

Software Maintenance, ESOF 326, Spring 2020
Endpoints, Jan. 24

Given the new database structure and permissions, write URIs for expected web-service endpoints, which do not require permissions.

Tasks to consider:

1. List all programs
2. List all outcomes
3. List all outcomes within a program
4. List all courses
5. List all courses within a program
6. List all courses within a program, outcomes within a program mapping

Example for list all programs:

<http://about.mtech.edu/programs>

... /programs

List all programs

... /programs/{program abbrev}/outcomes

List outcomes within a program

... /programs/{program abbrev}/courses

List courses within a program

... /programs/{program abbrev}/measures/{course abbrev}

List those outcomes that the given course measures

... /programs/{program abbrev}/measures/{outcome abbrev}

List those courses that measure an outcome

The above requires that course and outcome abbreviations be distinct. It also has one endpoint doing two things. An alternative to this is to precede the course or outcome abbreviation with 'course-' or 'outcome-'

... /courses

List all courses

... /outcomes

List all outcomes

- ... /subjects
List all subjects
- ... /subjects/{subject text}/courses
List all courses for a particular subject
- ... /subjects/{subject text}/courses/{course abbrev}/offerings
List all offerings of a particular course
- ... /subjects/{subject text}/courses/{course abbrev}/offerings/{semester}/assessments
List all assessments of a particular offering
- ... /subjects/{subject text}/courses/{course abbrev}/offerings/{semester}/students
List all students of a particular offering
- ... /subjects/{subject text}/courses/{course abbrev}/offerings/{semesters}/scores
List of (assessment, student, score) of all assessments in the offering

- ... /prefixes
List all prefixes

Phil suggested that a way to handle items expiring is to allow an optional semester interval start and end specification at the beginning of each uri. In the following ‘[...]?’ indicates optional. If present a start and end value are specified, variables will be created with the given values. If start and end are not specified, the variables will not be created. .../[start semester, end semester]?/...