**Tracking Learner Progress (Instructor & Student Dashboards)**

1. **Google Classroom APIs** for tracking learner activities:

* **courses.courseWork.list**: Retrieves the coursework (assignments) for a specific course.
* **courses.courseWork.studentSubmissions.list**: Retrieves student submissions for a specific coursework, including the submission status and grades.
* **courses.students.list**: Lists all students enrolled in a course.
* **courses.teachers.list**: Lists all teachers in a course.

1. **Fetching Learner Data**

* The courses.list: gets all courses created by the instructor.
* courses.students.list: retrieves the list of students in each course.
* courses.courseWork.list: to get the coursework for a course.
* courses.courseWork.studentSubmissions.list: to track progress on each coursework for every student.

**courses.list** provides the below course states:

* ACTIVE: The user is actively enrolled in the course.
* ARCHIVED: The course is archived and no longer active.
* PROVISIONED: The course is provisioned but not yet active.
* DECLINED: The invitation to join the course was declined.
* SUSPENDED: The user's enrollment in the course is temporarily suspended.

**Table Relationships**

* **Instructor**:
  + Owns multiple **Courses**.
* **Course**:
  + Contains multiple **Students** and multiple **Coursework** items.
* **Student**:
  + Enrolled in a **Course** and can have multiple **StudentSubmission** entries.
* **Coursework**:
  + Part of a **Course** and can have multiple **StudentSubmissions**.
* **StudentSubmission**:
  + Tracks the progress of a **Student** for a specific **Coursework**.

**DATABASE TABLES:**

**Course Table**

id

title

description

price

googleclassownerid

googleclassroomid

datecreated

**Instructor Table**

id

googleinstructorid

firstname

lastname

datecreated

**Student Table**

googlestudentid

course

firstname

lastname

email

password

datecreated

**CourseWork Table**

googlecourseworkid

course

title

description

duedate

creationdate

**StudentSubmission Table**

googlesubmissionid

coursework

student

state (NEW, CREATED, TURNED\_IN, RETURNED)

grade #from instructor

submissiondate

**Enrolment Table**

id

courseid

studentid

paymentid

enrolledate

**Payment Table**

id

studentid

course

amount

paymentstatus

datecreated