

# ASSIGNMENT

Node JS

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Nagarro campus learning program

### **NPM Packages used: -**

- Express
- Body-parser
- Mongoose
- mongoDB
- errors (Error and response codes)
- Winston (Logging)

### **File Structure: -**

- .git
- .idea
- Models
  - Company.js
  - Registration.js
  - Student.js
- Node\_modules
- 2 git files
- App.js (Entry point to the application)
- AppLog.log (for logging)
- Package

**App runs on :-** <http://localhost:3000>

### **Errors: -**

- E1 - FailedNameValidation: Invalid Name
  - Valid Name is between the length of 2 – 70
- E2 - FailedDepartmentValidation: Invalid Department
  - Valid Department are cse, ece, eee, me, cv
- E3 - FailedRollnoValidation: Invalid RollNo
  - Valid Integer is a rollno
- E4 - FailedCGPAValidation: Invalid CGPA
  - Valid cgpa is between 0.1 – 10.0
- E5 - RequiredFieldNotSet: Some filed is missing
- E6 - FailedDateValidation: Date is not Valid
  - Valid date format is MM-DD-YYYY
- E7 - FailedMongoldValidation : Invalid MongoID

## Get Functions:

- /: Welcome Screen
- /api/students: To get the list of students
- /api/companies: To get the list of companies
- /api/registrations: to get the list of registrations

## Post Functions:

- /api/students/add: To add students in the database
  - Required schema:
    - Name: String with length between 2 - 70
    - Department: String from the list of cse, ece, eee, me, cv
    - Rollno: Int
    - Cgpa: Float between 0.1 – 10.0
  - Ex: -

```
{  
  "name": "Jatin",  
  "department": "CSE",  
  "rollno": "3",  
  "cgpa": "6"  
}
```
  - Errors possible: E1, E2, E3, E4, E5
- /api/companies/add: To add companies in the database
  - Required schema: -
    - Name: String with length between 2 - 70
    - Date\_of\_placement: String in format MM-DD-YYYY after the today's date
  - Ex: -

```
{  
  "name": "Nagarro",  
  "date_of_Placement": "04-28-2017",  
}
```
  - Errors possible: E1, E5, E6.
- /api/students/update: To update students in the database
  - Parameters (At least one): -

- Id=mongold
- Name=string
- Department=string from cse, ece, eee, me, cv
- Cgpa=float between 0.1 – 10.0
- Rollno=integer

Ex: - localhost:3000/api/students/update?name=Jatin

- Required schema (At least one): -
  - Name: String with length between 2 - 70
  - Department: String from the list of cse, ece, eee, me, cv
  - Rollno: Int
  - Cgpa: Float between 0.1 – 10.0

Ex: -

```
{
  "name": "Jatin",
  "department": "CSE",
  "rollno": "3",
  "cgpa": "6"
}
```

- Errors possible: E1, E2, E3, E4, E5, E7
- /api/students/register: To register students for company in the database
  - Parameters: -
    - sld=mongold of a student
    - cld=mongold of a company

ex: localhost:3000/api/students/update?sld=id&cld=id
  - Errors possible: E5, E7

## Delete Functions:

- /api/students/remove: To remove students from the database
  - Parameters (At least one): -
    - Id=mongold
    - Name=string
    - Department=string from cse, ece, eee, me, cv
    - Cgpa=float between 0.1 – 10.0
    - Rollno=integer

Ex: - localhost:3000/api/students/remove?name=Jatin

- Errors Possible: E1, E2, E3, E4, E5, E7
- /api/companies/remove: To remove company from the database and if some students have registered with the company to be removed, registration shall also be deleted.
  - Parameters: -
    - Id=mongoldEx: - localhost:3000/api/companies/remove?id=id
  - Errors Possible: E5, E7
- /api/students/unregister: To unregister students from placement of a specific company from the database
  - Parameters: -
    - sId=mongold of a student
    - cId=mongold of a companyEx: localhost:3000/api/students/update?sId=id&cId=id
  - Errors possible: E5, E7