**Final Project: Portfolio Assignment**

**CS 493: Cloud Application Development**

**Fall 2021**

**Oregon State University**

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URL where application is deployed: <https://finalproject-rajamong.wl.r.appspot.com/>

URL for account creation/login: <https://finalproject-rajamong.wl.r.appspot.com/>

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**Data Model**

The app stores three kinds of entities in the Students, Courses, and Assignments.The ‘students’ entity represents the user entity. While the ‘courses’ and ‘assignments’ entities represent two non-user entities. Courses can be created, read, updated, as well as deleted, these courses are assigned to the student. Assignments can also be created, read, updated, as well as deleted, these assignments are assigned to courses, which are related to the student. The user entity is modelled using the student entity since this application is created to essentially represent a college student who is able to enroll in courses as well as view assignments that are within each of these enrolled courses. The unique identifier for users within my application, utilizes the “sub” category created from the generated JWT. Both the JWT as well as the unique identifier are automatically generated by the application when the user creates a new account, these values are linked to the user’s log in information.

**Students:**

|  |  |  |
| --- | --- | --- |
| **Property** | **Data Type** | **Notes** |
| id | integer | The student’s ID. The Datastore automatically generates this. |
| email | string | The email of the user who the JWT belongs to. |
| sub | string | The Unique ID of the user who the JWT belongs to. |

**Courses:**

|  |  |  |
| --- | --- | --- |
| **Property** | **Data Type** | **Notes** |
| id | integer | The course’s ID. The Datastore automatically generates this. |
| title | string | The title of the course. (e.g., Operating Systems) |
| subject | string | The subject of the course. (e.g., Mathematics, English) |
| level | string | The level of the course. (e.g., 101, 345, 493) |
| professor | string | The name of the professor teaching the course. |
| owner | string | The Unique ID of the stud who the course belongs to. |
| assignments | list | The assignments that belong to the course. |

**Assignments:**

|  |  |  |
| --- | --- | --- |
| **Property** | **Data Type** | **Notes** |
| id | integer | The assignment’s ID. The Datastore automatically generates this. |
| title | string | The title of the assignment. (e.g., Homework 1, Quiz 3, Lab 4) |
| due\_date | date | The date when the assignment is due. |
| points | integer | The number of points that the assignment is worth. |
| finished | boolean | Whether the assignment has been submitted or not. |
| course\_id | integer | The ID of the course that the assignment belongs to. |
| owner | string | The Unique ID of the user who the assignment belongs to. |

**View all Students**

Allows you to view all existing students.

|  |
| --- |
| GET /students (not protected) |

**Request**

Path Parameters:

None

Request Body:

None

Request Body Format:

JSON

**Response Statuses:**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 200 OK |  |
| Failure | 406 Not Acceptable | This status code occurs if the requested MIME type is not supported by the application. |
| Failure | 405 Not Allowed | This status code occurs if the requested method is not supported by the application. |

**Response Examples:**

**Success:**

|  |
| --- |
| Status: 200 OK  [      {          "email": "rajamong@oregonstate.edu",          "id": 5632499082330112,          "self": "https://finalproject-rajamong.wl.r.appspot.com/students/5632499082330112",          "sub": "113472411099456260058"      },      {          "email": "catherine.l.frost@hotmail.com",          "id": 5636645067948032,          "self": "https://finalproject-rajamong.wl.r.appspot.com/students/5636645067948032",          "sub": "107492373296973451802"      },      {          "email": "gretel.rajamoney@gmail.com",          "id": 5642368648740864,          "self": "https://finalproject-rajamong.wl.r.appspot.com/students/5642368648740864",          "sub": "113727376696571402818"      }  ] |

**Failures:**

|  |
| --- |
| Status: 406 Not Acceptable  <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2 Final//EN">  <title>405 Method Not Allowed</title>  <h1>Method Not Allowed</h1>  <p>The method is not allowed for the requested URL.</p> |
| Status: 405 Not Allowed  "sent MIME type not supported" |

**View a Student**

Allows you to view an existing student.

|  |
| --- |
| GET /students/:student\_id (protected) |

**Request**

Path Parameters:

|  |  |
| --- | --- |
| **Name** | **Description** |
| student\_id | The ID of the student. |

Request Body:

None

Request Body Format:

JSON

**Response Statuses:**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 200 OK |  |
| Failure | 406 Not Acceptable | This status code occurs if the requested MIME type is not supported by the application. |
| Failure | 405 Not Allowed | This status code occurs if the requested method is not supported by the application. |
| Failure | 401 Unauthorized | This status code occurs if the JWT Bearer Token provided is either missing or invalid. |
| Failure | 404 Not Found | This status code occurs if the requested student does not exist or if the user does not have access to the student. |

**Response Examples:**

**Success:**

|  |
| --- |
| Status: 200 OK  [      {          "email": "gretel.rajamoney@gmail.com",          "id": 5642368648740864,          "self": "https://finalproject-rajamong.wl.r.appspot.com/students/113727376696571402818",          "sub": "113727376696571402818"      }  ] |

**Failure:**

|  |
| --- |
| Status: 406 Not Acceptable  "requested MIME type not supported" |
| Status: 405 Not Allowed  "this method is not recognized" |
| Status: 401 Unauthorized  "the jwt is wrong"  "there is no jwt" |
| Status: 404 Not Found  "you do not have access to this student"  "this student does not exist" |

**Create a Course**

Allows you to create a new course.

|  |
| --- |
| POST /courses (protected) |

**Request**

Path Parameters:

None

Request Body:

Required

Request Body Format:

JSON

**Request JSON Attributes:**

|  |  |
| --- | --- |
| **Name** | **Description** |
| title | The title of the course. (e.g., Operating Systems) |
| subject | The subject of the course. (e.g., Mathematics, English) |
| level | The level of the course. (e.g., 101, 345, 493) |
| professor | The name of the professor teaching the course. |
| owner | The Unique ID of the stud who the course belongs to. |
| assignments | The assignments that belong to the course. |

**Request Body Example:**

|  |
| --- |
| {    "title": "Cloud Application Development",    "subject": "Computer Science",    "level": "493",    "professor": "Professor Chaudry",    "assignments": [],    "owner": "*{{user\_id1}}*"  } |

**Response Statuses:**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 201 Created |  |
| Failure | 406 Not Acceptable | This status code occurs if the requested MIME type is not supported by the application. |
| Failure | 405 Not Allowed | This status code occurs if the requested method is not supported by the application. |
| Failure | 401 Unauthorized | This status code occurs if the JWT Bearer Token provided is either missing or invalid. |
| Failure | 400 Bad Request | This status code occurs if one or more of the required attributes is missing. |

**Response Examples:**

**Success:**

|  |
| --- |
| Status: 201 Created  {      "assignments": [],      "id": 6690971290959872,      "level": "493",      "owner": "113727376696571402818",      "professor": "Professor Chaudry",      "self": "https://finalproject-rajamong.wl.r.appspot.com/courses/6690971290959872",      "subject": "Computer Science",      "title": "Cloud Application Development"  } |

**Failure:**

|  |
| --- |
| Status: 406 Not Acceptable  "requested MIME type not supported" |
| Status: 405 Not Allowed  "this method is not recognized" |
| Status: 401 Unauthorized  "the jwt is wrong"  "there is no jwt" |
| Status: 400 Bad Request  "the course is missing one or more of the required attributes" |

**View all Courses**

Allows you to view all existing courses.

|  |
| --- |
| GET /courses (protected) |

**Request**

Path Parameters:

None

Request Body:

None

Request Body Format:

JSON

**Response Statuses:**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 200 OK |  |
| Failure | 406 Not Acceptable | This status code occurs if the requested MIME type is not supported by the application. |
| Failure | 405 Not Allowed | This status code occurs if the requested method is not supported by the application. |
| Failure | 401 Unauthorized | This status code occurs if the JWT Bearer Token provided is either missing or invalid. |

**Response Examples:**

**Success:**

|  |
| --- |
| Status: 200 OK  {      "collection": 176,      "courses": [          {              "assignments": [],              "id": 4536029230923776,              "level": "434",              "owner": "113727376696571402818",              "professor": "Professor Lee",              "self": "https://finalproject-rajamong.wl.r.appspot.com/courses/4536029230923776",              "subject": "Computer Science",              "title": "Machine Learning & Data Mining"          },          {              "assignments": [],              "id": 4537037071843328,              "level": "444",              "owner": "113727376696571402818",              "professor": "Professor Jang",              "self": "https://finalproject-rajamong.wl.r.appspot.com/courses/4537037071843328",              "subject": "Computer Science",              "title": "Operating Systems 2"          },          {              "assignments": [],              "id": 4579477656961024,              "level": "444",              "owner": "113727376696571402818",              "professor": "Professor Jang",              "self": "https://finalproject-rajamong.wl.r.appspot.com/courses/4579477656961024",              "subject": "Computer Science",              "title": "Operating Systems 2"          },          {              "assignments": [],              "id": 4594920882962432,              "level": "444",              "owner": "113727376696571402818",              "professor": "Professor Jang",              "self": "https://finalproject-rajamong.wl.r.appspot.com/courses/4594920882962432",              "subject": "Computer Science",              "title": "Operating Systems 2"          },          {              "assignments": [],              "id": 4599843183919104,              "level": "444",              "owner": "113727376696571402818",              "professor": "Professor Jang",              "self": "https://finalproject-rajamong.wl.r.appspot.com/courses/4599843183919104",              "subject": "Computer Science",              "title": "Operating Systems 2"          }      ],      "next": "https://finalproject-rajamong.wl.r.appspot.com/courses?limit=5&offset=5"  } |

**Failures:**

|  |
| --- |
| Status: 406 Not Acceptable  <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2 Final//EN">  <title>405 Method Not Allowed</title>  <h1>Method Not Allowed</h1>  <p>The method is not allowed for the requested URL.</p> |
| Status: 405 Not Allowed  "sent MIME type not supported" |
| Status: 401 Unauthorized  "the jwt is wrong"  "there is no jwt" |

**View a Course**

Allows you to view an existing course.

|  |
| --- |
| GET /courses/:course\_id (protected) |

**Request**

Path Parameters:

|  |  |
| --- | --- |
| **Name** | **Description** |
| course\_id | The ID of the course. |

Request Body:

None

Request Body Format:

JSON

**Response Statuses:**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 200 OK |  |
| Failure | 406 Not Acceptable | This status code occurs if the requested MIME type is not supported by the application. |
| Failure | 405 Not Allowed | This status code occurs if the requested method is not supported by the application. |
| Failure | 401 Unauthorized | This status code occurs if the JWT Bearer Token provided is either missing or invalid. |
| Failure | 404 Not Found | This status code occurs if the requested course does not exist or if the user does not have access to the course. |

**Response Examples:**

**Success:**

|  |
| --- |
| Status: 200 OK  {      "assignments": [],      "id": 6690971290959872,      "level": "493",      "owner": "113727376696571402818",      "professor": "Professor Chaudry",      "self": "https://finalproject-rajamong.wl.r.appspot.com/courses/6690971290959872",      "subject": "Computer Science",      "title": "Cloud Application Development"  } |

**Failure:**

|  |
| --- |
| Status: 406 Not Acceptable  "requested MIME type not supported" |
| Status: 405 Not Allowed  "this method is not recognized" |
| Status: 401 Unauthorized  "the jwt is wrong"  "there is no jwt" |
| Status: 404 Not Found  "you do not have access to this course"  "this course does not exist" |

**Delete a Course**

Allows you to delete an existing course.

|  |
| --- |
| DELETE /courses/:course\_id (protected) |

**Request**

Path Parameters:

|  |  |
| --- | --- |
| **Name** | **Description** |
| course\_id | The ID of the course. |

Request Body:

None

Request Body Format:

Success: No Body

Failure: JSON

**Response Statuses:**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 204 No Content |  |
| Failure | 406 Not Acceptable | This status code occurs if the requested MIME type is not supported by the application. |
| Failure | 405 Not Allowed | This status code occurs if the requested method is not supported by the application. |
| Failure | 401 Unauthorized | This status code occurs if the JWT Bearer Token provided is either missing or invalid. |
| Failure | 404 Not Found | This status code occurs if the requested course does not exist or if the user does not have access to the course. |

**Response Examples:**

**Success:**

|  |
| --- |
| Status: 204 No Content |

**Failure:**

|  |
| --- |
| Status: 406 Not Acceptable  "requested MIME type not supported" |
| Status: 405 Not Allowed  "this method is not recognized" |
| Status: 401 Unauthorized  "the jwt is wrong"  "there is no jwt" |
| Status: 404 Not Found  "you do not have access to this course"  "this course does not exist" |

**Edit a Course**

Allows you to edit an existing course.

|  |
| --- |
| PUT /courses/:course\_id (protected) |
| PATCH /courses/:course\_id (protected) |

**Request**

Path Parameters:

|  |  |
| --- | --- |
| **Name** | **Description** |
| course\_id | The ID of the course. |

Request Body:

Required

Request Body Format:

JSON

**Request JSON Attributes:**

|  |  |
| --- | --- |
| **Name** | **Description** |
| title | The title of the course. (e.g., Operating Systems) |
| subject | The subject of the course. (e.g., Mathematics, English) |
| level | The level of the course. (e.g., 101, 345, 493) |
| professor | The name of the professor teaching the course. |
| owner | The Unique ID of the stud who the course belongs to. |
| assignments | The assignments that belong to the course. |

**Request Body Example:**

|  |
| --- |
| {    "title": "Cloud Application Development",    "subject": "Computer Science",    "level": "493",    "professor": "Professor Chaudry",    "assignments": [],    "owner": "*{{user\_id1}}*"  } |

**Response Statuses:**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 201 Created |  |
| Failure | 406 Not Acceptable | This status code occurs if the requested MIME type is not supported by the application. |
| Failure | 405 Not Allowed | This status code occurs if the requested method is not supported by the application. |
| Failure | 401 Unauthorized | This status code occurs if the JWT Bearer Token provided is either missing or invalid. |
| Failure | 400 Bad Request | This status code occurs if one or more of the required attributes is missing. |

**Response Examples:**

**Success:**

|  |
| --- |
| Status: 201 Created  {      "assignments": [],      "id": 6690971290959872,      "level": "493",      "owner": "113727376696571402818",      "professor": "Professor Chaudry",      "self": "https://finalproject-rajamong.wl.r.appspot.com/courses/6690971290959872",      "subject": "Computer Science",      "title": "Cloud Application Development"  } |

**Failure:**

|  |
| --- |
| Status: 406 Not Acceptable  "requested MIME type not supported" |
| Status: 405 Not Allowed  "this method is not recognized" |
| Status: 401 Unauthorized  "the jwt is wrong"  "there is no jwt" |
| Status: 400 Bad Request  "the course is missing one or more of the required attributes" |

**Create an Assignment**

Allows you to create a new assignment.

|  |
| --- |
| POST /assignments (protected) |

**Request**

Path Parameters:

None

Request Body:

Required

Request Body Format:

JSON

**Request JSON Attributes:**

|  |  |
| --- | --- |
| **Name** | **Description** |
| title | The title of the assignment. (e.g., Homework 1, Lab 4) |
| due\_date | The date that the assignment is due. |
| points | The number of points the assignment is worth. |
| finished | Whether the assignment has been completed or not. |

**Request Body Example:**

|  |
| --- |
| {      "title": "GAE",      "due\_date": "10/5/2021",      "points": 10,      "finished": **true**  } |

**Response Statuses:**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 201 Created |  |
| Failure | 406 Not Acceptable | This status code occurs if the requested MIME type is not supported by the application. |
| Failure | 405 Not Allowed | This status code occurs if the requested method is not supported by the application. |
| Failure | 401 Unauthorized | This status code occurs if the JWT Bearer Token provided is either missing or invalid. |
| Failure | 400 Bad Request | This status code occurs if one or more of the required attributes is missing. |

**Response Examples:**

**Success:**

|  |
| --- |
| Status: 201 Created  {      "course\_id": **null**,      "due\_date": "10/5/2021",      "finished": **false**,      "id": 6370169781747712,      "owner": "113727376696571402818",      "points": 10,      "self": "https://finalproject-rajamong.wl.r.appspot.com/assignments/6370169781747712",      "title": "GAE"  } |

**Failure:**

|  |
| --- |
| Status: 406 Not Acceptable  "requested MIME type not supported" |
| Status: 405 Not Allowed  "this method is not recognized" |
| Status: 401 Unauthorized  "the jwt is wrong"  "there is no jwt" |
| Status: 400 Bad Request  "the assignment is missing one or more of the required attributes" |

**View all Assignments**

Allows you to view all existing assignments.

|  |
| --- |
| GET /assignments (protected) |

**Request**

Path Parameters:

None

Request Body:

None

Request Body Format:

JSON

**Response Statuses:**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 200 OK |  |
| Failure | 406 Not Acceptable | This status code occurs if the requested MIME type is not supported by the application. |
| Failure | 405 Not Allowed | This status code occurs if the requested method is not supported by the application. |
| Failure | 401 Unauthorized | This status code occurs if the JWT Bearer Token provided is either missing or invalid. |

**Response Examples:**

**Success:**

|  |
| --- |
| Status: 200 OK  {      "assignments": [          {              "course\_id": **null**,              "due\_date": "10/12/2021",              "finished": **false**,              "id": 4544724593541120,              "owner": "113727376696571402818",              "points": 10,              "self": "https://finalproject-rajamong.wl.r.appspot.com/assignments/4544724593541120",              "title": "Use a Web API"          },          {              "course\_id": **null**,              "due\_date": "10/12/2021",              "finished": **false**,              "id": 4551752837758976,              "owner": "113727376696571402818",              "points": 10,              "self": "https://finalproject-rajamong.wl.r.appspot.com/assignments/4551752837758976",              "title": "Use a Web API"          },          {              "course\_id": **null**,              "due\_date": "10/12/2021",              "finished": **false**,              "id": 4555476842840064,              "owner": "113727376696571402818",              "points": 10,              "self": "https://finalproject-rajamong.wl.r.appspot.com/assignments/4555476842840064",              "title": "Use a Web API"          },          {              "course\_id": **null**,              "due\_date": "10/12/2021",              "finished": **false**,              "id": 4577847381327872,              "owner": "113727376696571402818",              "points": 10,              "self": "https://finalproject-rajamong.wl.r.appspot.com/assignments/4577847381327872",              "title": "Use a Web API"          },          {              "course\_id": **null**,              "due\_date": "10/12/2021",              "finished": **false**,              "id": 4582827194580992,              "owner": "113727376696571402818",              "points": 10,              "self": "https://finalproject-rajamong.wl.r.appspot.com/assignments/4582827194580992",              "title": "Use a Web API"          }      ],      "collection": 144,      "next": "https://finalproject-rajamong.wl.r.appspot.com/assignments?limit=5&offset=5"  } |

**Failures:**

|  |
| --- |
| Status: 406 Not Acceptable  <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2 Final//EN">  <title>405 Method Not Allowed</title>  <h1>Method Not Allowed</h1>  <p>The method is not allowed for the requested URL.</p> |
| Status: 405 Not Allowed  "sent MIME type not supported" |
| Status: 401 Unauthorized  "the jwt is wrong"  "there is no jwt" |

**View an Assignment**

Allows you to view an existing assignment.

|  |
| --- |
| GET /assignments/:assignment\_id (protected) |

**Request**

Path Parameters:

|  |  |
| --- | --- |
| **Name** | **Description** |
| assignments\_id | The ID of the assignment. |

Request Body:

None

Request Body Format:

JSON

**Response Statuses:**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 200 OK |  |
| Failure | 406 Not Acceptable | This status code occurs if the requested MIME type is not supported by the application. |
| Failure | 405 Not Allowed | This status code occurs if the requested method is not supported by the application. |
| Failure | 401 Unauthorized | This status code occurs if the JWT Bearer Token provided is either missing or invalid. |
| Failure | 404 Not Found | This status code occurs if the requested assignment does not exist or if the user does not have access to the assignment. |

**Response Examples:**

**Success:**

|  |
| --- |
| Status: 200 OK  {      "course\_id": **null**,      "due\_date": "10/5/2021",      "finished": **false**,      "id": 6370169781747712,      "owner": "113727376696571402818",      "points": 10,      "self": "https://finalproject-rajamong.wl.r.appspot.com/assignments/6370169781747712",      "title": "GAE"  } |

**Failure:**

|  |
| --- |
| Status: 406 Not Acceptable  "requested MIME type not supported" |
| Status: 405 Not Allowed  "this method is not recognized" |
| Status: 401 Unauthorized  "the jwt is wrong"  "there is no jwt" |
| Status: 404 Not Found  "you do not have access to this assignment"  "this assignment does not exist" |

**Delete an Assignment**

Allows you to delete an existing assignment.

|  |
| --- |
| DELETE /assignments/:assignment\_id (protected) |

**Request**

Path Parameters:

|  |  |
| --- | --- |
| **Name** | **Description** |
| assignment\_id | The ID of the assignment. |

Request Body:

None

Request Body Format:

Success: No Body

Failure: JSON

**Response Statuses:**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 204 No Content |  |
| Failure | 406 Not Acceptable | This status code occurs if the requested MIME type is not supported by the application. |
| Failure | 405 Not Allowed | This status code occurs if the requested method is not supported by the application. |
| Failure | 401 Unauthorized | This status code occurs if the JWT Bearer Token provided is either missing or invalid. |
| Failure | 404 Not Found | This status code occurs if the requested assignment does not exist or if the user does not have access to the assignment. |

**Response Examples:**

**Success:**

|  |
| --- |
| Status: 204 No Content |

**Failure:**

|  |
| --- |
| Status: 406 Not Acceptable  "requested MIME type not supported" |
| Status: 405 Not Allowed  "this method is not recognized" |
| Status: 401 Unauthorized  "the jwt is wrong"  "there is no jwt" |
| Status: 404 Not Found  "you do not have access to this assignment"  "this assignment does not exist" |

**Edit an Assignment**

Allows you to edit an existing assignment.

|  |
| --- |
| PUT /assignments/:assignment\_id (protected) |
| PATCH /assignments/:assignment\_id (protected) |

**Request**

Path Parameters:

|  |  |
| --- | --- |
| **Name** | **Description** |
| assignment\_id | The ID of the assignment. |

Request Body:

Required

Request Body Format:

JSON

**Request JSON Attributes:**

|  |  |
| --- | --- |
| **Name** | **Description** |
| title | The title of the assignment. (e.g., Homework 1, Lab 4) |
| due\_date | The date that the assignment is due. |
| points | The number of points the assignment is worth. |
| finished | Whether the assignment has been completed or not. |

**Request Body Example:**

|  |
| --- |
| {      "title": "GAE",      "due\_date": "10/5/2021",      "points": 10,      "finished": **true**  } |

**Response Statuses:**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 201 Created |  |
| Failure | 406 Not Acceptable | This status code occurs if the requested MIME type is not supported by the application. |
| Failure | 405 Not Allowed | This status code occurs if the requested method is not supported by the application. |
| Failure | 401 Unauthorized | This status code occurs if the JWT Bearer Token provided is either missing or invalid. |
| Failure | 400 Bad Request | This status code occurs if one or more of the required attributes is missing. |

**Response Examples:**

**Success:**

|  |
| --- |
| Status: 201 Created  {      "course\_id": "null",      "due\_date": "11/1/2021",      "finished": **false**,      "id": 5298608324739072,      "owner": "113727376696571402818",      "points": 10,      "self": "https://finalproject-rajamong.wl.r.appspot.com/assignments/5298608324739072",      "title": "Quiz 1"  } |

**Failure:**

|  |
| --- |
| Status: 406 Not Acceptable  "requested MIME type not supported" |
| Status: 405 Not Allowed  "this method is not recognized" |
| Status: 401 Unauthorized  "the jwt is wrong"  "there is no jwt" |
| Status: 400 Bad Request  "the assignment is missing one or more of the required attributes" |

**Create an Assignment in a Course**

Allows you to create a new assignment in an existing course.

|  |
| --- |
| POST /courses/:course\_id/assignments (protected) |

**Request**

Path Parameters:

|  |  |
| --- | --- |
| **Name** | **Description** |
| course\_id | The ID of the course. |

Request Body:

Required

Request Body Format:

JSON

**Request JSON Attributes:**

|  |  |
| --- | --- |
| **Name** | **Description** |
| title | The title of the assignment. (e.g., Homework 1, Lab 4) |
| due\_date | The date that the assignment is due. |
| points | The number of points the assignment is worth. |
| finished | Whether the assignment has been completed or not. |

**Request Body Example:**

|  |
| --- |
| {      "title": "GAE",      "due\_date": "10/5/2021",      "points": 10,      "finished": **true**  } |

**Response Statuses:**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 201 Created |  |
| Failure | 406 Not Acceptable | This status code occurs if the requested MIME type is not supported by the application. |
| Failure | 405 Not Allowed | This status code occurs if the requested method is not supported by the application. |
| Failure | 401 Unauthorized | This status code occurs if the JWT Bearer Token provided is either missing or invalid. Or if course\_id is invalid. |
| Failure | 400 Bad Request | This status code occurs if one or more of the required attributes is missing. |

**Response Examples:**

**Success:**

|  |
| --- |
| Status: 201 Created  {      "course\_id": 5246940136603648,      "due\_date": "10/5/2021",      "finished": **false**,      "id": 6370169781747712,      "owner": "113727376696571402818",      "points": 10,      "self": "https://finalproject-rajamong.wl.r.appspot.com/assignments/6370169781747712",      "title": "GAE"  } |

**Failure:**

|  |
| --- |
| Status: 406 Not Acceptable  "requested MIME type not supported" |
| Status: 405 Not Allowed  "this method is not recognized" |
| Status: 401 Unauthorized  "the jwt is wrong"  "there is no jwt"  "this course can not be found" |
| Status: 400 Bad Request  "the assignment is missing one or more of the required attributes" |

**View all Assignments in a Course**

Allows you to view all existing assignments in an existing course.

|  |
| --- |
| GET /courses/:course\_id/assignments (protected) |

**Request**

Path Parameters:

|  |  |
| --- | --- |
| **Name** | **Description** |
| course\_id | The ID of the course. |

Request Body:

None

Request Body Format:

JSON

**Response Statuses:**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 200 OK |  |
| Failure | 406 Not Acceptable | This status code occurs if the requested MIME type is not supported by the application. |
| Failure | 405 Not Allowed | This status code occurs if the requested method is not supported by the application. |
| Failure | 401 Unauthorized | This status code occurs if the JWT Bearer Token provided is either missing or invalid. |

**Response Examples:**

**Success:**

|  |
| --- |
| Status: 200 OK  {      "assignments": [          {              "course\_id": 5246940136603648,              "due\_date": "10/12/2021",              "finished": **false**,              "id": 4544724593541120,              "owner": "113727376696571402818",              "points": 10,              "self": "https://finalproject-rajamong.wl.r.appspot.com/assignments/4544724593541120",              "title": "Use a Web API"          },          {              "course\_id": 5246940136603648,              "due\_date": "10/12/2021",              "finished": **false**,              "id": 4551752837758976,              "owner": "113727376696571402818",              "points": 10,              "self": "https://finalproject-rajamong.wl.r.appspot.com/assignments/4551752837758976",              "title": "Use a Web API"          },          {              "course\_id": 5246940136603648,              "due\_date": "10/12/2021",              "finished": **false**,              "id": 4555476842840064,              "owner": "113727376696571402818",              "points": 10,              "self": "https://finalproject-rajamong.wl.r.appspot.com/assignments/4555476842840064",              "title": "Use a Web API"          },          {              "course\_id": 5246940136603648,              "due\_date": "10/12/2021",              "finished": **false**,              "id": 4577847381327872,              "owner": "113727376696571402818",              "points": 10,              "self": "https://finalproject-rajamong.wl.r.appspot.com/assignments/4577847381327872",              "title": "Use a Web API"          },          {              "course\_id": 5246940136603648,              "due\_date": "10/12/2021",              "finished": **false**,              "id": 4582827194580992,              "owner": "113727376696571402818",              "points": 10,              "self": "https://finalproject-rajamong.wl.r.appspot.com/assignments/4582827194580992",              "title": "Use a Web API"          }      ],      "collection": 144,      "next": "https://finalproject-rajamong.wl.r.appspot.com/assignments?limit=5&offset=5"  } |

**Failures:**

|  |
| --- |
| Status: 406 Not Acceptable  <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2 Final//EN">  <title>405 Method Not Allowed</title>  <h1>Method Not Allowed</h1>  <p>The method is not allowed for the requested URL.</p> |
| Status: 405 Not Allowed  "sent MIME type not supported" |
| Status: 401 Unauthorized  "the jwt is wrong"  "there is no jwt" |

**Put an Assignment into a Course**

Allows you to put an existing assignment into an existing course.

|  |
| --- |
| PUT /courses/:course\_id/assignments/:assignment\_id (protected) |

**Request**

Path Parameters:

|  |  |
| --- | --- |
| **Name** | **Description** |
| course\_id | The ID of the course. |
| assignment\_id | The ID of the assignment. |

Request Body:

None

Request Body Format:

JSON

**Response Statuses:**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 204 No Content |  |
| Failure | 406 Not Acceptable | This status code occurs if the requested MIME type is not supported by the application. |
| Failure | 405 Not Allowed | This status code occurs if the requested method is not supported by the application. |
| Failure | 401 Unauthorized | This status code occurs if the JWT Bearer Token provided is either missing or invalid. |
| Failure | 403 Forbidden | This status code occurs if the assignment is already in the course. |
| Failure | 400 Bad Request | This status code occurs if one or more of the required attributes is missing. |
| Failure | 404 Not Found | This status code occurs if the course or assignment can not be found. |

**Response Examples:**

**Success:**

|  |
| --- |
| Status: 204 No Content |

**Failure:**

|  |
| --- |
| Status: 406 Not Acceptable  "requested MIME type not supported" |
| Status: 405 Not Allowed  "this method is not recognized" |
| Status: 401 Unauthorized  "the jwt is wrong"  "there is no jwt" |
| Status: 403 Forbidden  "this assignment is already in the course" |
| Status: 400 Bad Request  "the assignment is missing one or more of the required attributes" |
| Status: 404 Not Found  "this assignment can not be found"  "this course can not be found" |

**Delete an Assignment from a Course**

Allows you to put an existing assignment into an existing course.

|  |
| --- |
| PUT /courses/:course\_id/assignments/:assignment\_id (protected) |

**Request**

Path Parameters:

|  |  |
| --- | --- |
| **Name** | **Description** |
| course\_id | The ID of the course. |
| assignment\_id | The ID of the assignment. |

Request Body:

None

Request Body Format:

JSON

**Response Statuses:**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 204 No Content |  |
| Failure | 406 Not Acceptable | This status code occurs if the requested MIME type is not supported by the application. |
| Failure | 405 Not Allowed | This status code occurs if the requested method is not supported by the application. |
| Failure | 401 Unauthorized | This status code occurs if the JWT Bearer Token provided is either missing or invalid. |
| Failure | 403 Forbidden | This status code occurs if the assignment is already in the course. |
| Failure | 400 Bad Request | This status code occurs if one or more of the required attributes is missing. |
| Failure | 404 Not Found | This status code occurs if the course or assignment can not be found. |

**Response Examples:**

**Success:**

|  |
| --- |
| Status: 204 No Content |

**Failure:**

|  |
| --- |
| Status: 406 Not Acceptable  "requested MIME type not supported" |
| Status: 405 Not Allowed  "this method is not recognized" |
| Status: 401 Unauthorized  "the jwt is wrong"  "there is no jwt" |
| Status: 403 Forbidden  "this assignment is already in the course" |
| Status: 400 Bad Request  "the assignment is missing one or more of the required attributes" |
| Status: 404 Not Found  "this assignment can not be found"  "this course can not be found" |