STUDENT

- **CREATE**: **/courses/{courseId}/students**

REQUEST BODY: {
     courseId: *long,*
     lastName: *string,*
     firstName: *string,*
     studentNumber: *string,*
     gender*: *string* **(M, F, OTHER)**

 }

RESPONSE:
- **Created:** *http Status 201* **(resource created location in header)**
- **Conflict:** *http status 409*
  Body: [
    {
    errorCode: *int* **(100, 101, 102, 103, 109),**
    fieldName: *string,*
    message: *string*
   }
  ]

- **Internal server error:** *http status 500*
  Body: {
    errorCode: *int* **(110),**
    fieldName: *null,*
    message: *string*
   }

- **Bad request:** *http status 400*
  Body: [
    {
    errorCode: *int* **(100, 101, 102, 103, 109),**
    fieldName: *string,*
    message: *string*
   }
  ]

- **GET**: **/courses/{courseId}/students/{studentId}**

PATH VARIABLES: *courseId,* *studentId*

RESPONSE:
- **Success**: *http Status 200*
  Body: *{*
    studentId: *long,*
    courseId: *long,*
    courseName: *string,*
    studentNumber: *string,*
    lastName: *string,*
    firstName: *string,*
    gender: *string* **(M, F, OTHER)**
  }

- **Not Found**: *http status 404*
  Body: *{*
    errorCode: *int* **(111),**
    fieldName: *null,*
    message: *string*
   }

- **Internal server error**: *http status 500*
  Body: *{*
    errorCode: *int* **(110),**
    fieldName: *null,*
    message: *string*
   }

- **GET ALL**: **/courses/{courseId}/students**

PATH PARAMS: *courseId*

QUERY PARAMS: *{*
    lastName*: *string,*
    firstName*: *string,*
    gender*: *string,*
    offset*: *int,*
    limit*: *int*

 }

RESPONSE:
- **Success**: *http Status 200*
  Body: *{*
  {
        "totalElements": int,

```
                "totalPages": int,
                "size": int,
                "content": [
                        {
                                studentId: long,
                                courseId: long,
                                courseName: string,
                                studentNumber: string,
                                lastName: string,
                                firstName: string,
                                gender: string (M, F, OTHER)
                        }
                ],
                "number": int,
                "sort": {
                  "empty": true,
                  "sorted": true,
                  "unsorted": true
                },
                "numberOfElements": int,
                "first": true,
                "last": true,
                "pageable": {
                  "offset": int,
                  "sort": {
                    "empty": true,
                    "sorted": true,
                    "unsorted": true
                  },
                  "pageSize": int,
                  "pageNumber": int,
                  "paged": true,
                  "unpaged": true
          }}}
```

- *Internal server error*: http status 500
  Body: {
     errorCode: int **(110)**,
      fieldName: null,
     message: string
   }

- **PUT**: **/courses/{courseId}/students/{studentId}**

REQUEST BODY: {

　　　　lastName: string,

　　　　firstName: string,

　　　　*gender: string **(M, F, OTHER)***

　}

RESPONSE:
- **Success**: *http Status 200*
- **Not Found**: *http status 404*
  Body: {
  　　*errorCode: int **(111),***
  　　 fieldName: null,
  　　message: string
  　}

- **Conflict**: *Http status 409*
  Body: [{
  　　*errorCode: int **(100, 101, 102, 103, 104),***
  　　 fieldName: string,
  　　message: string

  　}]
- **Internal server error**: *http status 500*
  Body: {
  　　*errorCode: int **(110),***
  　　 fieldName: null,
  　　message: string
  　}

- **Bad request**: *http status 400*
  Body: [{
  　　*errorCode: int **(100, 101, 102, 103, 104),***
  　　 fieldName: string,
  　　message: string
  　}]

- **DELETE**:　**/courses/{courseId}/students/{studentId}**

  PATH VARIABLES: *courseId,　studentId*

  RESPONSE:
  - **Success**: *http Status 200*
  - **Not Found**: *http status 404*
    Body: {
    　　*errorCode: int **(111),***

              fieldName: null,
              message: string
           }

-   ***Internal server error****: http status 500*
    Body*: {*
      errorCode*: int **(110),***
      fieldName*: null,*
      message*: string*
     }

COURSE

-   **<u>CREATE</u>**:   **/courses**

    REQUEST BODY*: {*
         facultyId: *long**,***
         name*: string,*
         professorName*: string,*
         startDate*: Date **(DD-MM-YYYY)***

    }

    RESPONSE*:*
    -   ***Created****: http Status 201 **(resource created location in header)***
    -   ***Conflict****: http status 409*
      Body*: [{*
        errorCode*: int **(105, 106, 107, 108),***
        fieldName*: string,*
        message*: string*
       }]

    -   ***Internal server error****: http status 500*
      Body*: {*
        errorCode*: int **(110),***
        fieldName*: null,*
        message*: string*
      }

    -   ***Bad request****: http status 400*
      Body*: [{*
        errorCode*: int **(105, 106, 107, 108),***
        fieldName*: string,*
        message*: string*
       }]

- **GET**:   **/courses/{courseId}**

  PATH VARIABLES: courseId

  RESPONSE:
  - *Success: http Status 200*
    Body: {
      id: long,
      facultyId: long,
      facultyName: string,
      name: string,
      professorName: string,
      startDate: Date (DD-MM-YYYY)
    }
  - *Not Found: http status 404*
    Body: {
      errorCode: int (111),
      fieldName: null,
      message: string
    }
  - *Internal server error: http status 500*
    Body: {
      errorCode: int (110),
      fieldName: null,
      message: string
    }

- **GET ALL**:   **/courses**

  PARAMS: {
      facultyName: string,*
      name: string,*
      professorName: string,*
      startDate: Date (DD-MM-YYYY),*
      offset: int,*
      limit: int*

   }

  RESPONSE:
  - *Success: http Status 200*
    Body: {
    {
          "totalElements": int,
          "totalPages": int,
          "size": int,
          "content": [

              {

```
                    id: long,
                    facultyId: long,
                    facultyName: string,
                    name: string,
                    professorName: string,
                    startDate: Date (DD-MM-YYYY)

              }

         ],

    "number": int,
    "sort": {
      "empty": true,
      "sorted": true,
      "unsorted": true
    },
    "numberOfElements": int,
    "first": true,
    "last": true,
    "pageable": {
      "offset": int,
      "sort": {
        "empty": true,
        "sorted": true,
        "unsorted": true
      },
      "pageSize": int,
      "pageNumber": int,
      "paged": true,
      "unpaged": true
    }}}
```

- *Internal server error: http status 500*
  Body: {
  errorCode: int (110),
  fieldName: null,
  message: string
  }

- **<u>PUT</u>**: **/courses/{courseId}**

REQUEST BODY: {
  facultyId: long,
  name: string,
  professorName: string,
  startDate: Date (DD-MM-YYYY)
  }

RESPONSE:
- *Success: http Status 200*
- *Not Found: http status 404*
  Body: {
     errorCode: int (111),
     fieldName: null,
     message: string
    }

- *Conflict: http status 409*
  Body: [{
     errorCode: int (105, 106, 107, 108),
     fieldName: string,
     message: string
    }]

- *Internal server error: http status 500*
  Body: {
     errorCode: int (110),
     fieldName: null,
     message: string
    }

- *Bad request: http status 400*
  Body: [{
     errorCode: int (105, 106, 107, 108),
     fieldName: string,
     message: string
    }]

- **DELETE**: **/courses/{courseId}**

  PATH VARIABLES: courseId

  RESPONSE:
  - *Success: http Status 200*
  - *Not Found: http status 404*
    Body: {
       errorCode: int (111),
       fieldName: null,
       message: string
      }
  - *Internal server error: http status 500*
    Body: {
       errorCode: int (110),
       fieldName: null,
       message: string
      }

FACULTY

- **GET ALL**: **/faculties**

  PARAMS: {
  > *name*: string,*
  > *offset*: int,*
  > *limit*: int*
  }

  RESPONSE:
  - *Success: http Status 200*
    Body: {
    {
    > *"totalElements": int,*
    > *"totalPages": int,*
    > *"size": int,*
    > *"content": [*
    >> *{*
    >>> *id: long,*
    >>> *name: string*
    >> *}*
    > *],*
    > *"number": int,*
    > *"sort": {*
    >> *"empty": true,*
    >> *"sorted": true,*
    >> *"unsorted": true*
    > *},*
    > *"numberOfElements": int,*
    > *"first": true,*
    > *"last": true,*
    > *"pageable": {*
    >> *"offset": int,*
    >> *"sort": {*
    >>> *"empty": true,*
    >>> *"sorted": true,*
    >>> *"unsorted": true*
    >> *},*
    >> *"pageSize": int,*
    >> *"pageNumber": int,*
    >> *"paged": true,*
    >> *"unpaged": true*
    }}}

  - *Internal server error: http status 500*

```
Body: {
    errorCode: int (110),
     fieldName: null,
     message: string
  }
```

RELATIONSHIPS

1/ COURSE <–> STUDENT : **1 – M**

2/ COURSE <–> FACULTY : **1 – M**

ERROR CODES:

- *100: lastName is empty*
- *101: firstName is empty*
- *102: gender not valid*
- *103: courseId is empty*
- *104: studentId is empty*
- *105: facultyId is empty*
- *106: name is empty*
- *107: professorName is empty*
- *108: startDate not valid*
- *109: studentNumber is empty*
- *110: Internal server error*
- *111: Resource not found*