# SOAP to REST

#### Scott Hurrey

```
 \{\% \ assign \ sluggedName = page.name \ | \ replace: `.md' \% \}  modified:  \{\{ \ page.last\_modified\_at \ | \ date: `\%b-\%d-\%y' \} \}
```

## SOAP to REST migration: Mapping

The purpose of this document is to provide a mapping from SOAP Web Service calls to REST API Endpoints. This is meant to be a quick-start guide to the migration process. With SOAP being deprecated in the near term future and removed from Learn following the public API Deprecation Policy, it is our intention to provide you the information you need in order to migrate as painlessly as possible. This is a living document and will up updated as the last few remaining gaps in functionality are closed.

New REST APIs are rolled out in new versions of Learn, but never back-ported to previous releases. To be sure the endpoint you require is available, be sure to visit the Developer Portal and check the individual endpoints you need.

#### Announcements

Read All System

Announcements

| Use Case              | SOAP WS Call                | REST Endpoint   |
|-----------------------|-----------------------------|---|
| Create Course         | AnnouncementWS.createCour   | rseAPAOS(Thermonts()  |
| Announcement          |                             | /learn/api/public/v1/courses/{courseId}/announcements           |
| Read Course           | AnnouncementWS.getCourse    |   |
| Announcement          | S                           | /learn/api/public/v1/courses/{courseId}/announcements/{announce |
| Read All Course       | AnnouncementWS.getCourse    | 1 1 - 1 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                         |
| Announcements         | Ü                           | /learn/api/public/v1/courses/{courseId}/announcements           |
| Update Course         | AnnouncementWS.updateCou    |   |
| Announcement          | -                           | /learn/api/public/v1/courses/{courseId}/announcements/{announce |
| Delete Course         | AnnouncementWS.deleteCour   |   |
| Announcement          |                             | /learn/api/public/v1/courses/{courseId}/announcements/{announce |
| Create Organization   | AnnouncementWS.createOrgA   |   |
| Announcement          | <u> </u>                    | /learn/api/public/v1/courses/{courseId}/announcements           |
| Read Organization     | AnnouncementWS.getOrgAnn    |   |
| Announcement          |                             | /learn/api/public/v1/courses/{courseId}/announcements/{announce |
| Read All Organization | AnnouncementWS.getOrgAnn    |   |
| Announcements         |                             | /learn/api/public/v1/courses/{courseId}/announcements           |
| Update Organization   | AnnouncementWS.updateOrg    |   |
| Announcement          |                             | /learn/api/public/v1/courses/{courseId}/announcements/{announce |
| Delete Organization   | AnnouncementWS.deleteOrgA   |   |
| Announcement          |                             | /learn/api/public/v1/courses/{courseId}/announcements/{announce |
| Create System         | AnnouncementWS.createSystem | em An OST in chements (pi/public/v1/announcements               |
| Announcement          | v                           | / / w / i / /   |
| Read System           | AnnouncementWS.getSystem.   | AnnG Time ments()   |
| Announcement          | ,                           | /learn/api/public/v1/announcements/{announcementId}             |
|                       |                             | 1 1 1 1 1 1 1   |

Announcement WS.get System Ann Grants (api/public/v1/announcements

| Use Case      | SOAP WS Call         | REST Endpoint   |
|---------------|----------------------|---|
| Update System | AnnouncementWS.upda  | ateSystem <b>PAATIGH</b> cements()                      |
| Announcement  |                      | /learn/api/public/v1/announcements/{announcementId}     |
| Delete System | AnnouncementWS.delet | eSystem ADE LEGEments()                                 |
| Announcement  |                      | $/learn/api/public/v1/announcements/\{announcementId\}$ |

# Calendar

| Use Case          | SOAP WS Call   | REST Endpoint  |  |
|-------------------|--|--|--|
| Create a Course   | CalendarWS.createCourseCalendarItem()CalendarWSOSFeCourseCalendarItem()  |  |  |
| Calendar Item     | v  | /learn/api/public/v1/calendars/items                   |  |
| Read a Course     | CalendarWS.getCalendarItem()   | GET  |  |
| Calendar Item     |  | /learn/api/public/v1/calendars/items/{calenda          |  |
|                   |  | $type$ /{calendar item id}                             |  |
| Read all Course   | CalendarWS.getCalendarItem()   | GET /learn/api/public/v1/calendarsGET                  |  |
| Calendar Items    |  | /learn/api/public/v1/calendars/items                   |  |
| Update a Course   | ${\bf Calendar WS. update Course Calendar Item () Calendar$ | ar <b>PASTS@H</b> CourseCalendarItem()                 |  |
| Calendar Item     |  | /learn/api/public/v1/calendars/items/{calenda          |  |
|                   |  | $type$ /{calendar item id}                             |  |
| Delete a Course   | CalendarWS.deleteCourseCalendarItem()  | DELETE   |  |
| Calendar Item     |  | /learn/api/public/v1/calendars/items/{calendars        |  |
|                   |  | $type$ /{calendar item id}                             |  |
| Create an         | CalendarWS.createInstitutionalCalendarItem()Ca   | alendarItem()  |  |
| Institutional     |  | /learn/api/public/v1/calendars/items                   |  |
| Calendar Item     |  |  |  |
| Read an           | CalendarWS.getCalendarItem()   | $\operatorname{GET}$                                   |  |
| Institutional     |  | /learn/api/public/v1/calendars/items/{calendars        |  |
| Calendar Item     |  | $type$ /{calendar item id}                             |  |
| Read all          | CalendarWS.getCalendarItem()   | GET /learn/api/public/v1/calendarsGET                  |  |
| Institutional     |  | /learn/api/public/v1/calendars/items                   |  |
| Calendar Items    |  |  |  |
| Update an         | Calendar WS. update Institutional Calendar Item() Calendar Item() Calendar Item()  |  |  |
| Institutional     |  | /learn/api/public/v1/calendars/items/{calendars/       |  |
| Calendar Item     |  | $type$ / ${calendar item id}$                          |  |
| Delete an         | ${\bf Calendar WS. delete Institutional Calendar Item ()}$   | DELETE   |  |
| Institutional     |  | /learn/api/public/v1/calendars/items/{calendars/       |  |
| Calendar Item     |  | $type \}/\{calendar item id\}$                         |  |
| Create a Personal | ${\bf Calendar WS. create Personal Calendar Item () Calend$ | V  |  |
| Calendar Item     |  | /learn/api/public/v1/calendars/items                   |  |
| Read a Personal   | CalendarWS.getCalendarItem()   | GET  |  |
| Calendar Item     |  | /learn/api/public/v1/calendars/items/{calendars/       |  |
|                   |  | type}/{calendar item id}                               |  |
| Read all Personal | CalendarWS.getCalendarItem()   | GET /learn/api/public/v1/calendarsGET                  |  |
| Calendar Items    | /learn/api/public/v1/calendars/items   |  |  |
| Update a Personal |  |  |  |
| Calendar Item     |  | /learn/api/public/v1/calendars/items/{calendars        |  |
| <b>.</b>          |  | type}/{calendar item id}                               |  |
| Delete a Personal | ${\bf Calendar WS. delete Personal Calendar Item ()}$  | DELETE   |  |
| Calendar Item     |  | /learn/api/public/v1/calendars/items/{calendars/items/ |  |
|                   |  | $type$ / ${calendar item id}$                          |  |

# Content

| Use                          |  |  |
|------------------------------|--|--|
| Case                         | SOAP WS Call   | REST Endpoint  |
| Create<br>Course<br>TOC      | ContentWS.saveCourseTOC()  | POST /learn/api/public/v1/courses/{courseId}/contents  |
| Read<br>Course<br>TOC        | ContentWS.getTOCsByCourseId  | $\label{eq:contents} $$ l(\ET / learn/api/public/v1/courses/{courseId}/contents/{content ID}) $$$  |
| Read All<br>Course<br>TOC    | ${\bf ContentWS.getTOCsByCourseId}$  | $\label{eq:course_def} $$ \end{course} $$ \end{course} / \end{course} $$ \end$ |
| Update<br>Course<br>TOC      | ${\bf ContentWS.save Course TOC()}$  | $PATCH / learn/api/public/v1/courses/\{courseId\}/contents$  |
| Delete<br>Course<br>TOC      | ·  | DELETE /learn/api/public/v1/courses/{courseId}/contents  |
| Create<br>Content<br>Item    | ContentWS.saveContent()  | POST /learn/api/public/v1/courses/{courseId}/contents/{content ID)/children  |
| Read<br>Content<br>Item      |  | GET /learn/api/public/v1/courses/{courseId}/contents/{content ID}  |
| Read All<br>Content<br>Items |  | GET /learn/api/public/v1/courses/{courseId}/contents/{content ID)/children   |
| Update<br>Content<br>Item    | ContentWS.saveContent()  | PATCH /learn/api/public/v1/courses/{courseId}/contents   |
| Delete<br>Content<br>Item    | ContentWS.deleteContents()   | DELETE /learn/api/public/v1/courses/{courseId}/contents  |
| Attach<br>File<br>Remove     | ContentWS.addContentFile() ContentWS.deleteContentFiles()  | POST /learn/api/public/v1/courses/{courseId}/contents/{content ID}/attachment DELETE   |
| File                         |  | /learn/api/public/v1/courses/{courseId}/contents/{contentID}/attachment/ ID}   |
| Update<br>File               | Content WS. update Content File Line Content WS. update Content File Line Content File Line Content WS. update Content File Line Content WS. update Content File Line Content File Conte | /learn/api/public/v1/courses/{courseId}/contents/{contentID}/attachment/ ID}POST /learn/api/public/v1/courses/{courseId}/contents/{contentID}/attachment   |
| Read<br>Content<br>File      | ContentWS.getContentFiles()  | GET /learn/api/public/v1/courses/{courseId}/contents/{contentID}/attachment/ ID}   |
| Read All<br>Content<br>Files | ${\bf ContentWS.getContentFiles()}$  | GET /learn/api/public/v1/courses/{courseId}/contents/{content ID}/attachment   |
| Download<br>Content<br>File  | ContentWS.getContentFiles()  | GET /learn/api/public/v1/courses/{courseId}/contents/{contentID}/attachment/ ID}/downloads   |
| Create<br>Link               | ContentWS.saveLink()   | POST /learn/api/public/v1/courses/{courseId}/contents/{content ID}/children  |
| Read<br>Link                 | Content WS.getLinksByReferred  | TGTE/Fe/MGont/entiWishlglitt/inlk/stbyrRefs/fersTiysel()}/contents/{content ID}  |

| Use               |                                 |   |
|-------------------|---------------------------------|---|
| Case              | SOAP WS Call                    | REST Endpoint   |
| Read All<br>Links | ContentWS.getLinksByReferred    | TGFFFe(Meaont/entiVffsightd/ink/stbynRsefe/s(entipred)}/contents  |
| Update<br>Link    | ${\bf ContentWS.saveLink}()$    | PATCH /learn/api/public/v1/courses/{courseId}/contents/{content ID}   |
| Delete<br>Link    | ${\bf ContentWS. deleteLink()}$ | DELETE /learn/api/public/v1/courses/{courseId}/contents/{content ID}  |
| Get Re-           | ContentWS.getReviewStatusBy     | Contestid()   |
| viewed<br>Status  |                                 | $/learn/api/public/v1/courses/\{courseId\}/contents/\{contentId\}/users/\{userId\}/reverserserserserserserserserserserserserse$ |
| Set Re-           | ContentWS.setContentReviewed    | d(PATCH   |
| viewed<br>Status  |                                 | /learn/api/public/v1/courses/{courseId}/contents/{contentId}/users/{userId}/rev   |

### Context

| Use Case                          | SOAP WS Call  | REST Endpoint   |
|-----------------------------------|---|---|
| Register Tool                     | ContextWS.registerTool()  | N/A   |
| Emulate a User                    | ContextWS.emulateUser()   | GET /learn/api/public/v1/oauth2/authorizationcodePOST /learn/api/public/v1/oauth2/token   |
| Extend Session Life               | ContextWS.extendSession   | LHQST /learn/api/public/v1/oauth2/token   |
| Get Memberships By<br>UserID      | ContextWS.getMembershi  | ips(ET /learn/api/public/v1/users/{user id}/courses                                       |
| Get Current User's<br>Memberships | ${\bf ContextWS.getMyMembe}$  | rsGip()/learn/api/public/v1/users/me/courses  |
| Get System<br>Installation ID     | ${\bf ContextWS.getSystemInst}$   | allestidald()   |
| Login as User                     | ${\rm ContextWS.login}()$   | GET /learn/api/public/v1/oauth2/authorizationcodePOST /learn/api/public/v1/oauth2/token   |
| Login with Access<br>Ticket       | ${\bf ContextWS.loginTicket}()$   | N/A   |
| Login as Tool<br>Logout           | $\begin{aligned} & \text{ContextWS.loginTool()} \\ & \text{ContextWS.logout()} \end{aligned}$ | $\begin{array}{l} {\rm POST\ /learn/api/public/v1/oauth2/token} \\ {\rm N/A} \end{array}$ |

# Courses

| Use Case          | SOAP WS Call              | REST Endpoint   |
|-------------------|---------------------------|---|
| Create Course     | CourseWS.createCourse()   | CPOSeTV/Sesuve Capuir su(blic/v2/courses  |
| Read Course       | CourseWS.getCourse()      | GET /learn/api/public/v2/courses/{courseId}   |
| Read All Courses  | CourseWS.getCourse()      | GET /learn/api/public/v2/courses  |
| Update Course     | CourseWS.saveCourse()     | PATCH /learn/api/public/v2/courses/{courseId}   |
| Update Course     | CourseWS.changeCourseE    | BaPATCGH()/learn/api/public/v2/courses/{courseId}   |
| BatchUID          |                           | V/  |
| Update Course     | CourseWS.changeCourseC    | CaPAGEGEBatchUid()  |
| Category          |                           | /learn/api/public/v1/catalog/categories/{categoryType}/{categoryId  |
| Update Course     | CourseWS.changeCourseI    | Dalla Section   Dalla Section |
| Datasource        | _                         |   |
| Delete Course     | CourseWS.deleteCourse()   | DELETE /learn/api/public/v2/courses/{courseId}  |
| Create            | CourseWS.createOrg()      | POST /learn/api/public/v2/courses   |
| Organization      |                           | , , , , , ,   |
| Read Organization | ${\tt CourseWS.getOrg()}$ | GET /learn/api/public/v2/courses/ $\{courseId\}$  |

| CourseWS.getOrg()   GET /learn/api/public/v2/courses   | Use Case               | SOAP WS Call                       | REST Endpoint  |
|--|------------------------|------------------------------------|--|
| Update Organization Update CourseWS.changeOrgBatchPAT(CH /learn/api/public/v2/courses/{courseld}) Update Organization BatchUID Update CourseWS.changeOrgCategPATBiHthUid() Organization Category Update CourseWS.changeOrgDataSPATBiHthUid() Organization Category Update CourseWS.changeOrgDataSPATBiHthUid() Organization Category Update CourseWS.changeOrgDataSPATBCH(Jlearn/api/public/v2/courses/{courseld}) Organization Datasource Delete CourseWS.deleteOrg() Organization Create Group CourseWS.saveGroup() Read All Groups Update Group CourseWS.saveGroup() Update Group CourseWS.saveGroup() Delete Group CourseWS.deleteGroup() Delete Group CourseWS.deleteGroup() Delete Term CourseWS.loadTerm() CourseWS.loadTerm() CourseWS.loadTerm() CourseWS.loadTerm() CourseWS.loadTerm() CourseWS.saveTerm() Delete Term CourseWS.saveCourse(TolethATCH /learn/api/public/v1/terms/{term id} CourseWS.addCourseToTethATCH /learn/api/public/v2/courses/{courseld}} CourseWS.loadCourseToTethATCH(Jearn/api/public/v2/courses/{courseld}} CourseWS.loadCourseSToTethATCH(Jearn/api/public/v2/courses/{courseld}} CourseWS.saveCourseCategROST /learn/api/public/v2/courses/{courseld}} CourseWS.saveCourseCategROST /learn/api/public/v1/catalog/categories/{categoryType}} CourseWS.getCategories() GET Category Read All Course CourseWS.getCategories() GET Clearn/api/public/v1/catalog/categories/{categoryType}/{categoryType}} CourseWS.getCategories() GET Clearn/api/public/v1/catalog/categories/{categoryType}/{categoryType}/{categoryType}/{categoryType}/{categoryType}/{categoryType}/{categoryType}/{categoryType}/{categoryType}/{categoryType}/{categoryType}/{categoryType}/{categoryType}/{categoryType}/{categoryType}/{categoryType}/{categoryType}/{categoryType}/{categoryTy |                        | CourseWS.getOrg()                  | GET /learn/api/public/v2/courses   |
| Update Organization BatchUID Update CourseWS.changeOrgCategDATEATEHUId() Update CourseWS.changeOrgCategDATEATEHUId() Update CourseWS.changeOrgCategDATEATEHUId() Update CourseWS.changeOrgDataSDATEGMCJICHUId() Update Create Create Course Update CourseWS.saveGroup() Update Create Term CourseWS.saveGroup() Update Create Term CourseWS.saveTerm() Update Create Term CourseWS.saveTerm() Update Term Update Term Update()  | Update                 | ${\bf CourseWS.saveCourse()}$      | $PATCH / learn/api/public/v2/courses/\{courseId\}$                         |
| CourseWS.changeOrgCategbAffElthUid()   | Update<br>Organization | ${\bf Course WS. change Org Bato}$ | chRAMCH /learn/api/public/v2/courses/{courseId}                            |
| Category    |                        |                                    |  |
| CourseWS.changeOrgDataSAMECH(  |                        | CourseWS.changeOrgCate             |  |
| Update Organization Datasource Delete CourseWS.deleteOrg() Organization Create Group Read Group CourseWS.getGroup() CourseWS.getGroup() CourseWS.aveGroup() DELETE /learn/api/public/v1/courses/{courseld}/groups/group Id} CourseWS.getGroup() CourseWS.aveGroup() DELETE /learn/api/public/v1/courses/{courseld}/groups/group Id} CourseWS.getGroup() CourseWS.getGroup() DELETE /learn/api/public/v1/courses/{courseld}/groups/group Id} CourseWS.getGroup() DELETE /learn/api/public/v1/courses/{courseld}/groups/group Id} CourseWS.deleteGroup() DELETE /learn/api/public/v1/courses/{courseld}/groups/group Id} Create Term CourseWS.deleteGroup() DELETE /learn/api/public/v1/courses/{courseld}/groups/group Id} CourseWS.deleteGroup() DELETE /learn/api/public/v1/terms CourseWS.saveTerm() DOST /learn/api/public/v1/terms CourseWS.saveTerm() POST /learn/api/public/v1/terms CourseWS.loadTerm() CourseWS.loadTerm() CourseWS.saveTerm() DELETE /learn/api/public/v1/terms/{term id} CourseWS.saveTerm() DELETE /learn/api/public/v1/terms/{term id} CourseWS.addCourseToTermATCH /learn/api/public/v1/terms/{term id} CourseWS.addCourseSinTetato() CourseWS.addCourseSinTetato() Term CourseWS.loadCourseSinTetato() CourseWS.removeCourseFrbATCHh() learn/api/public/v2/courses/tcourseId} CourseWS.saveCourseCategOST /learn/api/public/v1/catalog/categories/{categoryType} Category Read All Course CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}/{categoryType}   |                        |                                    | /learn/api/public/v1/catalog/categories/{categoryType}//{categoryId}       |
| Organization Datasource Delete CourseWS.deleteOrg() DELETE /learn/api/public/v2/courses/{courseId} Organization Create Group CourseWS.saveGroup() POST /learn/api/public/v1/courses/{courseId}/groups Read Group CourseWS.getGroup() GET /learn/api/public/v1/courses/{courseId}/groups/{group Id} Read All Group CourseWS.saveGroup() PATCH /learn/api/public/v1/courses/{courseId}/groups/{group Id} Delete Group CourseWS.saveGroup() PATCH /learn/api/public/v1/courses/{courseId}/groups/{group Id} Delete Group CourseWS.deleteGroup() DELETE /learn/api/public/v1/terms Read Term CourseWS.loadTerm() CourseWS.loadTerms/DeleteTerms/{term id} CourseWS.loadTerms() CourseWS.loadTerms/DeleteTerms/{term id} Delete Term CourseWS.addCourseToTerMCTCH /learn/api/public/v1/terms/{term id} Delete Term CourseWS.addCourseSToTerMCTCH /learn/api/public/v2/courses/{courseId} Term Get Course CourseWS.removeCourseFrDATCHM()learn/api/public/v2/courses/{courseId} Term Get Course CourseWS.removeCourseFrDATCHM()learn/api/public/v2/courses/{courseId} Term Create Course CourseWS.saveCourseCategeOs(T /learn/api/public/v2/courses/{courseId} Term Create Course CourseWS.saveCourseCategeOs(T /learn/api/public/v1/catalog/categories/{categoryType}} Category  |                        | C WC -1maOvaDat                    | CO + CO C (MIT / VI  |
| Datasource Delete CourseWS.deleteOrg() DELETE /learn/api/public/v2/courses/{courseId} Organization Create Group CourseWS.getGroup() GET /learn/api/public/v1/courses/{courseId}/groups Read Group CourseWS.getGroup() GET /learn/api/public/v1/courses/{courseId}/groups/{group Id} Read All Groups CourseWS.getGroup() GET /learn/api/public/v1/courses/{courseId}/groups/{group Id} Read All Groups Update Group CourseWS.saveGroup() PATCH /learn/api/public/v1/courses/{courseId}/groups/{group Id} Delete Group CourseWS.deleteGroup() DELETE /learn/api/public/v1/courses/{courseId}/groups/{group Id} Delete Term CourseWS.deleteGroup() DESETE /learn/api/public/v1/courses/{courseId}/groups/{group Id} Read All Terms Update Term CourseWS.loadTerm()CourseMS./loadTizens/poblics/did/terms/{term id} CourseWS.loadTerms()CourseMS./loadTizens/poblics/did/terms/{term id} CourseWS.saveTerm() PATCH /learn/api/public/v1/terms/{term id} Delete Term CourseWS.addCourseToTerMCTCH /learn/api/public/v1/terms/{term id} Delete Term Get Course to CourseWS.loadCourseSInTeMCTCH /learn/api/public/v2/courses/{courseId}} Term Get Course Course CourseWS.loadCourseSInTeMCTCH /learn/api/public/v2/courses/{courseId}} Term Remove Course CourseWS.saveCourseCaterMOSTCHMTCH/(learn/api/public/v2/courses/{courseId}} Term Create Course CourseWS.saveCourseCaterMOSTCHMTCH/(learn/api/public/v2/courses/{courseId}} Term Create Course CourseWS.saveCourseCaterMOSTCHMTCH/(learn/api/public/v2/courses/{courseId}} Term Create Course CourseWS.saveCourseCaterMOSTCHMTCH/(learn/api/public/v1/catalog/categories/{categoryType}} Category Read Course CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}/{categoryId}} Read All Course CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}   |                        | CourseWS.cnangeOrgData             | aSAAACEM(//learn/api/public/v2/courses/{course1d}                          |
| Delete Organization Create Group CourseWS.saveGroup() POST /learn/api/public/v1/courses/{courseId} / groups Read Group CourseWS.getGroup() GET /learn/api/public/v1/courses/{courseId} / groups / GET /learn/api/public/v1/courses/{courseId} / GET / GE | _                      |                                    |  |
| Organization Create Group CourseWS.saveGroup() Read Group CourseWS.getGroup() Read All Groups CourseWS.saveGroup() Read All Groups CourseWS.saveGroup() Read All Groups CourseWS.saveGroup() Read Group CourseWS.saveGroup() Read Group CourseWS.saveGroup() Read Term CourseWS.saveTerm() Read All Terms CourseWS.loadTerm()CourseWS.loadTerm/api/public/v1/courses/{courseId}/groups/{groups/groups |                        | O 1170 1 1-4-Oum()                 |  |
| Create Group Read Group CourseWS.getGroup() Read All Groups CourseWS.getGroup() Read All Groups CourseWS.getGroup() CourseWS.getGroup() CourseWS.getGroup() CourseWS.getGroup() CourseWS.getGroup() CourseWS.saveGroup() CourseWS.saveGroup() CourseWS.saveGroup() PATCH /learn/api/public/v1/courses/{courseId}/groups/{groups/grou |                        | Course WS. delete Org()            | DELETE /learn/api/public/v2/courses/{course1a}                             |
| Read Group Read All Groups Update Group CourseWS.getGroup() Update Group CourseWS.saveGroup() CourseWS.saveGroup() Delete Group CourseWS.deleteGroup() CourseWS.deleteGroup() Delete Group CourseWS.deleteGroup() CourseWS.saveTerm() POST /learn/api/public/v1/courses/{courseId}/groups/{groups/groups |                        | C WC correCroup()                  | DOOD /1 / / 11: /-1//[comesTall/mound                                      |
| Read All Groups Update Group CourseWS.getGroup() Delete Group CourseWS.deleteGroup() Delete Group Delete Group CourseWS.deleteGroup() Delete Group Dele |                        |                                    |  |
| Update Group  CourseWS.saveGroup()  Delete Group  CourseWS.deleteGroup()  Create Term  CourseWS.saveTerm()  Read Term  CourseWS.loadTerm()CourseSITE(II)/(learn/api/public/v2/courses/termId={term id}  Term  Remove Course  CourseWS.removeCourseFrblaTerh()learn/api/public/v2/courses/{courseId}  From Term  Create Course  CourseWS.saveCourseCate@OST /learn/api/public/v1/catalog/categories/{categoryType}  Category  Read Course  CourseWS.getCategories() GET  Category  //earn/api/public/v1/catalog/categories/{categoryType}/{categoryType}/{categoryType}/{categoryType}//categoryType}  CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}//categoryType}  | -                      |                                    |  |
| Delete Group  CourseWS.deleteGroup()  DELETE /learn/api/public/v1/courses/{courseId}/groups/{group} Id}  Create Term  CourseWS.saveTerm()  POST /learn/api/public/v1/terms  Read Term  CourseWS.loadTerm()CourseWS.loadTerms/{term id}}  CourseWS.loadTerms()CourseWS.loadTerms/{term id}}  Read All Terms  Update Term  CourseWS.saveTerm()  PATCH /learn/api/public/v1/terms/{term id}}  Delete Term  CourseWS.deleteTerm()  DELETE /learn/api/public/v1/terms/{term id}}  Add Course to  CourseWS.addCourseToTermATCH /learn/api/public/v2/courses/{courseId}}  Term  Get Courses in  CourseWS.loadCoursesInTermATCH /learn/api/public/v2/courses?termId={term id}}  Term  Remove Course  CourseWS.removeCourseFrMATCH /learn/api/public/v2/courses/{courseId}}  From Term  Create Course  CourseWS.saveCourseCategOOST /learn/api/public/v1/catalog/categories/{categoryType}}  Category  Read Course  CourseWS.getCategories()  GET  Clearn/api/public/v1/catalog/categories/{categoryType}/{categoryType}}   | _                      |                                    |  |
| CourseWS.deleteGroup() DÉLETE /learn/api/public/v1/courses/{courseId}/groups/{group Id}  Create Term CourseWS.saveTerm() POST /learn/api/public/v1/terms  Read Term CourseWS.loadTerm()CourseWS.loadTe/ppppGblirseId/terms/{term id}  Read All Terms CourseWS.loadTerms()CourseWS.loadTe/ppppGblirseId/terms/{term id}  CourseWS.loadTerms()CourseWS.loadTe/ppppGblirseId/terms/{term id}  CourseWS.saveTerm() PATCH /learn/api/public/v1/terms/{term id}  Delete Term CourseWS.deleteTerm() DELETE /learn/api/public/v2/courses/{courseId}  Term  Get Course WS.loadCourseToTerMATCH /learn/api/public/v2/courses?termId={term id}  Term  Remove Course  CourseWS.removeCourseFrDATCH (/learn/api/public/v2/courses/{courseId})  From Term  Create Course  CourseWS.saveCourseCategOOST /learn/api/public/v1/catalog/categories/{categoryType}}  Category  Read Course  CourseWS.getCategories() GET  Category  Read All Course  CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}/{categoryType}}  | Update Group           | Course w 5. save Group()           |  |
| Create Term CourseWS.saveTerm() POST /learn/api/public/v1/terms Read Term CourseWS.loadTerm()CourseWS.loadTerpppGblirsedd()erms/{term id} Read All Terms CourseWS.loadTerms()CouseWS.loadTerpppGblirsedd()erms/{term id} Read All Terms CourseWS.saveTerm() PATCH /learn/api/public/v1/terms/{term id} Delete Term CourseWS.addCourseToTerphATCH /learn/api/public/v2/courses/{courseId}  Term Get Courses in CourseWS.loadCoursesInTeGE(I) /learn/api/public/v2/courses?termId={term id}  Term Remove Course Course CourseFrphATCHh()learn/api/public/v2/courses/{courseId}  From Term Create Course CourseWS.saveCourseCategOST /learn/api/public/v1/catalog/categories/{categoryType}  Category Read Course CourseWS.getCategories() GET Category Read All Course CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}  CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}  | D 1-1- Crown           | CWC dalataCroup()                  |  |
| Create Term CourseWS.saveTerm() PÓST /learn/api/public/v1/terms  Read Term CourseWS.loadTerm()CourseWS.loadTe/ppppfblit/sppppfblit/sppppfblit/sppppfblit/sppppfblit/sppppfblit/sppppfblit/sppppfblit/sppppfblit/spppppfblit/spppppfblit/spppppfblit/spppppfblit/spppppfblit/spppppfblit/spppppfblit/spppppfblit/spppppfblit/spppppfblit/spppppfblit/spppppfblit/spppppfblit/sppppppfblit/sppppppfblit/spppppppfblit/spppppppppppppppppppppppppppppppppppp  | Delete Group           | Course w S. delete Group ()        | ,                                    |
| Read Term  CourseWS.loadTerm()CourseWS.loadTe/apply@blirseld()erms/{term id}  Read All Terms  CourseWS.loadTerms()CourseWS.loadTerms()terms/{term id}  CourseWS.saveTerm() PATCH /learn/api/public/v1/terms/{term id}  Delete Term  CourseWS.deleteTerm() DELETE /learn/api/public/v2/courses/{courseId}  Term  Get CourseWS.addCourseToTerMATCH /learn/api/public/v2/courses?termId={term id}  Term  Remove Course  CourseWS.loadCoursesInTerm() / learn/api/public/v2/courses?termId={term id}  Term  Remove Course  CourseWS.removeCourseFrDATCH() learn/api/public/v2/courses/{courseId}  From Term  Create Course  CourseWS.saveCourseCaterCOST /learn/api/public/v1/catalog/categories/{categoryType}}  Category  Read Course  CourseWS.getCategories() GET  Category  /learn/api/public/v1/catalog/categories/{categoryType}/{categoryId}  Read All Course  CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}   | Oata Tarm              | O(WC goveTorm()                    | ,  |
| Read All Terms   |                        |                                    |  |
| Update Term CourseWS.saveTerm() PATCH /learn/api/public/v1/terms/{term id} Delete Term CourseWS.deleteTerm() DELETE /learn/api/public/v1/terms/{term id} Add Course to CourseWS.addCourseToTerMA(TCH /learn/api/public/v2/courses/{courseId}) Term Get Course in CourseWS.loadCoursesInTeGE(I) /learn/api/public/v2/courses?termId={term id} Term Remove Course Course CourseWS.removeCourseFrDATGH() learn/api/public/v2/courses/{courseId}} From Term Create Course Course CourseCaterDOS(T /learn/api/public/v1/catalog/categories/{categoryType}} Category Read Course CourseWS.getCategories() GET Category /learn/api/public/v1/catalog/categories/{categoryType}/{categoryId}} Read All Course CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}}   |                        |                                    |  |
| Delete Term Add Course to CourseWS.deleteTerm() DELETE /learn/api/public/v1/terms/{term id} CourseWS.addCourseToTerM(TCH /learn/api/public/v2/courses/{courseId}) Term Get Courses in CourseWS.loadCoursesInTeME(I) /learn/api/public/v2/courses?termId={term id} Term Remove Course From Term Create Course CourseWS.removeCourseFromTeM() learn/api/public/v2/courses/{courseId}} Create Course CourseWS.saveCourseCaterOco() Category Read Course CourseWS.getCategories() GET Category Read All Course CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}/{categoryId} CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}/ CategoryType}   |                        |                                    |  |
| Add Course to Term Get CourseWS.loadCourseInTent(I) /learn/api/public/v2/courses/{courseId} Term Remove Course From Term Create Course CourseWS.saveCourseCategOOST /learn/api/public/v1/catalog/categories/{categoryType} Category Read Course CourseWS.getCategories() GET Category Read All Course CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType} CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType} CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}  |                        | · ·                                |  |
| Term Get Courses in CourseWS.loadCoursesInTeEE(I) /learn/api/public/v2/courses?termId={term id} Term Remove Course From Term Create Course CourseWS.removeCourseFromTeHt() learn/api/public/v2/courses/{courseId} From Term Create Course CourseWS.saveCourseCategoosT /learn/api/public/v1/catalog/categories/{categoryType} Category Read Course CourseWS.getCategories() GET Category Read All Course CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}/{categoryId} CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}  |                        |                                    |  |
| Get Course in CourseWS.loadCoursesInTeME(I) /learn/api/public/v2/courses?termId={term id}  Term  Remove Course  CourseWS.removeCourseFrMATeM()learn/api/public/v2/courses/{courseId}  From Term  Create Course  CourseWS.saveCourseCateMOST /learn/api/public/v1/catalog/categories/{categoryType}  Category  Read Course  CourseWS.getCategories() GET  Category  Read All Course  CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}/{categoryId}  CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}/  CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}  |                        | Contra M.D. and Contractor         | emation / learn/api/public/v2/courses/{courserd}                           |
| Term Remove Course CourseWS.removeCourseFrbhATCHh() learn/api/public/v2/courses/{courseId}  From Term Create Course CourseWS.saveCourseCategOOST /learn/api/public/v1/catalog/categories/{categoryType}  Category Read Course CourseWS.getCategories() GET Category  |                        | CourseMS loadCoursesIn'            | Town / loom / nublic/v2/courses ? term Id - [term id]                      |
| Remove Course From Term Create Course CourseWS.removeCourseFrom Term Create Course CourseWS.saveCourseCategoryType} Category Read Course CourseWS.getCategories() GET Category Read All Course CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}/{categoryId} Read All Course CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}}   |                        | COURSE W D.10au Coursesin.         | Team(j) / Team/api/public/v2/courses: termid—[term_id]                     |
| From Term  Create Course  CourseWS.saveCourseCate@OST /learn/api/public/v1/catalog/categories/{categoryType}  Category  Read Course  CourseWS.getCategories() GET  Category  All Course  CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}/{categoryId}  Read All Course  CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}  |                        | CourseWS removeCourseL             | E-BATGH /Marm /ani/nublic/v2/courses/{courseId}                            |
| Create Course  CourseWS.saveCourseCate@OST /learn/api/public/v1/catalog/categories/{categoryType}  Category  Read Course  CourseWS.getCategories() GET  Category  All Course  CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}/{categoryId}  CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}  |                        | Comise as demonder of the control  | !TOTA Levin() learn/api/public/v2/courses/fcourserd;                       |
| Category Read Course Category CourseWS.getCategories() GET Category CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}   |                        | CourseWS saveCourseCat             | +aDACT /loam /ani/nublic/v1/catalog/categories/{categoryType}              |
| Read Course  CourseWS.getCategories() GET  Category  Category  Read All Course  CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}/{categoryId}  CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}  |                        | Comise in Disave Composition       | egotion / learn/api/public/vi/catalog/categories/ feategory in the         |
| $\label{lem:category} $$                                  $  |                        | CourseWS getCategories(            | \ CET  |
| Read All Course CourseWS.getCategories() GET /learn/api/public/v1/catalog/categories/{categoryType}  |                        | Comise in practically              | V  |
|  |                        | CourseWS getCategories(            |  |
| Categories   |                        | COULDO AND PROPERTION ()           | GET / Tearin/apr/ public/ vi/ canalog/ canegories/ (canegory in re-)       |
| Update Course CourseVS.saveCourseCategOATCCH   | ~                      | CourseWS saveCourseCat             | FARAMIN'II   |
| Category /learn/api/public/v1/catalog/categories/{categoryType}//{categoryId}  |                        | Contro as promano contro con-      |  |
| Delete Course CourseWS.deleteCourseCateBox TE  |                        | CourseWS.deleteCourseC             |  |
| Category /learn/api/public/v1/catalog/categories/{categoryType}//{categoryId}  |                        | Course it biddless s s             | 9 1/7  |
| Create Course CourseWS.saveCourseCategotyMembership()  |                        | CourseWS.saveCourseCat             |  |
|  |                        | Course it bibare a land.           | /learn/api/public/v1/catalog/categories/{categoryType}/{categoryId}/course |
| Membership   |                        |                                    | / 100111/ apr/ passio/ 12/ 5000000/ 50000001/ (500000 V V V V)/ (500000)   |
| Read Course  CourseWS.getCourseCateg@FMembership()   |                        | CourseWS.getCourseCate             | բուներությունը ()  |
|  |                        |                                    | /learn/api/public/v1/catalog/categories/{categoryType}/{categoryId}/course |
| Membership //earn/api/public/v1/courses/{courseId}/categories  |                        |                                    |  |
| Read All Course CourseWS.getCourseCateg@EMembership()  |                        | CourseWS.getCourseCate             |  |
|  |                        | 004222                             | /learn/api/public/v1/catalog/categories/{categoryType}/{categoryId}/course |
| Memberships  | - v                    |                                    | / Sur-   Sp-   F   |

| Use Case          | SOAP WS Call              | REST Endpoint  |
|-------------------|---------------------------|--|
| Update Course     | CourseWS.saveCourseCate   |  |
| Category          |                           | $/learn/api/public/v1/catalog/categories/\{categoryType\}/\{categoryId\}/courserverserv$ |
| Membership        |                           |  |
| Delete Course     | CourseWS.deleteCourseCa   | ntering ()   |
| Category          |                           | $/learn/api/public/v1/catalog/categories/\{categoryType\}/\{categoryId\}/coursed for the control of the control of$ |
| Membership        |                           |  |
| Create            | CourseWS.saveOrgCatego    | rr(0ST /learn/api/public/v1/catalog/categories/{categoryType}  |
| Organization      |                           |  |
| Category          |                           |  |
| Read Organization | CourseWS.getCategories()  | GET  |
| Category          |                           | $/learn/api/public/v1/catalog/categories/\{categoryType\}/\{categoryId\}$  |
| Read All          | CourseWS.getCategories()  | GET /learn/api/public/v1/catalog/categories/{categoryType}   |
| Organization      |                           |  |
| Categories        |                           |  |
| Update            | CourseWS.saveOrgCatego    | r <del>y</del> (ATCH   |
| Organization      |                           | /learn/api/public/v1/catalog/categories/{categoryType}/{categoryId}  |
| Category          |                           |  |
| Delete            | CourseWS.deleteOrgCateg   | CONTINUETE   |
| Organization      |                           | /learn/api/public/v1/catalog/categories/{categoryType}//{categoryId}   |
| Category          |                           | ,  |
| Create            | CourseWS.saveOrgCatego    | r <b>PM</b> Embership()  |
| Organization      |                           | /learn/api/public/v1/catalog/categories/{categoryType}/{categoryId}/course   |
| Category          |                           |  |
| Membership        |                           |  |
| Read Organization | CourseWS.getOrgCategory   | y MEMbership()   |
| Category          |                           | /learn/api/public/v1/catalog/categories/{categoryType}//{categoryId}/course  |
| Membership        |                           | /learn/api/public/v1/courses/{courseId}/categories   |
| Read All          | CourseWS.getOrgCategory   |  |
| Organization      |                           | /learn/api/public/v1/catalog/categories/{categoryType}/{categoryId}/course   |
| Category          |                           |  |
| Memberships       |                           |  |
| Update            | CourseWS.saveOrgCatego    | r <b>PM</b> Embership()  |
| Organization      |                           | /learn/api/public/v1/catalog/categories/{categoryType}/{categoryId}/course   |
| Category          |                           |  |
| Membership        |                           |  |
| Delete            | CourseWS.deleteOrgCateg   | gadynlendership()  |
| Organization      |                           | /learn/api/public/v1/catalog/categories/{categoryType}/{categoryId}/course   |
| Category          |                           | , , -, - , ,   |
| Membership        |                           |  |
| Create Cartridge  | CourseWS.saveCartridge()  | N/A  |
| Read Cartridge    | CourseWS.getCartridge()   |  |
| Update Cartridge  | CourseWS.saveCartridge()  |  |
| Delete Cartridge  | CourseWS.deleteCartridge  |  |
| Create StaffInfo  | 9                         | POST /learn/api/public/v1/usersPUT   |
|                   | V                         | /learn/api/public/v1/courses/{course id}/users/{user id}   |
| Read StaffInfo    | CourseWS.getStaffInfo()   | GET /learn/api/public/v1/users/{user id}   |
| Update StaffInfo  |                           | PATCH /learn/api/public/v1/users/{user id}   |
| Delete StaffInfo  |                           | DELETE /learn/api/public/v1/users/{user id}  |
| Set Course Banner | CourseWS.setCourseBann    |  |
| Get Group Tools   | CourseWS.getAvailableGre  |  |
| Read              | CourseWS.getClassificatio |  |
| Classification    | G                         | W  |

# Course Memberships

| Use Case                               | SOAP WS Call                    | REST Endpoint  |
|--|---------------------------------|--|
| Create Course Membership               | PUT                             |  |
| CourseMember-                          | /learn/api/public/v1/cou        | urses/{courseId}/users/{user   |
| shipWS.saveCourseMembership()          | id                              |  |
| Read Course Membership                 | CourseMembershipWS.ge           | etCourseM@HHership()   |
|  |                                 | /learn/api/public/v1/courses/{courseId}/users/{user id}  |
| Read All Course Memberships            | ${\bf Course Membership WS.ge}$ | - 0  |
|  |                                 | $/learn/api/public/v1/courses/\{courseId\}/users$  |
| Update Course Memberships              | CourseMembershipWS.sa           | - 0  |
|  |                                 | $/learn/api/public/v1/courses/\{courseId\}/users/\{userId\}/users/$ |
| Delete Course Memberships              | CourseMembershipWS.de           | ± (/   |
|  |                                 | $/learn/api/public/v1/courses/\{courseId\}/users/\{userId\}/users/$ |
| Create Organization Membership         | CourseMembershipWS.sa           |  |
|  |                                 | /learn/api/public/v1/courses/{courseId}/users/{user  |
|  |                                 | $\operatorname{id}$  |
| Read Organization Membership           | CourseMembershipWS.ge           | - 0  |
|  |                                 | /learn/api/public/v1/courses/{courseId}/users/{user  |
|  | ~ 35 1 1. 1170                  | id}  |
| Read All Organization                  | CourseMembershipWS.ge           |  |
| Memberships                            | ~ 35 1 1. 1770                  | /learn/api/public/v1/courses/{courseId}/users  |
| Update Organization Memberships        | CourseMembershipWS.sa           | - 0  |
|  |                                 | /learn/api/public/v1/courses/{courseId}/users/{userId  |
| Delete Organization Memberships        | CourseMembershipWS.de           |  |
| G                                      | C M 1 1: WC                     | /learn/api/public/v1/courses/{courseId}/users/{userId  |
| Create Group Membership                | CourseMembershipWS.sa           | /  |
| D 10 M 1 1:                            | C M 1 1: WC                     | /learn/api/public/v1/courses/{courseId}/groups/{groups/  |
| Read Group Membership                  | CourseMembershipWS.ge           |  |
| D 1 411 C M 1 1:                       | C M 1 1: WC                     | /learn/api/public/v1/courses/{courseId}/groups/{groups/  |
| Read All Group Memberships             | CourseMembershipWS.ge           |  |
| D 1 + Q M 1 1:                         | C M 1 1: WC 1                   | /learn/api/public/v1/courses/{courseId}/groups/{groups/  |
| Delete Group Memberships               | CourseMembershipWS.de           |  |
| Get Course Roles                       | CourseMembershinWS or           | /learn/api/public/v1/courses/{courseId}/groups/{groupsetCourseRoles1) /learn/api/public/v1/courseRoles   |
| —————————————————————————————————————— | Ourselvicinsersinp ** 5.8c      |  |

# $\mathbf{Gradebook}$

| Use Case          | SOAP WS Call       | REST Endpoint  |
|-------------------|--------------------|--|
| Create an         | GradebookWS.saveA  | ttem <b>pts(\$</b> T   |
| Attempt           |                    | /learn/api/public/v2/course/{courseId}/gradebook/columns/{columnid}/attem    |
| Read an           | GradebookWS.getAtt |  |
| Attempt           | <u> </u>           | /learn/api/public/v2/course/{courseId}/gradebook/columns/{columnid}/attemid} |
| Read All          | GradebookWS.getAtt | temp <b>G</b> ET   |
| Attempts          |                    | /learn/api/public/v2/course/{courseId}/gradebook/columns/{columnid}/attem    |
| Update an         | GradebookWS.saveA  |  |
| Attempt           |                    | /learn/api/public/v2/course/{courseId}/gradebook/columns/{columnid}/attemid} |
| Delete an Attempt | GradebookWS.delete | ,  |

| Use Case                       | SOAP WS Call REST Endpoint   |
|--------------------------------|--|
| Create a<br>Column             | $\label{lem:gradebookWS} GradebookWS.saveColum Magnetic for the control of the control of$   |
| Read a Column                  | $\label{eq:GradebookWS} GradebookWS.getGradebookMS.getGradebook/columns of the property of th$   |
| Read All<br>Columns            | $Gradebook WS.get Gradeb \textbf{\textit{GEC}} \textbf{\textit{Colleans}} (\texttt{papi/public/v2/course/\{courseId\}/gradebook/columns}) \\$  |
| Update a<br>Column             | $\label{eq:GradebookWS} GradebookWS.saveColum \begin{tabular}{l} & A & A & A & A & A & A & A & A & A & $   |
| Delete a<br>Column             | $\label{eq:GradebookWS} GradebookWS. delete Columb EM Columns of the columns of the columns of the columns of the column $   |
| Create a<br>Gradebook<br>Type  | $Gradebook WS. save Gradel \textit{ROSTyphes.} (n/api/public/v2/course/\{courseId\}/gradebook/columns) and the same of th$   |
| Read a<br>Gradebook<br>Type    | $\label{eq:GradebookWS} GradebookWS.getGradebook() \\ / [learn/api/public/v2/course/\{courseId\}/gradebook/columns/\{columnid\}] \\ id \\ \}$  |
| Read All<br>Gradebook<br>Types | $Gradebook WS. get Gradeb \textbf{\textit{GET}yples}(yn/api/public/v2/course/\{courseId\}/gradebook/columns)$  |
| Update a<br>Gradebook<br>Type  | $\label{eq:GradebookWS} GradebookWS.saveGradebook/columns/{column id}/public/v2/course/{courseId}/gradebook/columns/{column id}$   |
| Delete a<br>Gradebook<br>Type  | $\label{eq:gradebookWS} GradebookWS.deleteGradebeelfypes() $$ /learn/api/public/v2/course/{courseId}/gradebook/columns/{columnid} $$ id}$  |
| Create a Grade                 | $\label{eq:GradebookWS} Grades \texttt{POST} \\ / learn/api/public/v2/course/\{courseId\}/gradebook/columns/\{columnid\}/attempts \\ / learn/api/public/v2/course/formalpi/public/v2/course$ |
| Read a Grade                   | $\label{eq:GET} GradebookWS.getGrades(GET / learn/api/public/v2/course/{courseId}/gradebook/columns/{columnid}/attempts id}$   |
| Read All<br>Grades             | $\label{eq:GET} GradebookWS.getGrades(GET / learn/api/public/v2/course/\{courseId\}/gradebook/columns/\{columnid\}/attempts / learn/api/public/v2/course/\{courseId\}/gradebook/columns/(columnid)/attempts / learn/api/public/v2/course/(courseId)/gradebook/columns/(columnid)/attempts / learn/api/public/v2/course/(courseId)/gradebook/columns/(columnid)/attempts / learn/api/public/v2/course/(courseId)/gradebook/columns/(columnid)/attempts / learn/api/public/v2/course/(courseId)/gradebook/columns/(columnid)/attempts / learn/api/public/v2/course/(courseId)/gradebook/columns/(columnid)/attempts / learn/api/public/v2/course/(courseId)/gradebook/columns/(columnid)/attempts / learn/api/public/v2/course/(courseId)/gradebook/columnid/gradebook/$                               |
| Update a Grade                 | /learn/api/public/v2/course/{courseId}/gradebook/columns/{columnid}/attempts id}   |
| Delete a Grade                 | GradebookWS.deleteGradeSATCH /learn/api/public/v2/course/{courseId}/gradebook/columns/{columnid}/attempts id} (set to 0)   |
| Create a<br>Grading<br>Schema  | GradebookWS.saveGradin <b>gSp\$\text{a}m/as()</b> rn/api/public/v1/courses/{course id]/gradebook/schemas   |
| Read a Grading<br>Schema       | GradebookWS.getGradingSdiffn/dsc()rn/api/public/v1/courses/{course<br>id]/gradebook/schemas/{schema id}  |
| Read All<br>Grading<br>Schemas | GradebookWS.getGradingSdEfem/asa)rn/api/public/v1/courses/{course id]/gradebook/schemas  |
| Update a Grading Schema        | $\label{eq:GradebookWS} GradebookWS.saveGradin \cite{Garn/api/public/v1/courses/{course id}/gradebook/schemas/{schema id}}$  |

| Use Case                      | SOAP WS Call          | REST Endpoint  |
|-------------------------------|-----------------------|--|
| Delete a<br>Grading<br>Schema | GradebookWS.deleteGra | adDESdEARas(earn/api/public/v1/courses/{course id]/gradebook/schemas/{schema id} |

# Users

| Use Case                   | SOAP WS Call  | REST Endpoint  |  |
|----------------------------|---|--|--|
| Create a User              | UserWS.saveUser()   | POST /learn/api/public/v1/users                            |  |
| Read a User                | UserWS.getUser()  | GET /learn/api/public/v1/users/{userId}                    |  |
| Read All Users             | UserWS.getUser()  | GET /learn/api/public/v1/users                             |  |
| Update a User              | UserWS.saveUser()   | PATCH /learn/api/public/v1/users/{userId}                  |  |
| Delete a User              | UserWS.deleteUser()   | DELETE /learn/api/public/v1/users/{userId}                 |  |
| Update a User's BatchUid   | UserWS.changeUserBat  | tcRNTCH /learn/api/public/v1/users/{userId}                |  |
| Update a User's            | UserWS.changeUserDa   | ta <b>BAT</b> ICHd(learn/api/public/v1/users/{userId}      |  |
| DataSource ID              |   |  |  |
| Delete User by Role        | UserWS.deleteUserByIn   | nsNitAtionRole()   |  |
| Create a User's Address    | UserWS.saveAddressbookK28Ty//learn/api/public/v1/users        |  |  |
| Book Entry                 |   |  |  |
| Read a User's Address      | UserWS.getAddressboo  | k <b>G</b> nTy/learn/api/public/v1/users/{userId}          |  |
| Book Entry                 |   |  |  |
| Read All a User's Address  | UserWS.getAddressboo  | k <b>G</b> nTy/learn/api/public/v1/users                   |  |
| Book Entries               |   |  |  |
| Update a User's Address    | UserWS.saveAddressBb  | odeAEfaHy()learn/api/public/v1/users/{userId}              |  |
| Book Entry                 |   |  |  |
| Delete a User's Address    | UserWS.deleteAddressI   | BookEffff()/learn/api/public/v1/users/{userId}             |  |
| Book Entry                 |   |  |  |
| Read All Institution Roles |   | Rocks (1) /learn/api/public/v1/institutionRoles            |  |
| Read All System Roles      | $UserWS.getSystemRoles\\ GET/learn/api/public/v1/systemRoles$ |  |  |
| Read All Institution Roles | UserWS.getUserInstitu   | ti6HRblesen/api/public/v1/users/{userId}                   |  |
| Assigned to a User         |   |  |  |
| Create Observer            | UserWS.saveObserverA  | <b>V</b>   |  |
| Association                |   | /learn/api/public/v1/users/{userId}/observers/{observerId} |  |
| Read Observer Association  | UserWS.getObservee()  |  |  |
|                            |   | /learn/api/public/v1/users/{userId}/observers              |  |
| Read All Observer          | UserWS.getObservee()  | GET /learn/api/public/v1/users/{userId}/observeesGET       |  |
| Association                |   | /learn/api/public/v1/users/{userId}/observers              |  |
| Update Observer            | UserWS.saveObserverA  | · · · · · · · · · · · · · · · · · · ·                      |  |
| Association                |   | /learn/api/public/v1/users/{userId}/observers/{observerId} |  |
| Delete Observer            | UserWS.deleteOverserv   |  |  |
| Association                |   | /learn/api/public/v1/users/{userId}/observers/{observerId} |  |

### Util

| Use Case                               | SOAP WS Call   | REST Endpoint                        |
|--|--|--------------------------------------|
| Read All Datasources                   | ${\bf UtilWS.getDataSources()}$                                | GET /learn/api/public/v1/dataSources |
| Get Required Entitlements By<br>Method | $\label{thm:continuous} Util WS. get Required Entitlements ()$ | N/A                                  |
| Check a User's Entitlements            | UtilWS.checkEntitlement()                                      | N/A                                  |
| Create a Setting                       | UtilWS.saveSetting()   | N/A                                  |

| Use Case         | SOAP WS Call           | REST Endpoint |
|------------------|------------------------|---------------|
| Load a Setting   | UtilWS.loadSetting()   | N/A           |
| Update a Setting | UtilWS.saveSetting()   | N/A           |
| Delete a Setting | UtilWS.deleteSetting() | N/A           |