**Configuration:**

There is a .env file in the main project directory containing these 3 elements:

PORT =3000

DB\_URL= \*\*your db url\*\*

TOKEN\_SECRET=jkbclkneuibyeruiasbeub

**How to start:**

1. When you first run the app, seeding will be done. You might need to run the app a few times for seeding to be complete.
2. Login with the email of the hr member you will find in the database and the default password “123456” and a new password { “email”: \*\*email from databse\*\*, “password”: “123456”, “newPassword”: “pass123” }
3. Use the /hr/addStaff route to add these three staff members:

{"name":"firstac",

    "gender": **true**,

    "salary": 2000,

    "email":"ac1@gmail.com",

    "day\_off":"Monday",

    "office\_location":"c1.101",

    "role1":"instructor",

    "role2":"hod",

    "faculty": "met",

    "dept\_id": "csen"}

{"name":"secondac",

    "gender": **true**,

    "salary": 2000,

    "email":"ac1@gmail.com",

    "day\_off":"Monday",

    "office\_location":"c1.101",

    "role1":"instructor",

    "faculty": "met",

    "dept\_id": "csen"

}

{"name":"thirdac",

    "gender": **true**,

    "salary": 2000,

    "email":"ac1@gmail.com",

    "day\_off":"Monday",

    "office\_location":"c1.101",

    "role1":"instructor",

    "faculty": "met",

    "dept\_id": "csen"

}

{"name":"firstta",

    "gender": **true**,

    "salary": 2000,

    "email":"ta1@gmail.com",

    "day\_off":"Monday",

    "office\_location":"c1.101",

    "role1":"instructor",

    "faculty": "met",

    "dept\_id": "csen"}

{"name":"secondta",

    "gender": **true**,

    "salary": 2000,

    "email":"ac5@gmail.com",

    "day\_off":"Monday",

    "office\_location":"c1.101",

    "role1":"ta",

    "faculty": "met",

    "dept\_id": "csen"}

1. Log in to the hod of met account {“email”: “ac1@gmail.com”, “password”: “123456” , “newPassword” : “pass123”}
2. Use the route /assignCourseInstructor to assign firstac and secondac to csen704 (preexisting course in the system)

{“instructor\_id”: \*\*firstac id from the db\*\*, “course\_id”: “csen704”}

{“instructor\_id”: \*\*secondac id from the db\*\*, “course\_id”: “csen704”}

1. Use the route /assignCourseTA to assign firstta and secondta to csen704 (preexisting course in the system)

{“ta\_id”: \*\*firstta id from the db\*\*, “course\_id”: “csen704”}

{“ta\_id”: \*\*secondta id from the db\*\*, “course\_id”: “csen704”}

ALL Staff:

Functionality: Log in with a unique email and a password.  
Route: /login  
Request type: POST   
Request body: {“email”: “ac1@gmail.com”, "password": "pass123"}  
Response: authentication token. Example: eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImhyLTEzIiwicm9sZTEiOiJociIsImlhdCI6MTYwODc1MzY5NX0.URwX7Tu4OypNMM7J0k4qDrHumFXNr7N\_E\_b3qDSMGLM

Functionality: Log out from the system.  
Route: /logout  
Request type: POST   
Request body:

**Parameters:**  
Response: confirmation message. Example: logout successful

Functionality: view their profile  
Route: /myProfile  
Request type: GET   
Request body:

**Parameters:**  
Response: name, email, day off, office location, salary, leave balance, schedule, info if available. Example: {

    "name": "firstac",

    "email": "ac1@gmail.com",

    "day\_off": "Saturday",

    "salary": 2000,

    "office": "C1.101",

    "leave\_balance": 2.5,

    "schedule": {

        "\_id": "5fe4ae51094c587050e0dd14",

        "saturday": [],

        "sunday": [{"replacement": **false**,

                "\_id": "5fe50d00071c316f0ccd146f",

                "id": 3,

                "type": "tut",

                "location\_id": "C1.101",

                "course\_id": "csen704",

                "group": "t16" },

            { "replacement": **false**,

                "\_id": "5fe50d00071c316f0ccd1470",

                "id": 3,

                "type": "tut",

                "location\_id": "C1.101",

                "course\_id": "csen704",

                "group": "t16"}],

        "monday": [],

        "tuesday": [],

        "wednesday": [],

        "thursday": []    },

    "information": "studied in some university. i love icecream"}

Functionality: Update their profile  
Route: / updateProfile  
Request type: POST   
Request body: {"info":"studied in some university. i love icecream"}

**Parameters:**  
Response: confirmation. Example:  updated profile info: studied in some university. i love icecream

Functionality: Reset their passwords  
Route: /resetPassword  
Request type: POST   
Request body: {“password”: “somepass123”}

**Parameters:**  
Response: confirmation message. Example: password reset done

Functionality: Sign in  
Route: /signIn  
Request type: POST   
Request body: {}

**Parameters:**  
Response: timestamp. Example: {"time": "2020-12-25T07:23:04.347Z"}

Functionality: Sign out  
Route: /signOut  
Request type: POST   
Request body: {}

**Parameters:**  
Response: timestamp. Example: {"time": "2020-12-25T07:23:04.347Z"}

Functionality: View all their attendance records  
Route: /viewAttendance/:month/:year  
Request type: GET   
Request body: {}

**Parameters:** viewAttendance/12/2020  
Response: attendance records array. Example: {"\_id": "5fe4ae51094c587050e0dd17",

    "staff\_id": "ac-1",

    "attendance": [ { "status": "attended",

            "missing\_hours": 30240,

            "\_id": "5fe593585449fe665cad4987",

            "day": "2020-12-25T07:23:04.347Z",

            "signs": [{"\_id": "5fe593585449fe665cad4988",

                    "signIn": "2020-12-25T07:23:04.347Z",

                    "signOut": **null**}]],

    "\_\_v": 1}

Functionality: View if they have missing days.  
Route: /viewMissingDays   
Request type: GET   
Request body: {}

**Parameters:**

Response: Records of missing days. Example: [ {"status": "missing",

        "missing\_hours": 30240,

        "\_id": "5fe593585449fe665cad4987",

        "day": "2020-12-25T07:23:04.347Z",

        "signs": [

            {"\_id": "5fe593585449fe665cad4988",

                "signIn": "2020-12-25T07:23:04.347Z",

                "signOut": **null**}]} ]

Functionality: View if they have hours or extra hours.  
Route: /viewMissingHours  
Request type: GET   
Request body: {}

**Parameters:**

Response: accumulated missing hours for the month. Example: missing hours: 7:47

**HOD:**

Functionality: Assign a course instructor for each course in his department  
Route: /assignCourseInstructor

Request type: POST   
Request body: {"instructor\_id":"ac-1","course\_id":"csen704"}

Parameters:

Response: confirmation message.

Functionality: Assign a course instructor for each course in his department  
Route: /assignCourseTA

Request type: POST   
Request body: {"ta\_id":"ac-4","course\_id":"csen704"}

Parameters:

Response: confirmation message.

Functionality: View all the staff in his/her department or per course along with their profiles.  
Route: /viewStaff  
Request type: GET   
Request body: optional {"course\_id":"csen704"}

**Parameters:**

Response: staff profiles (including their schedules). Example:

[

    {

        "first\_login": **false**,

        "day\_off": "Saturday",

        "leave\_balance": 2.5,

        "courses": [

            "csen704"

        ],

        "accidental\_leave": 0,

        "\_id": "5fe4ae51094c587050e0dd15",

        "id": "ac-1",

        "name": "firstac",

        "email": "ac1@gmail.com",

        "salary": 2000,

        "gender": **true**,

        "office\_location": "C1.101",

        "role1": "instructor",

        "faculty": "MET",

        "department": "CSEN",

        "role2": "hod",

        "schedule": {

            "\_id": "5fe4ae51094c587050e0dd14",

            "saturday": [],

            "sunday": [

                {

                    "replacement": **false**,

                    "\_id": "5fe50d00071c316f0ccd146f",

                    "id": 3,

                    "type": "tut",

                    "location\_id": "C1.101",

                    "course\_id": "csen704",

                    "group": "t16"

                },

                {

                    "replacement": **false**,

                    "\_id": "5fe50d00071c316f0ccd1470",

                    "id": 3,

                    "type": "tut",

                    "location\_id": "C1.101",

                    "course\_id": "csen704",

                    "group": "t16"

                }

            ],

            "monday": [],

            "tuesday": [],

            "wednesday": [],

            "thursday": []

        },

        "\_\_v": 2,

        "info": "studied in some university. i love icecream"

    },

    {

        "first\_login": **true**,

        "day\_off": "Saturday",

        "leave\_balance": 2.5,

        "courses": [],

        "accidental\_leave": 0,

        "\_id": "5fe4b014094c587050e0dd19",

        "id": "ac-2",

        "name": "secondac",

        "email": "ac2@gmail.com",

        "salary": 2000,

        "gender": **true**,

        "office\_location": "C1.101",

        "role1": "instructor",

        "faculty": "MET",

        "department": "CSEN",

        "role2": "",

        "schedule": {

            "\_id": "5fe4b014094c587050e0dd18",

            "saturday": [],

            "sunday": [],

            "monday": [],

            "tuesday": [],

            "wednesday": [],

            "thursday": []

        },

        "\_\_v": 0

    },

    {

        "first\_login": **true**,

        "day\_off": "Saturday",

        "leave\_balance": 2.5,

        "courses": [

            "CSEN704"

        ],

        "accidental\_leave": 0,

        "\_id": "5fe4baa767ee7670a03c04b7",

        "id": "ac-3",

        "name": "firstta",

        "email": "ta1@gmail.com",

        "salary": 2000,

        "gender": **true**,

        "office\_location": "C1.101",

        "role1": "instructor",

        "faculty": "MET",

        "department": "CSEN",

        "role2": "",

        "schedule": {

            "\_id": "5fe4baa767ee7670a03c04b6",

            "saturday": [],

            "sunday": [],

            "monday": [],

            "tuesday": [],

            "wednesday": [],

            "thursday": []

        },

        "\_\_v": 0

    },

    {

        "first\_login": **false**,

        "day\_off": "Saturday",

        "leave\_balance": 2.5,

        "courses": [

            "csen704"

        ],

        "accidental\_leave": 0,

        "\_id": "5fe4bd6d9f938f6360981ea7",

        "id": "ac-4",

        "name": "secondta",

        "email": "ta2@gmail.com",

        "salary": 2000,

        "gender": **true**,

        "office\_location": "C1.101",

        "role1": "ta",

        "faculty": "MET",

        "department": "CSEN",

        "role2": "Coordinator",

        "schedule": {

            "\_id": "5fe4bd6d9f938f6360981ea6",

            "saturday": [],

            "sunday": [],

            "monday": [],

            "tuesday": [],

            "wednesday": [],

            "thursday": []

        },

        "\_\_v": 0

    },

    {

        "first\_login": **true**,

        "day\_off": "Saturday",

        "leave\_balance": 2.5,

        "courses": [],

        "accidental\_leave": 0,

        "\_id": "5fe4dbb6bb036e7230d8d82f",

        "id": "ac-5",

        "name": "secondta",

        "email": "ac5@gmail.com",

        "salary": 2000,

        "gender": **true**,

        "office\_location": "C1.101",

        "role1": "instructor",

        "faculty": "MET",

        "department": "CSEN",

        "role2": "",

        "schedule": {

            "\_id": "5fe4dbb6bb036e7230d8d82e",

            "saturday": [],

            "sunday": [],

            "monday": [],

            "tuesday": [],

            "wednesday": [],

            "thursday": []

        },

        "\_\_v": 0

    }]

**Functionality:** View the day off of all the staff in

**Route:** /viewDayOff

**Request type:** GET **Request body:** optional{"member\_id":"ac-3"}

**Parameters:**

**Response:** list of staff members and their corresponding days off (besides Friday)**.** Example**:**

(Staff Member ID: ac-1, Day Off: Saturday)

(Staff Member ID: ac-2, Day Off: Saturday)

(Staff Member ID: ac-3, Day Off: Saturday)

(Staff Member ID: ac-4, Day Off: Saturday)

(Staff Member ID: ac-5, Day Off: Saturday)

(Staff Member ID: ac-8, Day Off: Saturday)

**or**

(Staff Member ID: ac-3, Day Off: Saturday)

**Functionality:** View all the requests \change day off/leave" sent by staff members in his/her department.

**Route:** /viewRequests

**Request type:** GET **Request body:**

**Parameters:**

**Response:** [

    {

        "replacement\_id": [],

        "status": "pending",

        "\_id": "5fe628628e12af2bc8a4717a",

        "sending\_staff": "ac-4",

        "receiving\_staff": "ac-8",

        "date\_sent": "2020-12-25T17:58:58.349Z",

        "request\_date": "2020-12-27T00:00:00.000Z",

        "request\_type": "replacement",

        "reason": "i want to take a break",

        "req\_slot": {

            "replacement": **false**,

            "\_id": "5fe628628e12af2bc8a4717b",

            "id": 2,

            "type": "tut",

            "course\_id": "CSEN704"

        },

        "course\_id": "CSEN704",

        "\_\_v": 0

    },

    {

        "replacement\_id": [],

        "status": "pending",

        "\_id": "5fe62fa2417d6c54bc3e7475",

        "sending\_staff": "ac-4",

        "receiving\_staff": "ac-8",

        "request\_type": "slot linking",

        "reason": "i want to take this slot",

        "date\_sent": "2020-12-25T18:29:54.423Z",

        "course\_id": "CSEN704",

        "req\_slot": {

            "replacement": **false**,

            "\_id": "5fe62fa2417d6c54bc3e7476",

            "id": 2,

            "type": "tut",

            "course\_id": "CSEN704",

            "date": "2020-12-27T00:00:00.000Z"

        },

        "request\_date": "2020-12-27T00:00:00.000Z",

        "\_\_v": 0

    },

    {

        "replacement\_id": [],

        "status": "pending",

        "\_id": "5fe630c4f2cab03580f7c0d5",

        "sending\_staff": "ac-4",

        "receiving\_staff": "ac-1",

        "date\_sent": "2020-12-25T18:34:44.375Z",

        "request\_type": "change day off",

        "reason": "i want to take monday off",

        "request\_date": "2020-12-27T00:00:00.000Z",

        "new\_day\_off": "monday",

        "\_\_v": 0

    },

    {

        "replacement\_id": [],

        "status": "cancelled",

        "\_id": "5fe631c2b512c7327c1c340f",

        "sending\_staff": "ac-4",

        "receiving\_staff": "ac-1",

        "request\_type": "annual",

        "reason": "i want to take a break",

        "date\_sent": "2020-12-25T18:38:58.457Z",

        "request\_date": "2020-12-27T00:00:00.000Z",

        "\_\_v": 0

    },

    {

        "replacement\_id": [],

        "status": "pending",

        "\_id": "5fe63645b512c7327c1c3419",

        "sending\_staff": "ac-4",

        "receiving\_staff": "ac-1",

        "request\_type": "sick",

        "date\_sent": "2020-12-25T18:58:13.761Z",

        "request\_date": "2020-12-27T00:00:00.000Z",

        "document": "linktodocneeded",

        "\_\_v": 0

    }

]

**Functionality:** Accept a request

**Route:** /acceptRequest

**Request type:** POST **Request body:** {"request\_id": "5fe63645b512c7327c1c3419"}

**Parameters:**

**Response:** confirmation message. Example: Request 5fe63645b512c7327c1c3419 has been successfully accepted

**Functionality:** Reject a request, and optionally leave a comment as to why this request was rejected.

**Route:** /rejectRequest

**Request type:** POST **Request body:** {"request\_id": "5fe630c4f2cab03580f7c0d5"}

**Parameters:**

**Response:** confirmation message. Example:

Request 5fe630c4f2cab03580f7c0d5 has been rejected.

**Functionality:** View the coverage of each course in his/her department.

**Route:** /viewCourseCoverage

**Request type:** GET **Request body:** {"course\_id":"csen704"}

**Parameters:**

**Response:** ratio of course slots taken by staff members**.** Example**:**

The total coverage of CSEN704 is 0.2

**Functionality:** View teaching assignments (which staff members teach which slots) of courses offered by his department **Route:** /viewTeachingAssignments

**Request type:** GET **Request body:** {"courseID":"csen704"}

**Parameters:**

**Response:** slots assigned in a course**.** Example**:**

Assignments for csen704:

[{"staff\_id":"ac-1","staff\_name":"firstac","day\_of\_week":"Sunday","assignment":{"replacement":false,"\_id":"5fe50d00071c316f0ccd146f","id":3,"type":"tut","location\_id":"C1.101","course\_id":"csen704","group":"t16"}},{"staff\_id":"ac-1","staff\_name":"firstac","day\_of\_week":"Sunday","assignment":{"replacement":false,"\_id":"5fe50d00071c316f0ccd1470","id":3,"type":"tut","location\_id":"C1.101","course\_id":"csen704","group":"t16"}}]

INSTRUCTOR

**Functionality:** View the coverage of course(s) he/she is assigned to **Route:** /instructor/viewCoverage

**Request type:** POST **Request body:** {"courseID":"csen704"}

**Parameters:**

**Response:** ratio of the course covered. Example:

The total coverage is 0.2

**Functionality:** View the slots’ assignment of course(s) he/she is assigned to.

**Route:** /instructor/viewSlots

**Request type:** POST **Request body:** {"courseID":"csen704"}

**Parameters:**

**Response:** slots in the course and whether they are taken (assigned) or not. Example:

[    {

        "taken": **false**,

        "replacement": **false**,

        "\_id": "5fe4f6d06e920c74d412f295",

        "id": 2,

        "type": "tut",

        "date": **null**,

        "location\_id": "C1.101",

        "course\_id": "csen704",

        "group": "t16",

        "day": "sunady"

    },    {

        "taken": **false**,

        "replacement": **false**,

        "\_id": "5fe4f6ff6e920c74d412f297",

        "id": 1,

        "type": "tut",

        "date": **null**,

        "location\_id": "C1.101",

        "course\_id": "csen704",

        "group": "t16",

        "day": "monday"

    },    {

        "taken": **true**,

        "replacement": **false**,

        "\_id": "5fe4f7126e920c74d412f299",

        "id": 3,

        "type": "tut",

        "date": **null**,

        "location\_id": "C1.101",

        "course\_id": "csen704",

        "group": "t16",

        "day": "sunday"

    },    {

        "taken": **true**,

        "replacement": **false**,

        "\_id": "5fe4f7166e920c74d412f29b",

        "id": 3,

        "type": "tut",

        "date": **null**,

        "location\_id": "C1.101",

        "course\_id": "csen704",

        "group": "t16",

        "day": "sunday"

    },    {

        "taken": **false**,

        "replacement": **false**,

        "\_id": "5fe4f77d6e920c74d412f29d",

        "id": 3,

        "type": "lecture",

        "date": **null**,

        "location\_id": "C1.101",

        "course\_id": "csen704",

        "group": "t16",

        "day": "wednesday"

    }]

**Functionality:** View all the staff in his/her department along with their profiles.

**Route:** /instructor/viewProfilesDepartment

**Request type:** POST **Request body:**

**Parameters:**

**Response:** instructor profiles for all instructors in that department. Example:

[    {        "name": "firstac",

        "email": "ac1@gmail.com",

        "office\_location": "C1.101",

        "role1": "instructor",

        "role2": "hod",

        "courses": ["csen704"],

        "day\_off": "Saturday",

        "info": "studied in some university. i love icecream"    },

    {"name": "secondac",

        "email": "ac2@gmail.com",

        "office\_location": "C1.101",

        "role1": "instructor",

        "role2": "",

        "courses": [],

        "day\_off": "Saturday"    },

    {        "name": "firstta",

        "email": "ta1@gmail.com",

        "office\_location": "C1.101",

        "role1": "instructor",

        "role2": "",

        "courses": ["CSEN704"],

        "day\_off": "Saturday"},

    {        "name": "secondta",

        "email": "ta2@gmail.com",

        "office\_location": "C1.101",

        "role1": "ta",

        "role2": "Coordinator",

        "courses": ["csen704"],

        "day\_off": "Saturday"    },

    {        "name": "secondta",

        "email": "ac5@gmail.com",

        "office\_location": "C1.101",

        "role1": "instructor",

        "role2": "",

        "courses": [],

        "day\_off": "Saturday"    },

    { "name": "thirdta",

        "email": "ta3@gmail.com",

        "office\_location": "C1.101",

        "role1": "ta",

        "role2": "",

        "courses": [],

        "day\_off": "Saturday"    }]

**Functionality:** View all the staff in his/her course along with their profiles.

**Route:** /instructor/viewProfilesCourse

**Request type:** POST **Request body:** {"courseID":"csen704"}

**Parameters:**

**Response:** instructor profiles for all instructors teaching that course. Example:

[    {        "name": "firstac",

        "email": "ac1@gmail.com",

        "office\_location": "C1.101",

        "role1": "instructor",

        "role2": "hod",

        "courses": ["csen704"],

        "day\_off": "Saturday",

        "info": "studied in some university. i love icecream"    },

    {        "name": "secondta",

        "email": "ta2@gmail.com",

        "office\_location": "C1.101",

        "role1": "ta",

        "role2": "Coordinator",

        "courses": ["csen704"],

        "day\_off": "Saturday"    }]

**Functionality:** Assign an academic member to an unassigned slots in course(s) he/she is assigned to.

**Route:** /instructor/assignToSlot

**Request type:** POST **Request body:** {"memID":"ac-4", "courseID":"csen704","id":2,"type":"tut","date":"",

"location\_id":"C1.101","course\_id":"CSEN704","group":"t16","day":"sunday"}

**Parameters:**

**Response:** confirmation or error message. Example:

Added Successfully

**Or**

The TA isn't free in this slot

**Functionality:** Update assignment of academic member in course(s) he/she is assigned to.

**Route:** /instructor/updateCourseMem

**Request type:** POST **Request body:** {"memID":"ac-4","courseID":"CSEN704", "targetCourseID":"csen103"}

**Parameters:**

**Response:** confirmation message

**Functionality:** delete assignment of academic member in course(s) he/she is assigned to.

**Route:** /instructor/deleteCourseMem

**Request type:** POST **Request body:** {"memID":"ac-4","courseID":"csen103"}

**Parameters:**

**Response:** confirmation message

**Functionality:** Remove an assigned academic member in course(s) he/she is assigned to

**Route:** /instructor/removeCourseMem

**Request type:** POST **Request body:** {"memID":"ac-4","courseID":"csen103"}

**Parameters:**

**Response:** confirmation message

**Functionality:** Assign an academic member in each of his/her course(s) to be a course coordinator.

**Route:** /instructor/assignCoordinator

**Request type:** POST **Request body:** {"memID":"ac-4", "courseID":"csen704"}

**Parameters:**

**Response:** confirmation message. Example: Updated the role successfully!

HR

**Functionality:** Add a location **Route:** /hr/addLocation

**Request type:** POST **Request body:** {"location\_id": "c3.102","location\_type":"tutorial","location\_capacity":25}

**Parameters:**

**Response:** confirmation and the new entry made. Example:

added : {

taken: 0,

\_id: 5fe5c1693bebcd205c27a53d,

id: 'c3.102',

type: 'tutorial',

\_\_v: 0}

**Functionality:** Update a location **Route:** /hr/addLocation

**Request type:** POST **Request body:** {"loc\_id": "c3.102","location\_type":"hall","capacity":35}

**Parameters:**

**Response:** confirmation and the updated entry. Example:

updated to: {

taken: 0,

\_id: 5fe5c1693bebcd205c27a53d,

id: 'c3.102',

type: 'hall',

\_\_v: 0,

capacity: 35}

**Functionality:** delete a location **Route:** /hr/deleteLocation

**Request type:** POST **Request body:** {"loc\_id": "c3.102"}

**Parameters:**

**Response:** confirmation and the updated entry. Example:

deleted : {

taken: 0,

\_id: 5fe5c1693bebcd205c27a53d,

id: 'c3.102',

type: 'hall',

\_\_v: 0,

capacity: 35}

**Functionality:** add a faculty **Route:** /hr/addFaculty

**Request type:** POST **Request body:** {"name":"iet","dep\_id":"netw", "dep\_name":"networks","course\_id":"netw101"}

**Parameters:**

**Response:** confirmation and the added entry. Example:

added : {\_id: 5fe5c72375c0985e105c0ef6,

name: 'iet',

departments: [

{\_id: 5fe5c72375c0985e105c0ef7,

id: 'netw',

name: 'networks',

courses: [Array]

}],\_

\_v: 0}

**Functionality:** update a faculty (change its name) **Route:** /hr/updateFaculty

**Request type:** POST **Request body:**  {"faculty\_name":"iet", "faculty\_name\_update":"iet2"}

**Parameters:**

**Response:** confirmation and the updated entry. Example:

updated to: {\_id: 5fe5c72375c0985e105c0ef6,

name: 'iet2',

departments: [

{\_id: 5fe5c72375c0985e105c0ef7,

id: 'netw',

name: 'networks',

courses: [Array]

}],

\_\_v: 4}

**Functionality:** delete a faculty **Route:** /hr/deleteFaculty

**Request type:** POST **Request body:**  {"faculty\_name":"iet2"}

**Parameters:**

**Response:** confirmation and the updated entry. Example:

deleted : {\_id: 5fe5c72375c0985e105c0ef6,

name: 'iet2',

departments: [{\_id: 5fe5c72375c0985e105c0ef7,

id: 'netw',

name: 'networks',

courses: [Array]}],\_\_v: 4}

**Functionality:** add a department under a faculty **Route:** /hr/adddepartment

**Request type:** POST **Request body:** {"faculty\_name":"iet","id":"elct", "name":"electricity","course\_id":"elct101"}

**Parameters:**

**Response:** confirmation and the added entry. Example:

added : {\_id: 5fe5c89b75c0985e105c0ef9,

id: 'elct',

name: 'electricity',

courses: [

{coverage: 1,

instructor\_ids: [],

academic\_member\_ids: [],

\_id: 5fe5c89b75c0985e105c0efa,

id: 'elct101',

course\_schedule: []}]}

**Functionality:** update a department under a faculty (change head id or department name) **Route:** /hr/updateDepartment

**Request type:** POST **Request body:** { "faculty\_name":"iet","dep\_id":"elct" ,"head\_id":"ac-5","name":"elct2" }

**Parameters:**

**Response:** confirmation and the updated entry. Example:

updated to: {\_id: 5fe5c89b75c0985e105c0ef9,

id: 'elct',

name: 'elct2',

courses: [

{coverage: 1,

instructor\_ids: [],

academic\_member\_ids: [],

\_id: 5fe5c89b75c0985e105c0efa,

id: 'elct101',

course\_schedule: []}],

head\_id: 'ac-5'}

**Functionality:** delete a department under a faculty  **Route:** /hr/deleteDepartment

**Request type:** POST **Request body:** { "faculty\_name":"iet","dep\_id":"elct"}

**Parameters:**

**Response:** confirmation and the removed entry. Example:

deleted : {\_id: 5fe5c89b75c0985e105c0ef9,

id: 'elct',

name: 'elct2',

courses: [{coverage: 1,

instructor\_ids: [],

academic\_member\_ids: [],

\_id: 5fe5c89b75c0985e105c0efa,

id: 'elct101',

course\_schedule: []}],

head\_id: 'ac-5'}

**Functionality:** add a course under a department  **Route:** /hr/addCourse

**Request type:** POST **Request body:** {"faculty\_name":"iet","dep\_id":"elct", "id":"circ101","credit\_hours":6,"coverage":20}

**Response:** confirmation and the department with the new course shown. Example:

added : {\_id: 5fe5c89b75c0985e105c0ef9,

id: 'elct',

name: 'electricity',

courses: [{

coverage: 1,

instructor\_ids: [],

academic\_member\_ids: [],

\_id: 5fe5c89b75c0985e105c0efa,

id: 'elct101',

course\_schedule: []},

{coverage: 20,

instructor\_ids: [],

academic\_member\_ids: [],

\_id: 5fe5d03275c0985e105c0efb,

id: 'circ101',

credit\_hours: 6,

coordinator\_id: '',

course\_schedule: []}]}

**Functionality:** update a course under a department (change its credit hours) **Route:** /hr/updateCourse

**Request type:** POST **Request body:** {"faculty\_name":"iet", "dep\_id":"elct","course\_id":"circ101","credit\_hours":8}

**Response:** confirmation and the department with the updated course shown. Example:

updated to: {

\_id: 5fe5c89b75c0985e105c0ef9,

id: 'elct',

name: 'electricity',

courses: [

{coverage: 1,

instructor\_ids: [],

academic\_member\_ids: [],

\_id: 5fe5c89b75c0985e105c0efa,

id: 'elct101',

course\_schedule: []

},

{coverage: 20,

instructor\_ids: [],

academic\_member\_ids: [],

\_id: 5fe5d03275c0985e105c0efb,

id: 'circ101',

credit\_hours: 8,

coordinator\_id: '',

course\_schedule: []}]}

**Functionality:** delete a course under a department

**Route:** /hr/deletecourse

**Request type:** POST **Request body:** {"faculty\_name":"iet", "dep\_id":"elct","course\_id":"circ101"}

**Response:** confirmation and the deleted course shown. Example:

deleted : {

coverage: 20,

instructor\_ids: [],

academic\_member\_ids: [],

\_id: 5fe5d03275c0985e105c0efb,

id: 'circ101',

credit\_hours: 8,

coordinator\_id: '',

course\_schedule: []

}

**Functionality:** HR can add a new staff member to the system

**Route:** /hr/addStaff

**Request type:** POST **Request body:** {"name":"thirdta",

    "gender":**false**,

    "salary":6000,

    "office\_location":"C1.101",

    "role1":"ta",

    "faculty":"MET",

    "dept\_id":"CSEN",

    "email":"ta3@gmail.com",

    "password":"pass123"}

**Parameters:**

**Response:** confirmation and the new entry made. Example:

added : {

first\_login: true,

day\_off: 'Saturday',

leave\_balance: 2.5,

courses: [],

accidental\_leave: 0,

\_id: 5fe5bf863bebcd205c27a53a,

id: 'ac-8',

name: 'thirdta',

email: 'ta3@gmail.com',

salary: 6000,

gender: false,

office\_location: 'C1.101',

password: '$2b$10$E30o3IU5Qc1cRCjofvviB.nZU8G5mhMiIybZlRNu8rMo5xyAE2QkO',

role1: 'ta',

faculty: 'MET',

department: 'CSEN',

role2: '',

schedule: {

\_id: 5fe5bf863bebcd205c27a539,

saturday: [],

sunday: [],

monday: [],

tuesday: [],

wednesday: [],

thursday: []

},

\_\_v: 0}

**Functionality:** Update already existing staff members.

**Route: /**hr/updatestaff

**Request type:** POST

**Request body:** {"id":"ac-8", "role1":"instructor","office\_location":"C1.101"}

**Response:** confirmation message

**Functionality:** delete already existing staff members.

**Route:** /hr/deletestaff

**Request type:** POST **Request body:** {"id":"ac-8"}

**Response:** confirmation message

**Functionality:** Manually add a missing sign in record of a staff member except for himself/herself

**Route:** /hr/addmissingSignIn

**Request type:** POST **Request body:** { "id":"ac-1",   "signIn": "2020-12-25T07:23:04.347+00:00"}

**Response:** confirmation message

**Functionality:** Manually add a missing sign out record of a staff member except for himself/herself

**Route:** /hr/addmissingSignOut

**Request type:** POST **Request body:** { "id":"ac-1",   "signOut": "2020-12-25T07:59:04.347+00:00"}

**Response:** confirmation message

**Functionality:** View any staff member attendance record.

**Route: /**hr/viewattendanceRec

**Request type:** GET **Request body:** {"id":"ac-1"}

**Response:** attendance records of given staff member. Example:

[ {        "status": "attended",

        "missing\_hours": 28072.207,

        "\_id": "5fe593585449fe665cad4987",

        "day": "2020-12-25T07:23:04.347Z",

        "signs": [

            {"\_id": "5fe59bd0cc444b3a884b7d45",

                "signIn": "2020-12-25T07:23:04.347Z",

                "signOut": "2020-12-25T07:59:12.140Z"}

        ]    }]

**Functionality:** View staff members with missing hours

**Route:** /hr/viewStaffmemberMissinghours

**Request type:** POST **Request body:**

**Response:** ids of staff members with missing hours. Example: [ "ac-1" ]

**Functionality:** View staff members with missing days

**Route:** /hr/viewStaffmemberMissingdays

**Request type:** POST **Request body:**

**Response:** ids of staff members with missing days. Example: [ "ac-1" ]

**Functionality:** Update the salary of a staff member.

**Route:** /hr/updateSalary

**Request type:** POST **Request body:** {"id":"ac-1", "salary":700000000}

**Response:** confirmation message. Example: salary updated successfully

Academic Member:

Functionality: View their schedule.  
Route: /academicMember/viewSchedule   
Request type: GET   
Request body:

**Parameters:**  
Response: { "error": "Here is your schedule with all your teaching activities.",

    "schedule": {

        "\_id": "5fe4bd6d9f938f6360981ea6",

        "saturday": [],

        "sunday": [

            {   "replacement": **false**,

                "\_id": "5fe6261130dbaf67b8607bdb",

                "id": 2,

                "type": "tut",

                "location\_id": "C1.101",

                "course\_id": "CSEN704",

                "group": "t16"            }        ],

        "monday": [  {

                "replacement": **false**,

                "\_id": "5fe6263130dbaf67b8607bde",

                "id": 1,

                "type": "tut",

                "location\_id": "C1.101",

                "course\_id": "CSEN704",

                "group": "t16"}        ],

        "tuesday": [],

        "wednesday": [],

        "thursday": []    }}

Functionality: view sent replacement requests  
Route: /academicMember/viewSendReplacementRequest

Request type: GET   
Request body:

**Parameters:**  
Response: {

    "error": "Here are all your send replacements requests.",

    "requests": [

        {            "replacement\_id": [],

            "status": "pending",

            "\_id": "5fe628628e12af2bc8a4717a",

            "sending\_staff": "ac-4",

            "receiving\_staff": "ac-8",

            "date\_sent": "2020-12-25T17:58:58.349Z",

            "request\_date": "2020-12-27T00:00:00.000Z",

            "request\_type": "replacement",

            "reason": "i want to take a break",

            "req\_slot": {

                "replacement": **false**,

                "\_id": "5fe628628e12af2bc8a4717b",

                "id": 2,

                "type": "tut",

                "course\_id": "CSEN704"

            },

            "course\_id": "CSEN704",

            "\_\_v": 0        }    ]}

Functionality: view recieved replacement requests  
Route: /academicMember/viewReceivedReplacementRequest  
Request type: PUT   
Request body: {"request\_id":"5fe628628e12af2bc8a4717b","req\_status": "accepted"} (optional)

**Parameters:**  
Response: {

    "error": "Here are all your received replacements requests.",

    "requests": [

        {"replacement\_id": [],

            "status": "pending",

            "\_id": "5fe628628e12af2bc8a4717a",

            "sending\_staff": "ac-4",

            "receiving\_staff": "ac-8",

            "date\_sent": "2020-12-25T17:58:58.349Z",

            "request\_date": "2020-12-27T00:00:00.000Z",

            "request\_type": "replacement",

            "reason": "i want to take a break",

            "req\_slot": {

                "replacement": **false**,

                "\_id": "5fe628628e12af2bc8a4717b",

                "id": 2,

                "type": "tut",

                "course\_id": "CSEN704"

            },

            "course\_id": "CSEN704",

            "\_\_v": 0        }    ]}

Functionality: send replacement requests  
Route: /academicMember/SendReplacementRequest  
Request type: POST   
Request body: {

"receiving\_staff":"ac-8",

"request\_date":"2020-12-27",

"reason":"i want to take a break",

"course\_id":"csen704",

"req\_slot":{"id":2,"type":"tut","course\_id":"csen704"} }

**Parameters:**  
Response: confirmation message

Functionality: send a slot linking request   
Route: /academicMember/slotLinkingRequest   
Request type: POST   
Request body: {

"request\_date":"2020-12-27",

"reason":"i want to take this slot",

"course\_id":"CSEN704",

"req\_slot":{"id":"2","type":"tut","course\_id":"CSEN704","date":"2020-12-27"}

}

**Parameters:**  
Response: confirmation message

Functionality: send a request to change day off    
Route: /academicMember/changeDayOff  
Request type: PUT   
Request body: {

"request\_date":"2020-12-27",

"reason":"i want to take monday off",

"new\_day\_off":"monday"

}

**Parameters:**  
Response: confirmation message

Functionality: send a leave request  
Route: /academicMember/sendLeaveRequest   
Request type: POST   
Request body:

Annual:

{

"request\_date":"2020-12-27",

"reason":"i want to take an annual leave",

"replacement\_id":["ac-8"], (optional field, only if there is already an accepted replacement)

"request\_type":"annual"

}

**Or**

{

"request\_date":"2020-12-27",

"request\_type":"sick",

"document":"linktodocneeded"

}

**Or**

{

"request\_date":"2020-12-27",

"request\_type":"accidental"

}

**OR**

{

"request\_date":"2020-12-27",

"request\_type":"maternity",

"document":"linktodocumentneeded"

}

**Or**

{

"request\_date":"2020-12-26",

"reason":"i want to take a break",

"request\_type":"compensation",

"compensation\_date":"2020-12-28"

}

**Parameters:**  
Response: confirmation message

Functionality: View the status of all submitted requests.

Route: /academicMember/viewAllRequests

Request type: GET   
Request body:

**Parameters:**  
Response: {

    "error": "These are all your submitted requests.",

    "requests": [

        {

            "replacement\_id": [],

            "status": "pending",

            "\_id": "5fe628628e12af2bc8a4717a",

            "sending\_staff": "ac-4",

            "receiving\_staff": "ac-8",

            "date\_sent": "2020-12-25T17:58:58.349Z",

            "request\_date": "2020-12-27T00:00:00.000Z",

            "request\_type": "replacement",

            "reason": "i want to take a break",

            "req\_slot": {

                "replacement": **false**,

                "\_id": "5fe628628e12af2bc8a4717b",

                "id": 2,

                "type": "tut",

                "course\_id": "CSEN704"

            },

            "course\_id": "CSEN704",

            "\_\_v": 0

        },

        {

            "replacement\_id": [],

            "status": "accepted",

            "\_id": "5fe62fa2417d6c54bc3e7475",

            "sending\_staff": "ac-4",

            "receiving\_staff": "ac-8",

            "request\_type": "slot linking",

            "reason": "i want to take this slot",

            "date\_sent": "2020-12-25T18:29:54.423Z",

            "course\_id": "CSEN704",

            "req\_slot": {

                "replacement": **false**,

                "\_id": "5fe62fa2417d6c54bc3e7476",

                "id": 2,

                "type": "tut",

                "course\_id": "CSEN704",

                "date": "2020-12-27T00:00:00.000Z"

            },

            "request\_date": "2020-12-27T00:00:00.000Z",

            "\_\_v": 0

        },

        {

            "replacement\_id": [],

            "status": "rejected",

            "\_id": "5fe630c4f2cab03580f7c0d5",

            "sending\_staff": "ac-4",

            "receiving\_staff": "ac-1",

            "date\_sent": "2020-12-25T18:34:44.375Z",

            "request\_type": "change day off",

            "reason": "i want to take monday off",

            "request\_date": "2020-12-27T00:00:00.000Z",

            "new\_day\_off": "monday",

            "\_\_v": 0

        },

        {

            "replacement\_id": [],

            "status": "cancelled",

            "\_id": "5fe631c2b512c7327c1c340f",

            "sending\_staff": "ac-4",

            "receiving\_staff": "ac-1",

            "request\_type": "annual",

            "reason": "i want to take a break",

            "date\_sent": "2020-12-25T18:38:58.457Z",

            "request\_date": "2020-12-27T00:00:00.000Z",

            "\_\_v": 0

        },

        {

            "replacement\_id": [],

            "status": "accepted",

            "\_id": "5fe63645b512c7327c1c3419",

            "sending\_staff": "ac-4",

            "receiving\_staff": "ac-1",

            "request\_type": "sick",

            "date\_sent": "2020-12-25T18:58:13.761Z",

            "request\_date": "2020-12-27T00:00:00.000Z",

            "document": "linktodocneeded",

            "\_\_v": 0

        }

    ]

}

Functionality: View the of their accepted submitted requests.

Route: /academicMember/viewAcceptedRequests

Request type: GET   
Request body:

**Parameters:**  
Response: {

    "error": "These are all your accepted requests.",

    "requests": [

        {

            "replacement\_id": [],

            "status": "accepted",

            "\_id": "5fe62fa2417d6c54bc3e7475",

            "sending\_staff": "ac-4",

            "receiving\_staff": "ac-8",

            "request\_type": "slot linking",

            "reason": "i want to take this slot",

            "date\_sent": "2020-12-25T18:29:54.423Z",

            "course\_id": "CSEN704",

            "req\_slot": {

                "replacement": **false**,

                "\_id": "5fe62fa2417d6c54bc3e7476",

                "id": 2,

                "type": "tut",

                "course\_id": "CSEN704",

                "date": "2020-12-27T00:00:00.000Z"

            },

            "request\_date": "2020-12-27T00:00:00.000Z",

            "\_\_v": 0

        },

        {

            "replacement\_id": [],

            "status": "accepted",

            "\_id": "5fe63645b512c7327c1c3419",

            "sending\_staff": "ac-4",

            "receiving\_staff": "ac-1",

            "request\_type": "sick",

            "date\_sent": "2020-12-25T18:58:13.761Z",

            "request\_date": "2020-12-27T00:00:00.000Z",

            "document": "linktodocneeded",

            "\_\_v": 0

        }

    ]

}

Functionality: View the of their rejected submitted requests.

Route: /academicMember/viewRejectedRequest

Request type: GET   
Request body:

**Parameters:**  
Response: {

    "error": "These are all your rejected requests.",

    "requests": [

        {

            "replacement\_id": [],

            "status": "rejected",

            "\_id": "5fe630c4f2cab03580f7c0d5",

            "sending\_staff": "ac-4",

            "receiving\_staff": "ac-1",

            "date\_sent": "2020-12-25T18:34:44.375Z",

            "request\_type": "change day off",

            "reason": "i want to take monday off",

            "request\_date": "2020-12-27T00:00:00.000Z",

            "new\_day\_off": "monday",

            "\_\_v": 0

        }

    ]

}

Functionality: View the of their pending submitted requests.

Route: /academicMember/viewPendingRequest

Request type: GET   
Request body:

**Parameters:**  
Response: {

    "error": "These are all your pending requests.",

    "requests": [

        {

            "replacement\_id": [],

            "status": "pending",

            "\_id": "5fe628628e12af2bc8a4717a",

            "sending\_staff": "ac-4",

            "receiving\_staff": "ac-8",

            "date\_sent": "2020-12-25T17:58:58.349Z",

            "request\_date": "2020-12-27T00:00:00.000Z",

            "request\_type": "replacement",

            "reason": "i want to take a break",

            "req\_slot": {

                "replacement": **false**,

                "\_id": "5fe628628e12af2bc8a4717b",

                "id": 2,

                "type": "tut",

                "course\_id": "CSEN704"

            },

            "course\_id": "CSEN704",

            "\_\_v": 0

        },

        {

            "replacement\_id": [],

            "status": "pending",

            "\_id": "5fe62fa2417d6c54bc3e7475",

            "sending\_staff": "ac-4",

            "receiving\_staff": "ac-8",

            "request\_type": "slot linking",

            "reason": "i want to take this slot",

            "date\_sent": "2020-12-25T18:29:54.423Z",

            "course\_id": "CSEN704",

            "req\_slot": {

                "replacement": **false**,

                "\_id": "5fe62fa2417d6c54bc3e7476",

                "id": 2,

                "type": "tut",

                "course\_id": "CSEN704",

                "date": "2020-12-27T00:00:00.000Z"

            },

            "request\_date": "2020-12-27T00:00:00.000Z",

            "\_\_v": 0

        },

        {

            "replacement\_id": [],

            "status": "pending",

            "\_id": "5fe630c4f2cab03580f7c0d5",

            "sending\_staff": "ac-4",

            "receiving\_staff": "ac-1",

            "date\_sent": "2020-12-25T18:34:44.375Z",

            "request\_type": "change day off",

            "reason": "i want to take monday off",

            "request\_date": "2020-12-27T00:00:00.000Z",

            "new\_day\_off": "monday",

            "\_\_v": 0

        },

        {

            "replacement\_id": [],

            "status": "pending",

            "\_id": "5fe631c2b512c7327c1c340f",

            "sending\_staff": "ac-4",

            "receiving\_staff": "ac-1",

            "request\_type": "annual",

            "reason": "i want to take a break",

            "date\_sent": "2020-12-25T18:38:58.457Z",

            "request\_date": "2020-12-27T00:00:00.000Z",

            "\_\_v": 0

        }

    ]

}

Functionality: Cancel a still pending request or a request whose day is yet to come.

Route: /academicMember/cancelRequest

Request type: PUT   
Request body: {"request\_id":"5fe631c2b512c7327c1c340f"}

**Parameters:**  
Response: confirmation message. Example: {

    "error": "your request has been cancelled"

}

Academic Coordinator:

Functionality: View “slot linking" request(s) from academic members linked to his/her course.

Route: /coordinator/viewSlotLinkingRequests

Request type: GET   
Request body:

**Parameters:**  
Response: a list of all slot linking requests from other academic members in that course

[    {    "replacement\_id": [],

        "status": "pending",

        "\_id": "5fe62fa2417d6c54bc3e7475",

        "sending\_staff": "ac-4",

        "receiving\_staff": "ac-8",

        "request\_type": "slot linking",

        "reason": "i want to take this slot",

        "date\_sent": "2020-12-25T18:29:54.423Z",

        "course\_id": "CSEN704",

        "req\_slot": {

            "replacement": **false**,

            "\_id": "5fe62fa2417d6c54bc3e7476",

            "id": 2,

            "type": "tut",

            "course\_id": "CSEN704",

            "date": "2020-12-27T00:00:00.000Z"

        },

        "request\_date": "2020-12-27T00:00:00.000Z",

        "\_\_v": 0}]

Functionality: Accept “slot linking" requests from academic members linked to his/her course

Route: /coordinator/acceptSlotLinkingRequests

Request type: POST   
Request body: {"request\_id":"5fe62fa2417d6c54bc3e7475"}

**Parameters:**  
Response: confirmation message. Example:Request 5fe62fa2417d6c54bc3e7475 has been successfully accepted.

Functionality: reject “slot linking" requests from academic members linked to his/her course

Route: /coordinator/rejectSlotLinkingRequest

Request type: POST   
Request body: {"request\_id":"5fe62fa2417d6c54bc3e7475"}

**Parameters:**  
Response: confirmation message. Example:

Request 5fe62fa2417d6c54bc3e7475 has been rejected

Functionality: Add course slot(s) in his/her course

Route: /coordinator/addSlots

Request type: POST   
Request body: {

"id":5,

"type":"lecture",

"date":"",

"location\_id":"C1.101",

"courseID":"csen704",

"group":"t16",

"day":"tuesday"

}

**Parameters:**  
Response: confirmation message

Functionality: update course slot(s) in his/her course

Route: /coordinator/updateSlot

Request type: POST   
Request body: {

"id":5,

"type":"tutorial",

"date":"",

"location\_id":"C1.101",

"course\_id":"CSEN704",

"group":"t16",

"day":"tuesday"}

**Parameters:**  
Response:confirmation message

Functionality: delete course slot(s) in his/her course

Route: /coordinator/deleteSlot

Request type: POST   
Request body: {

"id":5,

"type":"tutorial",

"date":"",

"location\_id":"C1.101",

"course\_id":"CSEN704",

"group":"t16",

"day":"tuesday"}

**Parameters:**  
Response: confirmation message