Technical Documentation

This file documents APIs that are used in our project. Most of them are related to data access and data rendering.

# API

## Render all degree names

### Description

This API returns a rendered page showing all the degree names. The Page conforms to the UI/UX design.

### URL

http://localhost:5000

### HTTP method

GET.

### Request parameters or query strings

None.

### Return example

None. When accessing this URL, an ejs file is automatically rendered on the web browser

## Render degree structure

### Description

This API returns a rendered page showing all the core courses and elective courses of a degree. The Page conforms to the UI/UX design.

### URL

http://localhost:5000/degree-stucture/:degreeName

### HTTP method

GET.

### Request parameters or query strings

| **Request parameters** | **Request value** | **Description** |
| --- | --- | --- |
| degreeName | string | each degree is identified by its unique name. The name will be used to query the related data from database. |

### Return example

An JSON object is returned:

| {  "core-courses":[  "comp sci 30xx Computer Netxxxx",  "comp sci 70xx Computer SysXXXX"  ],  "elective-courses":[  "...",  "..."  ] } |
| --- |

## Render course relationships

### Description

This API returns a rendered page showing the pre-requisite courses and incompatible courses of a selected course. The Page conforms to the UI/UX design.

### URL

http://localhost:5000/course-relationship/:courseID

### HTTP method

GET.

### Request parameters or query strings

| **Request parameters** | **Request value** | **Description** |
| --- | --- | --- |
| courseID | int | each course is identified by a unique id number. This id number will be used to search the related data in database. |

### Return example

An JSON object is returned:

| {  "pre-requisite":[  "comp sci 30xx Computer Netxxxx",  "comp sci 70xx Computer SysXXXX"  ],  "incompatible":[  "...",  "..."  ] } |
| --- |

## Searching course(s) by course/major name

### Description

This API returns a rendered page showing the searching result. The Page conforms to the UI/UX design.

### URL

http://localhost:5000/search

### HTTP method

GET.

### Request parameters or query strings

| **Query key** | **Query value type** | **Description** |
| --- | --- | --- |
| course-name | string | Course name will be used to query the related data from database. |
| major-name | string | Major name will be used to query the related data from database. |

# Data Prototype

The prototype of JSON data that will be used in the course relationships page.