Backend API

Use test command : `mocha -R spec test.js` in /react_backend (or npm test)
Since we are using an express server, it never stops once started
unless there is a bug. You have to exit the test by using cmd+C. The
test results are as follows:

```
  loading express
(node:5372) DeprecationWarning: `open()` is deprecated in mongoose >=
4.11.0, use `openUri()` instead, or set the `useMongoClient` option if
using `connect()` or `createConnection()`. See http://mongoosejs.com/
docs/connections.html#use-mongo-client
(node:5372) DeprecationWarning: Mongoose: mpromise (mongoose's default
promise library) is deprecated, plug in your own promise library
instead: http://mongoosejs.com/docs/promises.html
Db.prototype.authenticate method will no longer be available in the
next major release 3.x as MongoDB 3.6 will only allow auth against
users in the admin db and will no longer allow multiple credentials on
a socket. Please authenticate using MongoClient.connect with auth
credentials.
GET /api 200 251.370 ms - 4363
    ✓ responds to /api (283ms)
GET /apiT 200 14.531 ms - 22
    ✓ responds to /apiT
POST /api/profile 200 3.957 ms - 73
    ✓ responds to /api/profile
POST /api/edit_profile 200 3.001 ms - 73
    ✓ responds to /api/edit_profile
POST /api/create_account 200 39.840 ms - 54
    ✓ responds to /api/create_account (43ms)
POST /api/create_event 200 0.750 ms - 75
    ✓ responds to /api/create_event
POST /api/show_event 200 0.663 ms - 75
    ✓ responds to /api/show_event
POST /api/search_event 200 44.623 ms - 2289
    ✓ responds to /api/search_event (48ms)
POST /api/sign_in 200 15.634 ms - 89
    ✓ responds to /api/sign_in
POST /api/create_profile 200 0.796 ms - 89
    ✓ responds to /api/create_profile
GET /logout 200 0.817 ms - 17
    ✓ responds to /logout
POST /username 200 0.723 ms - 29
    ✓ responds to /username
POST /api/view_team 200 0.839 ms - 47
    ✓ responds to /api/view_team
POST /api/user_teams 200 0.642 ms - 47
    ✓ responds to /api/user_teams
POST /api/edit_team 200 0.685 ms - 47
```

```
      ✓ responds to /api/edit_team
POST /api/join_event 200 0.500 ms — 52
      ✓ responds to /api/join_event
POST /api/give_team 200 89.578 ms — 96
      ✓ responds to /api/give_team (93ms)
POST /api/reject_team 200 24.228 ms — 96
      ✓ responds to /api/reject_team
POST /api/team_matched 200 0.524 ms — 52
      ✓ responds to /api/team_matched
POST /check_login 200 0.363 ms — 15
      ✓ responds to /check_login
GET /get_name 200 0.653 ms — 17
      ✓ responds to /get_name


  21 passing (1s)


Here is the document for the api in backend
```

API: GET /api

Attempt to get all the users' info.

Resource URL

Localhost:3001/api

Resource Information

Response formats	JSON
Requires authentication?	No

Parameters

Name	Required	Description	Default Value	Example

N/A	N/A	N/A	N/A	*N/A*

Example Request

POST localhost:3001/api
{
}

Response Format

Sample:
{
  user:[
     users's data
  ]
}

API: GET / apiT

Attempt to get all the teams' info.

Resource URL

Localhost:3001/apiT

Resource Information

Response formats	JSON
Requires authentication?	No

Parameters

Name	Required	Description	Default Value	Example
N/A	N/A	N/A	N/A	*N/A*

Example Request

POST localhost:3001/apiT
{
}

Response Format

Sample:
{
   user:[
       teams's data
   ],
   length:how many teams are in database
}

API: POST / api/profile

Attempt to get the login user's profile info.

Resource URL

Localhost:3001 /api/profile

Resource Information

Response formats	JSON
Requires authentication?	Yes

Parameters

Name	Required	Description	Default Value	Example
N/A	N/A	N/A	N/A	*N/A*

Example Request

POST localhost: 3001 /api/profile

```
{
}
```

Response Format

Sample:

```
{
    success: true,
    name: user.profile.name,
    skills: user.profile.skills,
    resume: user.profile.resume,
    bio: user.profile.bio,
}
```

If not login:

```
{
    success: false,
    login: false,
    message: 'login plz',
    error: 'login plz',
}
```

If profile not created yet:

```
{
    success: false,
    message: 'no profile for now',
    error: 'no profile for now',
}
```

API: POST /api/edit_profile

Attempt to edit the login user's profile info.

Resource URL

Localhost:3001/api/edit_profile

Resource Information

Response formats	JSON
Requires authentication?	Yes

Parameters

Name	Required	Description	Default Value	Example
name	No	New Name	N/A	*"David"*
skills	No	New Skill	N/A	*'java'*
resume	No	New Resume	N/A	*'I am Daivd'*
bio	No	New Bio	N/A	*'I am a student'*

Example Request

POST localhost: 3001 /api/edit_profile

```
{
    name: "David",
    skills: 'java',
    resume: 'I am Daivd',
    bio: "I am a student"
}
```

Response Format

Sample:
```
{
    success: true,
}
```

If not login:
```
{
    success: false,
    login: false,
    message: 'login plz',
    error: 'login plz',
}
```

If profile not created yet:
```
{
    success: false,
    message: 'no profile for now',
    error: 'no profile for now',
}
```
If profile updated fail:
```
{
    success: false,
    message: 'update failed',
}
```

API: POST / api/create_account

Attempt to create an account.

Resource URL

Localhost:3001 /api/create_account

Resource Information

Response formats	JSON
Requires authentication?	No

Parameters

Name	Required	Description	Default Value	Example
email	Yes	User's email	N/A	*"David@david.com"*
Username	Yes	Username	N/A	*'java'*
password	Yes	Password	N/A	*'12345*

Example Request

POST localhost: 3001/api/create_account

```
{
    email:david@david.com,
    username:"david",
    password:"12345"

}
```

Response Format

Sample:
```
{
    success: true,
    user:user
}
```

If repeated email:
```
{
     success: false,
     message: 'email already used',
     error:error message
}
```

If credential created fail:
```
{
    success: 'fail at cre',
    error:error message,
}
```

If user credential updated fail:
```
{
     success: false,
     message: 'user created fail',
    error:error message,
}
```

API: POST /api/create_event

Attempt to create an event.

Resource URL

Localhost:3001 /api/create_event

Resource Information

Response formats	JSON
Requires authentication?	Yes

Parameters

Name	Required	Description	Default Value	Example
eventName	Yes	Event's name	N/A	*"coms4117"*
startDate	Yes	Date started	N/A	*"10/09/2017"*
endDate	Yes	Date end	N/A	*"10/19/2017"*
registrationDeadline	Yes	Deadline for registration	N/A	*"10/12/2017"*
description	Yes	Description for the event	N/A	*"Class event"*
max	Yes	Maximum number of team member	N/A	*"10"*

min	Yes	Minimum number if team member	N/A	*"3"*

Example Request

POST localhost: 3001/api/create_event

```
{
    eventName:"coms4117",
    startDate: "10/09/2017",
    endDate: "10/19/2017",
    registrationDeadline: "10/12/2017"
    description: Class event",
    max: "10",
    min: "7"
}
```

Response Format

Sample:
```
{
    success: true,
}
```
If not login:
```
{
    success: false,
    login: false,
    message: 'login plz',
    error: 'login plz',
}
```

If required info not fully cpmpleted:
```
{
    success: false,
    message: 'infomation not completed',
}
```

If event added fail:
```
{
        success: 'fail at creating event',
        error: error message
```

}

If host not found:
{
    success: false,
    message: 'No such user',
    error:error message
}

If user updated fail:
{
    success: fail at user
}

API: POST /api/show_event

Attempt to get the login user's event info.

Resource URL

Localhost:3001 /api/show_event

Resource Information

Response formats	JSON
Requires authentication?	Yes

Parameters

Name	Required	Description	Default Value	Example
N/A	N/A	N/A	N/A	*N/A*

Example Request

POST localhost: 3001 /api/profile

```
{
}
```

Response Format

Sample:
```
{
    success: 'success',
    events: eventList
}
```

If not login:
```
{
    success: false,
    login: false,
    message: 'login plz',
    error: 'login plz',
}
```

If user cannot be found:
```
{
    success: false,
     message: 'No such user',
     error: error message,
}
```

API: POST /api/search_event

Attempt to get all the users' info.

Resource URL

Localhost:3001/api

Resource Information

Response formats	JSON

Requires authentication?	No

Parameters

Name	Required	Description	Default Value	Example
query	No	Key for search	N/A	*N/A*

Example Request

POST localhost:3001/api
{
        query:"david"
}

Response Format

Sample:
{
        success: 'success',
        events: req.events,
}

API: POST /api/sign_in

Attempt to sign in.

Resource URL

Localhost:3001/api

Resource Information

Response formats	JSON
Requires authentication?	No

Parameters

Name	Required	Description	Default Value	Example
password	Yes	User's password	N/A	*"12345"*
email	Yes	"user's email"	N/A	*"david@david.com"*

Example Request

POST localhost:3001/api
{
        email:david@david.com,
        password:"12345"
}

Response Format

Sample:
{
    success: true,
    user: user,
}

If required info not fully cpmpleted:
{
    success: false,
    message: 'infomation not completed',
}

If user cannot be found:

```
{
    success: false,
    login: false,
    message: 'no such user',
    error: 'no such user',
}
```

If password wrong:
```
{
    success: false,
    login: true,
    message: 'password wrong',
    error: 'password wrong',
}
```

API: POST /api/create_profile

Attempt to create the login user's profile info.

Resource URL

Localhost:3001/api/edit_profile

Resource Information

Response formats	JSON
Requires authentication?	Yes

Parameters

Name	Required	Description	Default Value	Example
name	No	New Name	N/A	*"David"*
skills	No	New Skill	N/A	*'java'*
resume	No	New Resume	N/A	*'I am Daivd'*
bio	No	New Bio	N/A	*'I am a student'*

Example Request

POST localhost: 3001 /api/create_profile

```
{
    name: "David",
    skills: 'java',
    resume: 'I am Daivd',
    bio: "I am a student"
}
```

Response Format

Sample:
```
{
    success: true,
}
```

If not login:
```
{
    success: false,
    login: false,
    message: 'login plz',
```

```
    error: 'login plz',
}
If required info not fully cpmpleted:
{
    success: false,
    message: 'infomation not completed',
}


If profile created fail:
{
    success: 'fail at pro',
}
If user updated fail:
{
    success: 'fail at user',
}
```

API: GET /logout

Attempt to logout.

Resource URL

Localhost:3001/api

Resource Information

Response formats	JSON
Requires authentication?	Yes

Parameters

Name	Required	Description	Default Value	Example

N/A	N/A	N/A	N/A	*N/A*

Example Request

POST localhost:3001/logout
{
}

Response Format

Sample:
{
    success: 'success',
}

if not login:

{
    success: false,
}

API: GET / get_name

Attempt to get the login user's username.

Resource URL

Localhost:3001/api

Resource Information

Response formats	JSON
Requires authentication?	Yes

Parameters

Name	Required	Description	Default Value	Example
N/A	N/A	N/A	N/A	*N/A*

Example Request

POST localhost:3001/ get_name
{
}

Response Format

Sample:
{
    success: 'success',
    name: req.session.user.credential.username,
}

if not login:

{
    success: false,
}

API: POST /check_login

Attempt to check the user has login status in his cookie session.

Resource URL

Localhost:3001/check_login

Resource Information

Response formats	JSON
Requires authentication?	No

Parameters

Name	Required	Description	Default Value	Example
N/A	N/A	N/A	N/A	*N/A*

Example Request

POST localhost:3001/ get_name
{
}

Response Format

Sample:
If login:
{
    success: true,
}

if not login:

{
    success: false,
}

API: POST /username

Attempt to get the login user's info data.

Resource URL

Localhost:3001/ username

Resource Information

Response formats	JSON
Requires authentication?	Yes

Parameters

Name	Required	Description	Default Value	Example
N/A	N/A	N/A	N/A	*N/A*

Example Request

POST localhost:3001/ get_name
{
}

Response Format

Sample:
If login:
{
    success: 'success',
    user: user info in json,
}

if not login:

{
    success: false,

user: null
}

API: POST /api/view_team

Attempt to get the login user's team info.

Resource URL

Localhost:3001/ /api/view_team

Resource Information

Response formats	JSON
Requires authentication?	Yes

Parameters

Name	Required	Description	Default Value	Example
event_id	Yes	TEAM for which event	N/A	

Example Request

POST localhost:3001/ get_name
{
        event_id:"dwqdqwdqwdqw2131"
}

Response Format

Sample:

```
{
    success: true,
```

```
    team: team
}

If not login:
{
    success: false,
    message: 'Need login first.',
}
If required event_id not given in the body:
{
    success: false,
    message: 'Need event id.',
}


If team found fail:
{
    success: false,
    message: 'No team found.',
}
```

API: POST /api/user_teams

Attempt to get the login user's teams info data.

Resource URL

Localhost:3001/api/user_teams

Resource Information

Response formats	JSON
Requires authentication?	Yes

Parameters

Name	Required	Description	Default Value	Example
N/A	N/A	N/A	N/A	*N/A*

Example Request

POST localhost:3001/api/user_teams
{
}

Response Format

Sample:
If login:
{
    success: 'success',
    teams:teams
}

if not login:

{
    success: false,
    message: 'Need login first.',
}

If no team found:
{
    success: false,
    message: 'No team found.',
}

API: POST /api/edit_team

Attempt to edit team info.

Resource URL

Localhost:3001 /api/edit_team

Resource Information

Response formats	JSON
Requires authentication?	Yes

Parameters

Name	Required	Description	Default Value	Example
event_id	Yes	Event's id to search the team	N/A	*"cqwe12d1dqqdq"*
skillsOwned	No	Skills the team has	N/A	*"java"*
skillsPrefered	No	Skills that teams like but require	N/A	*"java"*

skillsRequired	No	Skills that teams required	N/A	*"java"*
projectName	No	Name for the team project	N/A	*"Class project"*
projectPlan	No	Description for the team project	N/A	*"for fun"*

Example Request

POST localhost: 3001/api/create_event

```
{
    event_id: "cqwe12d1dqqdq",
    skillsOwned: "java",
    skillsPrefered: "java",
    skillsRequired: "java",
    projectName: "Class project"",
    projectPlan: "for fun",
}
```

Response Format

Sample:
```
{
     success: 'success',
}
```
If not login:
```
{
    success: false,
    message: 'Need login first.',
}
```

If required event_id not given in the body:
```
{
    success: false,
    message: 'Need event id.',
}
```

If no team found:
```
{
    success: false,
    message: 'No team found.',
}
```

If team updated fail:
```
{
        success: false,
        message: 'Team update failed.',
}
```

API: POST /api/join_event

Attempt to join an event.

Resource URL

Localhost:3001 /api/join_event

Resource Information

Response formats	JSON
Requires authentication?	Yes

Parameters

Name	Required	Description	Default Value	Example
event_id	Yes	TEAM for which event	N/A	

Example Request

POST localhost:3001/ get_name
```
{
        event_id:"dwqdqwdqwdqw2131"
}
```

Response Format

Sample:
```
{
    success: true,
}
```

If not login:
```
{
    success: false,
    login: false,
    message: 'Need login first.',
}
```

If event found fail:
```
{
    success: false,
    message: 'Cannot find that event',
}
```

If user found fail:
```
{
     success: false,
     message: 'user not found',
}
```

if already in the event:
```
{
      success: false,
      message: 'already in that event',
}
```

if team created fail:
```
{
      success: false,
      message: 'team added fail',
}
```

If event updated fail:
{
     success: false,
     message: 'event updated fail',
}

API: POST /api/give_team

Attempt to get a matching team from the team pool.

Resource URL

Localhost:3001 /api/join_event

Resource Information

Response formats	JSON
Requires authentication?	Yes

Parameters

Name	Required	Description	Default Value	Example
team_id	Yes	The team of the user	N/A	

Example Request

POST localhost:3001/api/give_team
{
     team_id:"dwqdqwdqwdqw2131"
}

Response Format

Sample:
```
{
      success: 'success',
      target_team: a team,
}
```

If team already got a match during processing:
```
{
      success: false,
      message: 'Your team has changed,refresh the page and check your team setting',
}
```

If no team in pool:
```
{
      success: false,
      message: 'No teams satisfy your requirement',
}
```

if all the teams that satify the requirement has been searched:
```
{
      success: false,
      allFound: true,
      message: 'All team searched, refresh to check from start',
}
```

if team updated fail:
```
{
      success: false,
      message: 'team update failed',
}
```

API: POST /api/reject_team

Attempt to reject a matching team from the team pool.

Resource URL

Localhost:3001 /api/reject_team

Resource Information

Response formats	JSON
Requires authentication?	Yes

Parameters

Name	Required	Description	Default Value	Example
reject_team_id	Yes	The team that is rejected	N/A	
team_id	Yes	The team of the user	N/A	

Example Request

POST localhost:3001/api/give_team
{
    team_id:"dwqdqwdqwdqw2131"
    reject_team_id:"13213211asw2131"

}

Response Format

Sample:
{
    success: true,
}

If team already got a match during processing:
{
    success: false,
    message: 'Your team has changed,refresh the page and check your team setting',

```
}

if team updated fail:
{
        success: false,
        message: 'team update failed',
}
```

API: POST /api/team_matched

Attempt to accept a matching team from the team pool.

Resource URL

Localhost:3001 /api/team_matched

Resource Information

Response formats	JSON
Requires authentication?	Yes

Parameters

Name	Required	Description	Default Value	Example
team1	Yes	The team of the user	N/A	
team2	Yes	The team accepted	N/A	

event_id	Yes	The event of the team	N/A	

Example Request

POST localhost:3001/api/give_team
{
      team1:"dwqdqwdqwdqw2131"
      team2:"13213211asw2131",
      event_id:"Dqwdqw"
}

Response Format

Sample:
{
            success: 'success',
}

If not login:
{
   success: false,
   message: 'Need login first.',
}

If event not found:
{
   success: false,
   message: 'Cannot find that event',
}

If team already got a match during processing:
{
      success: false,
      message: ' This match failed. The matching team just updated, check it!',
}
if team updated fail:
{
      success: false,
      message: 'team update failed',
}

if team successfully added your preferred team pool but that hasn't accept you:

```
{
        success: false,
        refresh: true,
}
```

if successfully merged two team but create new team failed

```
{
        success: false,
        message: 'team added fail',
}
```

if successfully merged two team but remove old team failed

```
{
        success: false,
        message: 'team1 removed fail',
}
or
{
        success: false,
        message: 'team2 removed fail',
}
```