**Dokumentasi API**

**Aplikasi Laporan Nilai Siswa**

**Disusun oleh kusnendi**

**Daftar isi**

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# Latar Belakang

Apliaksi laporan nilai siswa adalah aplikasi backend sederhana menggunakan model microservice yang bertujuan untuk merekam nilai dari siswa sekolah dasar atau menengah.

API dari aplikasi ini dapat di coba dengan menggunakan cUrl atau aplikasi debug API seperti Postman atau SOAPUI

# Daftar API

## Menu Generate

### Generate Dummy Data

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/generate |
| Method | GET |
| Deskripsi | Untuk melakukan generate user (username admin, password admin ) dan data dummy lain nya |
| Sample Request | - |
| Response sukses | {  "status": "200",  "message": "OK"  } |
| Response eksepsi | {  "status": "500",  "message": "data already generated"  } |

## Menu User

### Register

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/users/register |
| Method | POST |
| Deskripsi | Untuk melakukan registrasi user baru |
| Sample Request | {  "username":"admin",  "password":"admin"  } |
| Response sukses | {  "status": "200",  "message": "OK"  } |
| Response eksepsi | {  "status": "500",  "message": "Username already taken"  } |

### Login

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/users/login |
| Method | POST |
| Deskripsi | Untuk mendapatkan token yang diguanakn untuk authentikasi di setiap api |
| Sample Request | {  "username":"admin",  "password":"admin"  } |
| Response sukses | {  "username": "admin",  "token": "2da6a1c7-c59e-4169-83c9-266bc9813ea0"  } |
| Response eksepsi | {  "timestamp": "11-03-2021 17:05:50",  "status": 401,  "error": "Unauthorized",  "message": "username admin already logged in",  "path": "/api/users/login"  }  {  "timestamp": "11-03-2021 17:09:42",  "status": 401,  "error": "Unauthorized",  "message": "password for username admin is wrong or not registered",  "path": "/api/users/login"  } |

### Logout

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/users/logout |
| Method | POST |
| Deskripsi | Untuk menghapus token autentikasi |
| Sample Request | {  "token": "abc"  } |
| Response sukses | {  "status": "200",  "message": "OK"  } |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/users/logout"  } |

### Change Password

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/users/forgotpwd |
| Method | POST |
| Deskripsi | Untuk mengganti password |
| Sample Request | {  "token": "7f4ed2e9-f606-43fb-88b5-f05d9d2598b9",  "newPassword":"admin123"  } |
| Response sukses | {  "status": "200",  "message": "OK"  } |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/users/forgotpwd "  } |

### Change Username

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/users/changename |
| Method | POST |
| Deskripsi | Untuk mengganti password |
| Sample Request | {  "token": "7f4ed2e9-f606-43fb-88b5-f05d9d2598b9",  "newUsername":"admin123"  } |
| Response sukses | {  "status": "200",  "message": "OK"  } |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/users/changename"  } |

### Delete User

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/users/delete/{id} |
| Method | DELETE |
| Parameter | Id = id user berupa angka |
| Deskripsi | Untuk menghapus user |
| Sample Request | {  "token":"7f4ed2e9-f606-43fb-88b5-f05d9d2598b9"  } |
| Response sukses | {  "status": "200",  "message": "OK"  } |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/users/changename"  } |

## Menu Student

### Add Student

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/student/new |
| Method | POST |
| Deskripsi | Untuk menambah siswa |
| Sample Request | {  "token":"7f4ed2e9-f606-43fb-88b5-f05d9d2598b9",  "nama":"Tiramisu",  "kelas":"1",  "tglLahir":"20-09-1995",  "namaAyah":"Test Ayah 2",  "namaIbu":"Test Ibu 2",  "alamatRumah":"Test alamat rumah 2",  "alamatEmail":"kusnendi@hotmail.com"    } |
| Response sukses | {  "status": "200",  "message": "OK"  } |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/student/new "  } |

### Get All Student

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/student/all |
| Method | POST |
| Deskripsi | Untuk melihat seluruh siswa |
| Sample Request | {  "token":"7f4ed2e9-f606-43fb-88b5-f05d9d2598b9"  } |
| Response sukses | {  "id": 24,  "nama": "Tiramisu",  "tglLahir": "20-09-1995 00:00:00",  "namaAyah": "Test Ayah 2",  "namaIbu": "Test Ibu 2",  "alamatRumah": "Test alamat rumah 2",  "alamatEmail": "kusnendi@hotmail.com",  "scores": [  {  "id": 522,  "subject": {  "id": 59,  "subjectName": "IPA",  "enabled": true  },  "kelas": "3",  "semester": "1",  "score": 70,  "createdAt": "11-03-2021 17:42:42",  "modifiedAt": "11-03-2021 17:42:42"  },  {  "id": 523,  "subject": {  "id": 59,  "subjectName": "IPA",  "enabled": true  },  "kelas": "3",  "semester": "2",  "score": 90,  "createdAt": "11-03-2021 17:42:54",  "modifiedAt": "11-03-2021 17:42:54"  }  ],  "createdAt": "11-03-2021 17:34:44",  "modifiedAt": "11-03-2021 17:34:44"  } |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/student/all "  } |

### Get Student By id

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/student/getbyid |
| Method | POST |
| Deskripsi | Untuk melihat siswa berdasarkan id |
| Sample Request | {  "token":"7f4ed2e9-f606-43fb-88b5-f05d9d2598b9",  "id":24  } |
| Response sukses | {  "id": 24,  "nama": "Tiramisu",  "tglLahir": "20-09-1995 00:00:00",  "namaAyah": "Test Ayah 2",  "namaIbu": "Test Ibu 2",  "alamatRumah": "Test alamat rumah 2",  "alamatEmail": "kusnendi@hotmail.com",  "scores": [  {  "id": 522,  "subject": {  "id": 59,  "subjectName": "IPA",  "enabled": true  },  "kelas": "3",  "semester": "1",  "score": 70,  "createdAt": "11-03-2021 17:42:42",  "modifiedAt": "11-03-2021 17:42:42"  },  {  "id": 523,  "subject": {  "id": 59,  "subjectName": "IPA",  "enabled": true  },  "kelas": "3",  "semester": "2",  "score": 90,  "createdAt": "11-03-2021 17:42:54",  "modifiedAt": "11-03-2021 17:42:54"  }  ],  "createdAt": "11-03-2021 17:34:44",  "modifiedAt": "11-03-2021 17:34:44"  } |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/student/getbyid "  }  {  "timestamp": "11-03-2021 17:53:50",  "status": 404,  "error": "Not Found",  "message": "Data from table Student is not found with id 99",  "path": "/api/student/getbyid"  } |

### Get Student By Name

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/student/getbyname |
| Method | POST |
| Deskripsi | Untuk melihat siswa berdasarkan nama |
| Sample Request | {  "token":"7f4ed2e9-f606-43fb-88b5-f05d9d2598b9",  "name":"tiramisu"  } |
| Response sukses | {  "id": 24,  "nama": "Tiramisu",  "tglLahir": "20-09-1995 00:00:00",  "namaAyah": "Test Ayah 2",  "namaIbu": "Test Ibu 2",  "alamatRumah": "Test alamat rumah 2",  "alamatEmail": "kusnendi@hotmail.com",  "scores": [  {  "id": 522,  "subject": {  "id": 59,  "subjectName": "IPA",  "enabled": true  },  "kelas": "3",  "semester": "1",  "score": 70,  "createdAt": "11-03-2021 17:42:42",  "modifiedAt": "11-03-2021 17:42:42"  },  {  "id": 523,  "subject": {  "id": 59,  "subjectName": "IPA",  "enabled": true  },  "kelas": "3",  "semester": "2",  "score": 90,  "createdAt": "11-03-2021 17:42:54",  "modifiedAt": "11-03-2021 17:42:54"  }  ],  "createdAt": "11-03-2021 17:34:44",  "modifiedAt": "11-03-2021 17:34:44"  } |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/student/getbyname "  }  {  "timestamp": "11-03-2021 17:53:50",  "status": 404,  "error": "Not Found",  "message": "Data from table Student is not found with id 99",  "path": "/api/student/getbyname "  } |

### Edit Student

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/student/update |
| Method | POST |
| Deskripsi | Untuk update siswa |
| Sample Request | {  "token":"7f4ed2e9-f606-43fb-88b5-f05d9d2598b9",  "id":24,  "nama":"Tiramisu T",  "kelas":"1",  "tglLahir":"20-09-1995",  "namaAyah":"Test Ayah 2",  "namaIbu":"Test Ibu 2",  "alamatRumah":"Test alamat rumah 2",  "alamatEmail":"kusnendi@hotmail.com"    } |
| Response sukses | {  "status": "200",  "message": "OK"  } |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/student/update "  }  {  "timestamp": "11-03-2021 17:53:50",  "status": 404,  "error": "Not Found",  "message": "Data from table Student is not found with id 99",  "path": "/api/student/update"  } |

### Delete Student

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/student/delete |
| Method | POST |
| Deskripsi | Untuk mwnghapus siswa |
| Sample Request | {  "token":"7f4ed2e9-f606-43fb-88b5-f05d9d2598b9",  "id":24  } |
| Response sukses | {  "status": "200",  "message": "OK"  } |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/student/delete "  }  {  "timestamp": "11-03-2021 17:53:50",  "status": 404,  "error": "Not Found",  "message": "Data from table Student is not found with id 99",  "path": "/api/student/delete"  } |

## Menu Subject

### Add Subject

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/subject/new |
| Method | POST |
| Deskripsi | Untuk menambah mata pelajaran |
| Sample Request | {  "token":"7f4ed2e9-f606-43fb-88b5-f05d9d2598b9",  "subjectName":"Test",  "enabled":true  } |
| Response sukses | {  "status": "200",  "message": "OK"  } |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/subject/new "  } |

### Get All Subject

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/subject/all |
| Method | POST |
| Deskripsi | Untuk melihat seluruh mata pelajaran |
| Sample Request | {  "token":"7f4ed2e9-f606-43fb-88b5-f05d9d2598b9"  } |
| Response sukses | [  {  "id": 59,  "subjectName": "IPA",  "enabled": true  },  {  "id": 60,  "subjectName": "IPS",  "enabled": false  },  {  "id": 61,  "subjectName": "Matematika",  "enabled": true  }  ] |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/ subject /all "  } |

### Get Enabled Subject

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/subject/enabled |
| Method | POST |
| Deskripsi | Untuk melihat seluruh mata pelajaran yang aktif |
| Sample Request | {  "token":"7f4ed2e9-f606-43fb-88b5-f05d9d2598b9"  } |
| Response sukses | [  {  "id": 59,  "subjectName": "IPA",  "enabled": true  },  {  "id": 61,  "subjectName": "Matematika",  "enabled": true  }  ] |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/subject/enabled"  } |

### Update Subject

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/subject/update |
| Method | POST |
| Deskripsi | Untuk update mata pelajaran |
| Sample Request | {  "token":"7f4ed2e9-f606-43fb-88b5-f05d9d2598b9",  "id":66,  "subjectName":"Tata Usaha",  "enabled":true  } |
| Response sukses | {  "status": "200",  "message": "OK"  } |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/subject/update "  }  {  "timestamp": "11-03-2021 17:53:50",  "status": 404,  "error": "Not Found",  "message": "Data from table Subject is not found with id 99",  "path": "/api/subject/update"  } |

### Delete Subject

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/subject/delete |
| Method | POST |
| Deskripsi | Untuk menghapus mata pelajaran |
| Sample Request | {  "token":"7f4ed2e9-f606-43fb-88b5-f05d9d2598b9",  "id":24  } |
| Response sukses | {  "status": "200",  "message": "OK"  } |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/subject/delete "  }  {  "timestamp": "11-03-2021 17:53:50",  "status": 404,  "error": "Not Found",  "message": "Data from table Student is not found with id 99",  "path": "/api/subject/delete"  } |

### Get Subject by Id

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/subject/getbyid |
| Method | POST |
| Deskripsi | Untuk melihat mata pelajaran berdasarkan id |
| Sample Request | {  "token":"7f4ed2e9-f606-43fb-88b5-f05d9d2598b9",  "id":24  } |
| Response sukses | {  "id": 60,  "subjectName": "IPS",  "enabled": true  } |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/subject/getbyid "  }  {  "timestamp": "11-03-2021 17:53:50",  "status": 404,  "error": "Not Found",  "message": "Data from table Subject is not found with id 99",  "path": "/api/subject/getbyid"  } |

## Menu Score

### Add Score

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/score/new |
| Method | POST |
| Deskripsi | Untuk menambah nilai |
| Sample Request | {  "token":"7f4ed2e9-f606-43fb-88b5-f05d9d2598b9",  "id":null,  "studentId":24,  "subjectId":59,  "kelas":"3",  "semester":"2",  "score":90  } |
| Response sukses | {  "status": "200",  "message": "OK"  } |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/score/new "  } |

### Get All Score

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/score/all |
| Method | POST |
| Deskripsi | Untuk melihat seluruh nilai mata pelajaran |
| Sample Request | {  "token":"7f4ed2e9-f606-43fb-88b5-f05d9d2598b9"  } |
| Response sukses | [  {  "id": 270,  "subject": {  "id": 59,  "subjectName": "IPA",  "enabled": true  },  "kelas": "1",  "semester": "Semester 1",  "score": 72,  "createdAt": "11-03-2021 12:10:04",  "modifiedAt": "11-03-2021 12:10:04"  }  ] |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/ score/all "  } |

### Get Score By ID

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/score/getbyid |
| Method | POST |
| Deskripsi | Untuk melihat nilai berdasarkan id |
| Sample Request | {  "token":"7f4ed2e9-f606-43fb-88b5-f05d9d2598b9",  "id":270  } |
| Response sukses | {  "id": 270,  "subject": {  "id": 59,  "subjectName": "IPA",  "enabled": true  },  "kelas": "1",  "semester": "Semester 1",  "score": 72,  "createdAt": "11-03-2021 12:10:04",  "modifiedAt": "11-03-2021 12:10:04"  } |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/score/getbyid "  }  {  "timestamp": "11-03-2021 17:53:50",  "status": 404,  "error": "Not Found",  "message": "Data from table Score is not found with id 99",  "path": "/api/score/getbyid"  } |

### Get Failed Subject

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/score/failedsubject |
| Method | POST |
| Deskripsi | Untuk melihat nilai rata – rata yang di bawah 50 berdasarkan nama siswa dan kelas |
| Sample Request | {  "token":"7f4ed2e9-f606-43fb-88b5-f05d9d2598b9",  "name":"Murid 1",  "kelas":"1"  } |
| Response sukses | [  {  "subjectName": "IPS",  "score": 31  },  {  "subjectName": "Matematika",  "score": 34  },  {  "subjectName": "Matematika",  "score": 17  }  ] |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/score/ failedsubject "  }  {  "timestamp": "11-03-2021 17:53:50",  "status": 404,  "error": "Not Found",  "message": "Data from table Score is not found with id 99",  "path": "/api/score/ failedsubject "  } |

### Get Score Summary

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/score/summary |
| Method | POST |
| Deskripsi | Untuk melihat ringkasan berdasarkan nama murid |
| Sample Request | {  "token":"7f4ed2e9-f606-43fb-88b5-f05d9d2598b9",  "name":"Murid 1"  } |
| Response sukses | {  "name": "Murid 1",  "kelas": "1",  "subjectName": "Agama",  "score": 39  },  {  "name": "Murid 1",  "kelas": "1",  "subjectName": "Bahasa Inggris",  "score": 27  }  ] |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/score/ failedsubject "  }  {  "timestamp": "11-03-2021 17:53:50",  "status": 404,  "error": "Not Found",  "message": "Data from table Score is not found with id 99",  "path": "/api/score/ failedsubject "  } |

### Update Score

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/score/update |
| Method | POST |
| Deskripsi | Untuk update nilai |
| Sample Request | {  "token":"7f4ed2e9-f606-43fb-88b5-f05d9d2598b9",  "id":523,  "studentId":24,  "subjectId":59,  "kelas":"3",  "semester":"Semester 2",  "score":80  } |
| Response sukses | {  "status": "200",  "message": "OK"  } |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/score/update "  }  {  "timestamp": "11-03-2021 17:53:50",  "status": 404,  "error": "Not Found",  "message": "Data from table Score is not found with id 99",  "path": "/api/score/update"  } |

### Delete Score

|  |  |
| --- | --- |
| URL | http://localhost:8080/api/score/delete |
| Method | POST |
| Deskripsi | Untuk menghapus nilai |
| Sample Request | {  "token":"7f4ed2e9-f606-43fb-88b5-f05d9d2598b9",  "id":24  } |
| Response sukses | {  "status": "200",  "message": "OK"  } |
| Response eksepsi | {  "timestamp": "11-03-2021 17:17:18",  "status": 401,  "error": "Unauthorized",  "message": "you are not authorized to access this page",  "path": "/api/score/delete "  }  {  "timestamp": "11-03-2021 17:53:50",  "status": 404,  "error": "Not Found",  "message": "Data from table Student is not found with id 99",  "path": "/api/score/delete"  } |