

<http://localhost:3030/api/accounts/signup>

For SignUp -> Post method -> Body -> x-www-form-urlencoded

2-

```
{  
  email: negin@gmail.com  
  password: abc123  
  name: negin mortazavi  
}
```

3-

```
{  
  email: alex@gmail.com  
  password: alex123  
  name: Alex  
}
```

4-

```
{  
  email: emy@gmail.com  
  password: emy123  
  name: Emy  
}
```

5-

```
{  
  email: christine@yahoo.com  
  password: christine_1  
  name: Christine  
}
```

6-

```
{  
  email: web@development.com
```

```
password: cs5610
name: Web Project
}
```

7-

```
{
  email: john@husky.neu.edu
  password: 9876
  name: John Smith
}
```

8-

```
{
  email: phil@outlook.com
  password: !ab492
  name: Philip Gust
}
```

9-

```
{
  email: course@outlook.com
  password: course
  name: Negin Alex Christine
}
```

10-

```
{
  email: peter@outlook.com
  password: 1p2e3t4e5r
  name: Peter Johnson
}
```

<http://localhost:3030/api/accounts/login>

For Login -> Post method -> Body -> x-www-form-urlencoded

1-

email: negin@gmail.com

since it is in database, you will receive:

2-
email: negin1@gmail.com
password: abc123

since email is wrong you will receive:

3-
email: negin1@gmail.com
password: abc1234

since password is wrong, you will receive:

http://localhost:3030/api/accounts/profile

for retrieving the profile:

GET method -> Headers ->

Authorization: provide the token from one of the users

Body -> x-www-form-urlencoded

email: **negin@gmail.com**

password: abc123

then it will give you the following:

```
{
  "success": true,
  "user": {
    "address": {
      "city": "awsome",
      "country": "USA",
      "state": "CA"
    },
    "created": "2018-04-13T04:51:42.558Z",
    "_id": "5ad0375ed7ae131576fed957",
    "name": "negin mortazavi",
    "email": "negin@gmail.com",
    "password":
"$2a$10$LVdFAwJucwtJkbtIUB.v..AjGXEvxDBq1CR21cviwZX9uSo4AbT.",
    "picture": "https://gravatar.com/avatar/
4adcca49b3b1e5a08ac202f5d5a9e688?s200&d=retro",
    "__v": 0
  },
  "message": "Successful"
}
```

if you do not provide the token:

```
{
  "success": false,
  "message": "No token provided"
}
```

and if the token you provided is wrong or the user with that token is not in database:

```
{
  "success": false,
  "message": "Failed to authenticate token"
```

```
}
```

- - - - -

for editing the profile:

Post method -> Headers ->

Authorization: provide the token from one of the users

Body -> x-www-form-urlencoded

```
{
  email: abc@gmail.com
  password: abc123
  name: mr ABC
}
```

then you will get:

```
{
  "success": true,
  "message": "You successfully edited your profile"
}
```

if you do not provide token:

```
{
  "success": false,
  "message": "No token provided"
}
```

For retrieving the semesters

<http://localhost:3030/api/semesters>

GET Method -> no need for token

```
{
  "success": true,
  "message": "Success",
  "semesters": [
    {
      "created": "2018-04-14T20:39:22.422Z",
      "_id": "5ad266fa13baf31f6bbfaee9",

```

```
"name": "Spring 2018",
"__v": 0
},
{
  "created": "2018-04-14T20:41:00.225Z",
  "_id": "5ad2675c13baf31f6bbfaeeb",
  "name": "Fall 2017",
  "__v": 0
},
{
  "created": "2018-04-14T20:41:06.619Z",
  "_id": "5ad2676213baf31f6bbfaeec",
  "name": "Summer 2017",
  "__v": 0
},
{
  "created": "2018-04-14T20:41:16.542Z",
  "_id": "5ad2676c13baf31f6bbfaeed",
  "name": "Spring 2017",
  "__v": 0
},
{
  "created": "2018-04-14T20:41:21.883Z",
  "_id": "5ad2677113baf31f6bbfaeee",
  "name": "Fall 2016",
  "__v": 0
},
{
  "created": "2018-04-14T20:41:30.817Z",
  "_id": "5ad2677a13baf31f6bbfaeef",
  "name": "Summer 2016",
  "__v": 0
},
{
  "created": "2018-04-14T20:42:16.664Z",
  "_id": "5ad267a813baf31f6bbfaef0",
  "name": "Spring 2016",
  "__v": 0
},
{
  "created": "2018-04-14T20:42:23.146Z",
  "_id": "5ad267af13baf31f6bbfaef1",
  "name": "Fall 2015",
```

```

    "__v": 0
  },
  {
    "created": "2018-04-14T20:42:32.078Z",
    "_id": "5ad267b813baf31f6bbfaef2",
    "name": "Summer 2015",
    "__v": 0
  },
  {
    "created": "2018-04-14T20:43:07.741Z",
    "_id": "5ad267db13baf31f6bbfaef3",
    "name": "Spring 2015",
    "__v": 0
  }
]
}

```

POST Method -> Body -> x-www-form-urlencoded

name Fall 2016

<http://localhost:3030/api/courses>

For retrieving the courses, to get all the courses

GET Method -> no need for token

```

{
  "success": true,
  "message": "semester",
  "courses": [
    {
      "reviews": [],
      "created": "2018-04-16T02:20:58.091Z",
      "_id": "5ad4088aa43cb02510b9d0ec",
      "name": "Discrete and Data Structures",
      "instructor": "Philip James Gust ",
      "description": "Introduces the mathematical structures and methods that
form the foundation of computer science. Studies structures such as sets, tuples,
sequences, lists, trees, and graphs. Discusses functions, relations, ordering, and
equivalence relations. Examines inductive and recursive definitions of structures
and functions. Covers principles of proof such as truth tables, inductive proof, and
basic logic and the counting techniques and arguments needed to estimate the
size of sets, the growth of functions, and the space-time complexity of algorithms.

```

Also, discusses data structures such as arrays, stacks, queues, lists, and the algorithms that manipulate them. ",

```
"number": "CS5002",
"credit": 4,
"semester": {
  "created": "2018-04-14T20:41:00.225Z",
  "_id": "5ad2675c13baf31f6bbfaeeb",
  "name": "Fall 2017",
  "__v": 0
},
"__v": 1,
"review": [
  "5ad4da6d294de029742316ae"
],
"id": "5ad4088aa43cb02510b9d0ec"
},
{
  "reviews": [],
  "created": "2018-04-16T02:22:03.130Z",
  "_id": "5ad408cba43cb02510b9d0ed",
  "name": "Intensive Foundations of Computer Science",
  "instructor": "Philip James Gust ",
  "description": "Introduces the fundamental ideas of computing and
programming principles. Discusses a systematic approach to word problems,
including analytic reading, synthesis, goal setting, planning, plan execution, and
testing. Presents several models of computing, beginning with functional program
design. The latter part of the course consists of two parts: a task organization
(ranging from the description of data to the creation of a test suite) and a data-
oriented approach to the organization of programs (ranging from atomic data to
self-referential data definitions and functions as data). Offers students an
opportunity to practice pair programming and public code review techniques, as
found in industry today. No prior programming experience is assumed; therefore,
suitable for students with little or no computer science background. ",
  "number": "CS5001",
  "credit": 4,
  "semester": {
    "created": "2018-04-14T20:41:00.225Z",
    "_id": "5ad2675c13baf31f6bbfaeeb",
    "name": "Fall 2017",
    "__v": 0
  },
  "__v": 0,
  "id": "5ad408cba43cb02510b9d0ed"
```



```

    },
    {
      "reviews": [],
      "created": "2018-04-16T02:23:28.523Z",
      "_id": "5ad40920a43cb02510b9d0ee",
      "name": "Computer Science and Its Applications",
      "instructor": "Karl J Lieberherr",
      "description": "Introduces students to the field of computer science and
the patterns of thinking that enable them to become intelligent users of software
tools in a problem-solving setting. Examines several important software
applications so that students may develop the skills necessary to use computers
effectively in their own disciplines. ",
      "number": "CS1100",
      "credit": 4,
      "semester": {
        "created": "2018-04-14T20:41:00.225Z",
        "_id": "5ad2675c13baf31f6bbfaeeb",
        "name": "Fall 2017",
        "__v": 0
      },
      "__v": 0,
      "id": "5ad40920a43cb02510b9d0ee"
    },
    {
      "reviews": [],
      "created": "2018-04-16T02:25:17.297Z",
      "_id": "5ad4098da43cb02510b9d0ef",
      "name": "Logic and Computation",
      "instructor": "David William Sprague",
      "description": "Introduces formal logic and its connections to computer and
information science. Offers an opportunity to learn to translate statements about
the behavior of computer programs into logical claims and to gain the ability to
prove such assertions both by hand and using automated tools. Considers
approaches to proving termination, correctness, and safety for programs.
Discusses notations used in logic, propositional and first order logic, logical
inference, mathematical induction, and structural induction. Introduces the use of
logic for modeling the range of artifacts and phenomena that arise in computer
and information science. ",
      "number": "CS2800",
      "credit": 4,
      "semester": {
        "created": "2018-04-14T20:41:00.225Z",
        "_id": "5ad2675c13baf31f6bbfaeeb",

```

```

    "name": "Fall 2017",
    "__v": 0
  },
  "__v": 0,
  "id": "5ad4098da43cb02510b9d0ef"
},
{

```

```

  "reviews": [],
  "created": "2018-04-16T02:26:06.589Z",
  "_id": "5ad409bea43cb02510b9d0f0",
  "name": "Lab for CS 2800",
  "instructor": "David William Sprague",
  "description": "Introduces formal logic and its connections to computer and
information science. Offers an opportunity to learn to translate statements about
the behavior of computer programs into logical claims and to gain the ability to
prove such assertions both by hand and using automated tools. Considers
approaches to proving termination, correctness, and safety for programs.
Discusses notations used in logic, propositional and first order logic, logical
inference, mathematical induction, and structural induction. Introduces the use of
logic for modeling the range of artifacts and phenomena that arise in computer
and information science. ",

```

```

    "number": "CS281",
    "credit": 1,
    "semester": {
      "created": "2018-04-14T20:41:00.225Z",
      "_id": "5ad2675c13baf31f6bbfaeeb",
      "name": "Fall 2017",
      "__v": 0
    },
    "__v": 0,
    "id": "5ad409bea43cb02510b9d0f0"
},
{

```

```

  "reviews": [],
  "created": "2018-04-16T02:26:58.139Z",
  "_id": "5ad409f2a43cb02510b9d0f1",
  "name": "Database Design",
  "instructor": "Ghita Amor-Tijani",
  "description": "Studies the design of a database for use in a relational
database management system. The entity-relationship model and normalization
are used in problems. Relational algebra and then the SQL (structured query
language) are presented. Advanced topics include triggers, stored procedures,
indexing, elementary query optimization, and fundamentals of concurrency and

```

recovery. Students implement a database schema and short application programs on one or more commercial relational database management systems. ",

```
"number": "CS3200",
"credit": 4,
"semester": {
  "created": "2018-04-14T20:41:00.225Z",
  "_id": "5ad2675c13baf31f6bbfaeeb",
  "name": "Fall 2017",
  "__v": 0
},
"__v": 0,
"id": "5ad409f2a43cb02510b9d0f1"
```

```
},
{
  "reviews": [],
  "created": "2018-04-16T06:44:33.662Z",
  "_id": "5ad44651270c1d2702d86cb9",
  "__v": 0,
  "id": "5ad44651270c1d2702d86cb9"
```

```
},
{
  "reviews": [],
  "created": "2018-04-16T02:27:36.983Z",
  "_id": "5ad40a18a43cb02510b9d0f2",
  "name": "Object-Oriented Design",
  "instructor": "Amit Prakash Shesh",
```

"description": "Presents a comparative approach to object-oriented programming and design. Discusses the concepts of object, class, meta-class, message, method, inheritance, and genericity. Reviews forms of polymorphism in object-oriented languages. Contrasts the use of inheritance and composition as dual techniques for software reuse: forwarding vs. delegation and subclassing vs. subtyping. Fosters a deeper understanding of the principles of object-oriented programming and design including software components, object-oriented design patterns, and the use of graphical design notations such as UML (unified modeling language). Basic concepts in object-oriented design are illustrated with case studies in application frameworks and by writing programs in one or more object-oriented languages. ",

```
"number": "CS3500",
"credit": 4,
"semester": {
  "created": "2018-04-14T20:41:00.225Z",
  "_id": "5ad2675c13baf31f6bbfaeeb",
  "name": "Fall 2017",
```

```

    "__v": 0
  },
  "__v": 0,
  "id": "5ad40a18a43cb02510b9d0f2"
},
{
  "reviews": [],
  "created": "2018-04-16T02:28:34.835Z",
  "_id": "5ad40a52a43cb02510b9d0f3",
  "name": "Programming in C++",
  "instructor": "Seth Everett Cooper",
  "description": "Examines how to program in C++ in a robust and safe
manner. Reviews basics, including scoping, typing, and primitive data structures.
Discusses data types (primitive, array, structure, class, string); addressing/
parameter mechanisms (value, pointer, reference); stacks; queues; linked lists;
binary trees; hash tables; and the design of classes and class inheritance,
emphasizing single inheritance. Considers the instantiation of objects, the trade-
offs of stack vs. heap allocation, and the design of constructors and destructors.
Emphasizes the need for a strategy for dynamic memory management. Addresses
function and operator overloading; templates, the Standard Template Library
(STL), and the STL components (containers, generic algorithms, iterators,
adaptors, allocators, function objects); streams; exception handling; and system
calls for processes and threads. ",
  "number": "CS3520",
  "credit": 4,
  "semester": {
    "created": "2018-04-14T20:41:00.225Z",
    "_id": "5ad2675c13baf31f6bbfaeeb",
    "name": "Fall 2017",
    "__v": 0
  },
  "__v": 0,
  "id": "5ad40a52a43cb02510b9d0f3"
},
{
  "reviews": [],
  "created": "2018-04-16T02:32:00.052Z",
  "_id": "5ad40b20a43cb02510b9d0f5",
  "name": "Computer Science/Information Science Overview 1",
  "instructor": "Megan Michelle Giordano ",
  "description": "Introduces students to the College of Computer and
Information Science (CCIS) and begins their preparation for careers in the
computing and information fields. Offers students an opportunity to learn how to

```

thrive at Northeastern and within CCIS by developing academic, professional, and interpersonal skills. Covers the variety of careers available in the high-technology professions. Students work in groups to create and deliver presentations on careers in the field. Intended for freshmen.",

```
    "number": "CS1200",
    "credit": 1,
    "semester": {
      "created": "2018-04-14T20:39:22.422Z",
      "_id": "5ad266fa13baf31f6bbfaee9",
      "name": "Spring 2018",
      "__v": 0
    },
    "__v": 0,
    "id": "5ad40b20a43cb02510b9d0f5"
  }
],
"totalCourses": 24,
"pages": 3
}
```

for posting the courses:

POST method:

<http://localhost:3030/api/course>

POST Method -> Body -> x-www-form-urlencoded

name

instructor

description

number

semesterId: find id of one semester

credit

To get just one course based on the id of that course: GET Method

<http://localhost:3030/api/course/5ad4088aa43cb02510b9d0ec>

To retrieve the list of courses for specific semester:

<http://localhost:3030/api/semesters/5ad267b813baf31f6bbfaef2>

no need for token

To post the sales of student for any course note or book:

http://localhost:3030/api/post/sale

POST method:

Authorization: token related to login information

title:

description

rating

price

sale_picture

courseld

edition

author

To retrieve the information of sales for specific owner(student):

http://localhost:3030/api/post/sale

GET method:

```
{
  "success": true,
  "message": "Sales",
  "sales": [
    {
      "created": "2018-04-16T06:50:57.256Z",
      "_id": "5ad447d1fcc624271189bb54",
      "owner": {
        "address": {
          "city": "awsome",
          "country": "USA",
          "state": "CA"
        },
        "created": "2018-04-13T04:51:42.558Z",
        "_id": "5ad0375ed7ae131576fed957",
        "name": "negin mortazavi",
        "email": "negin@gmail.com",
        "password":
"$2a$10$LVdFAwJucwttJkbtIUB.v..AjGXEVxDBq1CR21cviwZX9uSo4AbT.",
        "picture": "https://gravatar.com/avatar/
4adcca49b3b1e5a08ac202f5d5a9e688?s200&d=retro",
        "__v": 0
      },
      "course": {
```

```
"created": "2018-04-16T02:20:58.091Z",
"_id": "5ad4088aa43cb02510b9d0ec",
"name": "Discrete and Data Structures",
"instructor": "Philip James Gust ",
"description": "Introduces the mathematical structures and methods that
form the foundation of computer science. Studies structures such as sets, tuples,
sequences, lists, trees, and graphs. Discusses functions, relations, ordering, and
equivalence relations. Examines inductive and recursive definitions of structures
and functions. Covers principles of proof such as truth tables, inductive proof, and
basic logic and the counting techniques and arguments needed to estimate the
size of sets, the growth of functions, and the space-time complexity of algorithms.
Also, discusses data structures such as arrays, stacks, queues, lists, and the
algorithms that manipulate them. ",
```

```
"number": "CS5002",
"credit": 4,
"semester": "5ad2675c13baf31f6bbfaeeb",
"__v": 0
```

```
},
"title": "Data Structures and Algorithms in Java",
"author": "Michael T. Goodrich, Roberto Tamassia, Michael H. Goldwasser",
"price": 168,
"edition": 6,
"rating": "very good",
```

```
"description": "The design and analysis of efficient data structures has long
been recognized as a key component of the Computer Science curriculum.
Goodrich, Tomassia and Goldwasser's approach to this classic topic is based on
the object-oriented paradigm as the framework of choice for the design of data
structures. For each ADT presented in the text, the authors provide an associated
Java interface. Concrete data structures realizing the ADTs are provided as Java
classes implementing the interfaces. The Java code implementing fundamental
data structures in this book is organized in a single Java package,
net.datastructures. This package forms a coherent library of data structures and
algorithms in Java specifically designed for educational purposes in a way that is
complimentary with the Java Collections Framework.",
```

```
"image": "https://webprojectcs5610.s3.amazonaws.com/1523861456664",
"__v": 0
```

```
},
{
```

```
"created": "2018-04-16T06:56:34.277Z",
"_id": "5ad44922fcc624271189bb55",
"owner": {
  "address": {
    "city": "awsome",
```

```

    "country": "USA",
    "state": "CA"
  },
  "created": "2018-04-13T04:51:42.558Z",
  "_id": "5ad0375ed7ae131576fed957",
  "name": "negin mortazavi",
  "email": "negin@gmail.com",
  "password":
"$2a$10$LVdFAwJucwttJkbtIUB.v..AjGXEVxDBq1CR21cviwZX9uSo4AbT.",
  "picture": "https://gravatar.com/avatar/
4adcca49b3b1e5a08ac202f5d5a9e688?s200&d=retro",
  "__v": 0
},
"course": {
  "created": "2018-04-16T02:20:58.091Z",
  "_id": "5ad4088aa43cb02510b9d0ec",
  "name": "Discrete and Data Structures",
  "instructor": "Philip James Gust ",
  "description": "Introduces the mathematical structures and methods that
form the foundation of computer science. Studies structures such as sets, tuples,
sequences, lists, trees, and graphs. Discusses functions, relations, ordering, and
equivalence relations. Examines inductive and recursive definitions of structures
and functions. Covers principles of proof such as truth tables, inductive proof, and
basic logic and the counting techniques and arguments needed to estimate the
size of sets, the growth of functions, and the space-time complexity of algorithms.
Also, discusses data structures such as arrays, stacks, queues, lists, and the
algorithms that manipulate them. ",
  "number": "CS5002",
  "credit": 4,
  "semester": "5ad2675c13baf31f6bbfaeeb",
  "__v": 0
},
"title": "Data Structures and Algorithms in Java",
"author": "Michael T. Goodrich, Roberto Tamassia, Michael H. Goldwasser",
"price": 168,
"edition": 6,
"rating": "very good",
"description": "The design and analysis of efficient data structures has long
been recognized as a key component of the Computer Science curriculum.
Goodrich, Tomassia and Goldwasser's approach to this classic topic is based on
the object-oriented paradigm as the framework of choice for the design of data
structures. For each ADT presented in the text, the authors provide an associated
Java interface. Concrete data structures realizing the ADTs are provided as Java

```


classes implementing the interfaces. The Java code implementing fundamental data structures in this book is organized in a single Java package, net.datastructures. This package forms a coherent library of data structures and algorithms in Java specifically designed for educational purposes in a way that is complimentary with the Java Collections Framework.",

```
"image": "https://webprojectcs5610.s3.us-west-1.amazonaws.com/1523861793981",
  "__v": 0
}
]
}
```

To retrieve the information of sales for specific course:

<http://localhost:3030/api/post/sales/id> of course

GET method:

```
{
  "success": true,
  "message": "Sales",
  "sales": [
    {
      "created": "2018-04-16T06:50:57.256Z",
      "_id": "5ad447d1fcc624271189bb54",
      "owner": {
        "address": {
          "city": "awsome",
          "country": "USA",
          "state": "CA"
        },
        "created": "2018-04-13T04:51:42.558Z",
        "_id": "5ad0375ed7ae131576fed957",
        "name": "negin mortazavi",
        "email": "negin@gmail.com",
        "password":
"$2a$10$LVdFAwJucwtJkbtIUB.v..AjGXEvxDBq1CR21cviwZX9uSo4AbT.",
        "picture": "https://gravatar.com/avatar/4adcca49b3b1e5a08ac202f5d5a9e688?s200&d=retro",
        "__v": 0
      },
      "course": {
        "created": "2018-04-16T02:20:58.091Z",
        "_id": "5ad4088aa43cb02510b9d0ec",
```

```

    "name": "Discrete and Data Structures",
    "instructor": "Philip James Gust ",
    "description": "Introduces the mathematical structures and methods that
form the foundation of computer science. Studies structures such as sets, tuples,
sequences, lists, trees, and graphs. Discusses functions, relations, ordering, and
equivalence relations. Examines inductive and recursive definitions of structures
and functions. Covers principles of proof such as truth tables, inductive proof, and
basic logic and the counting techniques and arguments needed to estimate the
size of sets, the growth of functions, and the space-time complexity of algorithms.
Also, discusses data structures such as arrays, stacks, queues, lists, and the
algorithms that manipulate them. ",
    "number": "CS5002",
    "credit": 4,
    "semester": "5ad2675c13baf31f6bbfaeeb",
    "__v": 0
  },
  "title": "Data Structures and Algorithms in Java",
  "author": "Michael T. Goodrich, Roberto Tamassia, Michael H. Goldwasser",
  "price": 168,
  "edition": 6,
  "rating": "very good",
  "description": "The design and analysis of efficient data structures has long
been recognized as a key component of the Computer Science curriculum.
Goodrich, Tomassia and Goldwasser's approach to this classic topic is based on
the object-oriented paradigm as the framework of choice for the design of data
structures. For each ADT presented in the text, the authors provide an associated
Java interface. Concrete data structures realizing the ADTs are provided as Java
classes implementing the interfaces. The Java code implementing fundamental
data structures in this book is organized in a single Java package,
net.datastructures. This package forms a coherent library of data structures and
algorithms in Java specifically designed for educational purposes in a way that is
complimentary with the Java Collections Framework.",
  "image": "https://webprojectcs5610.s3.amazonaws.com/1523861456664",
  "__v": 0
}
]
}

```

To retrieve all sales (book, note) for all students and courses

<http://localhost:3030/api/post/sales>

To post review for specific courses:

`http://localhost:3030/api/review`

It is the POST method, it needs the authorization token.

title:

description

rating

courseId

Algolia account is the platform for search engine

:

create account in Algolia

create indices: **web_development_project_student_forum**

in API keys you have all information which you will need later on in your code

now we need to install the library call mongoose-algolia so we can start doing search

npm install mongoose-algolia --save

add algolia to our course schema

now we should create the search API based on the Algolia, Algolia is the real time framework.

first we should install all algolia official dependencies

npm install algoliasearch --save