she qualifies for.

HEADERS

Authorization

PARAMS

applicant	be92c248-31ca-4c23-9145-93be998144fd
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GET List Applications

http://localhost:5000/api/applications/

List all applications present in the system.

HEADERS

Authorization

PATCH Update Application

http://localhost:5000/api/applications/31dd7abf-bc0b-4683-9fe9-a52c0ebd478f/

Update a specific application's parameters, such as the status of the application.

HEADERS

Authorization

Body raw (json)

json

```
{
  "applicant_id": "be92c248-31ca-4c23-9145-93be998144fd",
  "application_status": "Pending",
  "application_schemes": [
    {
      "scheme": "Scheme 1",
      "status": "Active"
    },
    {
      "scheme": "Scheme 2",
      "status": "Active"
    }
  ]
}
```

```
"remarks": "single scheme applied",
```

```
"schemes": [1]
```

```
}
```

GET List Applications (for applicant)

http://localhost:5000/api/applications/applicant/be92c248-31ca-4c23-9145-93be998144fd/

List all the applications that an applicant has.

HEADERS

Authorization

POST Create Applications

http://localhost:5000/api/applications/

Create a new application using the fields applicant_id, application_status, remarks and schemes.

HEADERS

Authorization

Body raw (json)

json

```
{
```

```
"applicant_id": "be92c248-31ca-4c23-9145-93be998144fd",
```

```
"application_status": "Pending",
```

```
"remarks": "multiple schemes applied",
```

```
"schemes": [1, 3]
```

```
}
```