

Esquema do banco de dados relacional utilizado nos testes:

```
assessment_rubric (id, content_hash)
assessment_assessment (id, submission_uuid, rubric_id, scored_at, scorer_id, score_type, feedback)
rubric_id REFERENCES assessment_rubric
assessment_assessmentfeedback (id, submission_uuid, feedback_text)
assessment_assessmentfeedback_assessments (id, assessmentfeedback_id, assessment_id, assessmentfeedback_id REFERENCES assessment_assessmentfeedback
assessment_id REFERENCES assessment_assessment
assessment_assessmentfeedbackoption (id, text)
assessment_assessmentfeedback_options (id, assessmentfeedback_id, assessmentfeedbackoption_id)
assessmentfeedbackoption_id REFERENCES assessment_assessmentfeedbackoption
assessment_assessmentfeedback assessment_criterion (id, rubric_id, name, order_num, prompt)
rubric_id REFERENCES assessment_rubric
assessment_criterionoption (id, criterion_id, order_num, points, name, explanation)
criterion_id REFERENCES assessment_criterion
assessment_assessmentpart (id, assessment_id, option_id, feedback)
assessment_id REFERENCES assessment_assessment
option_id REFERENCES assessment_criterionoption
assessment_peerworkflow (id, student_id, item_id, course_id, submission_uuid, created_at, completed_at, grading_completed_at)
assessment_peerworkflowitem (id, scorer_id, author_id, submission_uuid, started_at, assessment_id, scored)
assessment_id REFERENCES assessment_assessment)
author_id REFERENCES assessment_peerworkflow
scorer_id REFERENCES assessment_peerworkflow
assessment_studenttrainingworkflow (id, submission_uuid, student_id, item_id, course_id)
assessment_trainingexample (id, raw_answer, rubric_id, content_hash)
rubric_id REFERENCES assessment_rubric
assessment_studenttrainingworkflowitem (id, workflow_id, order_num, started_at, completed_at, training_example_id)
training_example_id REFERENCES assessment_trainingexample
workflow_id REFERENCES assessment_studenttrainingworkflow
assessment_trainingexample_options_selected (id, trainingexample_id, criterionoption_id)
criterionoption_id REFERENCES assessment_criterionoption
trainingexample_id REFERENCES assessment_trainingexample
auth_group (id, name)
django_content_type (id, name, app_label, model)
auth_permission (id, name, content_type_id, codename)
content_type_id REFERENCES django_content_type
auth_group_permissions (id, group_id, permission_id)
group_id REFERENCES auth_group
permission_id REFERENCES auth_permission
auth_user (id, username, first_name, last_name, email, password, is_staff, is_active, is_superuser, last_login, date_joined)
auth_registration (id, user_id, activation_key)
user_id REFERENCES auth_user
auth_user_groups (id, user_id, group_id)
group_id REFERENCES auth_group
user_id REFERENCES auth_user
auth_user_permissions (id, user_id, permission_id)
permission_id REFERENCES auth_permission
auth_userprofile (id, user_id, name, language, location, meta, courseware, gender, mailing_address, year_of_birth, level_of_education, goals, allow_certificate, country, city)
user_id REFERENCES auth_user
bulk_email_courseauthorization (id, course_id, email_enabled)
bulk_email_courseemail (id, sender_id, slug, subject, html_message, created, modified, course_id, to_option, text_message)
sender_id REFERENCES auth_user
bulk_email_courseemailtemplate (id, html_template, plain_template)
bulk_email_optout (id, course_id, user_id)
user_id REFERENCES auth_user
celery_taskmeta (id, task_id, status, result, date_done, traceback, hidden, meta)
celery_tasksetmeta (id, taskset_id, result, date_done, hidden)
certificates_certificatewhitelist (id, user_id, course_id, whitelist)
user_id REFERENCES auth_user
certificates_generatedcertificate (id, user_id, download_url, grade, course_id, key, distinction, status, verify_uuid, download_uuid, name, created_date, modified_date, error_reason, mode)
user_id REFERENCES auth_user
circuit_servercircuit (id, name, schematic)
course_creators_coursecreator (id, user_id, state_changed, state, note)
user_id REFERENCES auth_user
course_groups_courseusergroup (id, name, course_id, group_type)
course_groups_courseusergroup_users (id, courseusergroup_id, user_id)
courseusergroup_id REFERENCES course_groups_courseusergroup
user_id REFERENCES auth_user
course_modes_coursemode (id, course_id, mode_slug, mode_display_name, min_price, suggested_prices, currency, expiration_date, expiration_datetotime)
courseware_offlinecomputedgrade (id, user_id, course_id, created, updated, gradeset)
user_id REFERENCES auth_user
courseware_offlinecomputedgradelog (id, course_id, created, seconds, nstudents)
courseware_studentmodule (id, module_type, module_id, student_id, state, grade, created, modified, max_grade, done, course_id)
student_id REFERENCES auth_user
courseware_studentmodulehistory (id, student_module_id, version, created, state, grade, max_grade)
student_module_id REFERENCES courseware_studentmodule
courseware_xmodulestudentinfofield
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(id, field_name, value, student_id, created, modified)
student_id REFERENCES auth_user[]courseware_xmodulestudentprefsfield (id, field_name,
module_type, value, student_id, created, modified)
student_id REFERENCES auth_user[]courseware_xmoduleuserstatesummaryfield (id, field_name,
usage_id, value, created, modified) dark lang darklangconfig (id, change_date,
changed_by_id, enabled, released_languages)
changed_by_id REFERENCES auth_user[]django_admin_log (id, action_time, user_id,
content_type_id, object_id, object_repr, action_flag, change_message)
content_type_id REFERENCES django_content_type
user_id REFERENCES auth_user django_comment_client_permission (name)
django_comment_client_role (id, name, course_id) django_comment_client_permission_roles
(id, permission_id, role_id)
permission_id REFERENCES django_comment_client_permission
role_id REFERENCES django_comment_client_role django_comment_client_role_users (id,
role_id, user_id)
role_id REFERENCES django_comment_client_role
user_id REFERENCES auth_user[]django_openid_auth_association (id, server_url, handle,
secret, issued, lifetime, assoc_type) django_openid_auth_nonce (id, server_url,
timestamp, salt) django_openid_auth_useropenid (id, user_id, claimed_id, display_id)
user_id REFERENCES auth_user[]django_session (session_key, session_data,
expire_date)[]django_site (id, domain, name)[]djcelery_crontabschedule (id, minute, hour,
day_of_week, day_of_month, month_of_year)[]djcelery_internalschedule (id, every,
period)[]djcelery_periodictask (id, name, task, interval_id, crontab_id, args, kwargs,
queue, exchange, routing_key, expires, enabled, last_run_at, total_run_count,
date_changed, description)
crontab_id REFERENCES djcelery_crontabschedule
interval_id REFERENCES djcelery_internalschedule[]djcelery_periodictasks (ident,
last_update)[]djcelery_workerstate (id, hostname, last_heartbeat)[]djcelery_taskstate (id,
state, task_id, name, tstamp, args, kwargs, eta, expires, result, traceback, runtime,
retries, worker_id, hidden)
worker_id REFERENCES djcelery_workerstate[]embargo_embargoedcourse (id, course_id,
embargoed)[]embargo_embargoedstate (id, change_date, changed_by_id, enabled,
embargoed_countries)
changed_by_id REFERENCES auth_user[]embargo_ipfilter (id, change_date, changed_by_id,
enabled, whitelist, blacklist)
changed_by_id REFERENCES auth_user[]experiments_anonymouspost (id, user,
commentid)[]experiments_strategyrandomization (id, strategyType, percents, planoutScript,
planoutJson, customDesign, factorial, periodos, periodoRel_id, clusterGroups)
periodoRel_id REFERENCES experiments_experimentdefinition
experiments_experimentdefinition (id, descricao, course, userTeacher_id, strategy_id)
strategy_id REFERENCES experiments_strategyrandomization
userTeacher_id REFERENCES auth_user[]experiments_opcoesexperiment (id, experimento_id,
sectionExp, sectionExp url, version)
experimento_id REFERENCES experiments_experimentdefinition experiments_groupscluster
(id, grupos, experiment_id, versao_id)
experiment_id REFERENCES experiments_experimentdefinition
versao_id REFERENCES experiments_opcoesexperiment experiments_historicoquestoes (id,
campo, valor, usuario_id)
usuario_id REFERENCES auth_user[]experiments_userchoiceexperiment (id, userStudent_id,
versionExp_id, bloco, experimento_id)
experimento_id REFERENCES experiments_experimentdefinition userStudent_id REFERENCES
auth_user[]versionExp_id REFERENCES experiments_opcoesexperiment
external_auth_externalauthmap (id, external_id, external_credentials, external_domain,
external_email, external_name, user_id, internal_password, dtcreated, dtsignup)
user_id REFERENCES auth_user[]foldit_puzzlecomplete (id, user_id, unique_user_id,
puzzle_id, puzzle_set, puzzle_subset, created)
user_id REFERENCES auth_user[]foldit_score (id, user_id, unique_user_id, puzzle_id,
best_score, current_score, score version, created)
user_id REFERENCES auth_user[]instructor_task_instructortask (id, task_type, course_id,
task_key, task_input, task_id, task_state, task_output, requester_id, created, updated,
subtasks)[]requester_id REFERENCES auth_user
licenses_coursesoftware (id, name, full_name, url, course_id) licenses_userlicense (id,
software_id, user_id, serial)
software_id REFERENCES licenses_coursesoftware
user_id REFERENCES auth_user[]linkedin_linkedin (user_id, has_linkedin_account,
emailed_courses)
user_id REFERENCES auth_user[]notes_note (id, user_id, course_id, uri, text, quote,
range_start, range_start_offset, range_end, range_end_offset, tags, created, updated)
user_id REFERENCES auth_user[]wiki_articlerevision (id, revision_number, user_message,
automatic_log, ip_address, user_id, modified, created, previous_revision_id, deleted,
locked, article_id, content, title)
article_id REFERENCES wiki_article previous_revision_id REFERENCES wiki_articlerevision
user_id REFERENCES auth_user
wiki_article (id, current_revision_id, created, modified, owner_id, group_id,
group_read, group write, other_read, other_write) current_revision_id REFERENCES
wiki_articlerevision[]group_id REFERENCES auth_group[]owner_id REFERENCES auth_user
wiki_articleplugin (id, article_id, deleted, created) article_id REFERENCES wiki_article

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notify_notificationtype (key, label, content_type_id) content_type_id REFERENCES
django_content_type
notify_settings (id, user_id, interval) user_id REFERENCES auth_user
notify_subscription (id, settings_id, notification_type_id, object_id, send_emails)
notification_type_id REFERENCES notify_notificationtype settings_id REFERENCES
notify_settings
notifications_articlesubscription (subscription_ptr_id, articleplugin_ptr_id)
articleplugin_ptr_id REFERENCES wiki_articleplugin subscription_ptr_id REFERENCES
notify_subscription
notify_notification (id, subscription_id, message, url, is_viewed, is_emailed, created)
subscription_id REFERENCES notify_subscription
psychometrics_psychometricdata (id, studentmodule_id, done, attempts, checktimes)
reverification_midcourseverificationwindow (id, course_id, start_date, end_date)
student_courseenrollment (id, user_id, course_id, created, is_active, mode)
user_id REFERENCES auth_user shoppingcart_order (id, user_id, currency, status,
purchase_time, bill_to_first, bill_to_last, bill_to_street1, bill_to_street2,
bill_to_city, bill_to_state, bill_to_postalcode, bill_to_country, bill_to_ccnum,
bill_to_cardtype, processor_reply_dump, refunded_time)
user_id REFERENCES auth_user shoppingcart_orderitem (id, order_id, user_id, status, qty,
unit_cost, line_desc, currency, fulfilled_time, report_comments, refund_requested_time,
service_fee)
order_id REFERENCES shoppingcart_order
user_id REFERENCES auth_user shoppingcart_certificateitem (orderitem_ptr_id, course_id,
course_enrollment_id, mode)
course_enrollment_id REFERENCES student_courseenrollment
orderitem_ptr_id REFERENCES shoppingcart_orderitem shoppingcart_paidcourseregistration
(orderitem_ptr_id, course_id, mode)
orderitem_ptr_id REFERENCES
shoppingcart_orderitem shoppingcart_paidcourseregistrationannotation (id, course_id,
annotation) south_migrationhistory (id, app_name, migration,
applied) splash_splashconfig (id, change_date, changed_by_id, enabled, cookie_name,
cookie_allowed_values, unaffected_usernames, redirect_url, unaffected_url_paths)
changed_by_id REFERENCES auth_user student_anonymoususerid (id, user_id,
anonymous_user_id, course_id)
user_id REFERENCES auth_user student_courseaccessrole (id, user_id, org, course_id,
role)
user_id REFERENCES auth_user student_courseenrollmentallowed (id, email, course_id,
created, auto_enroll) student_loginfailures (id, user_id, failure_count, lockout_until)
user_id REFERENCES auth_user student_passwordhistory (id, user_id, password, time_set)
user_id REFERENCES auth_user student_pendingemailchange (id, user_id, new_email,
activation_key)
user_id REFERENCES auth_user student_pendingnamechange (id, user_id, new_name,
rationale)
user_id REFERENCES auth_user student_userstanding (id, user_id, account_status,
changed_by_id, standing_last_changed_at)
changed_by_id REFERENCES auth_user
user_id REFERENCES auth_user student_usertestgroup (id, name, description)
student_usertestgroup_users (id, usertestgroup_id, user_id)
usertestgroup_id REFERENCES student_usertestgroup
user_id REFERENCES auth_user submissions_studentitem (id, student_id, course_id,
item_id, item_type) submissions_submission (id, uuid, student_item_id, attempt_number,
submitted_at, created_at, raw_answer)
student_item_id REFERENCES submissions_studentitem submissions_score (id,
student_item_id, submission_id, points_earned, points_possible, created_at, reset)
student_item_id REFERENCES submissions_studentitem
submission_id REFERENCES submissions_submission submissions_scoresummary (id,
student_item_id, highest_id, latest_id)
highest_id REFERENCES submissions_score latest_id REFERENCES submissions_score
student_item_id REFERENCES submissions_studentitem
track_trackinglog (id, dtcreated, username, ip, event_source, event_type, event, agent,
page, time, host) user_api_usercoursestag (id, user_id, key, course_id, value)
user_id REFERENCES auth_user user_api_userpreference (id, user_id, key, value)
user_id REFERENCES auth_user verify_student_softwaresecurephotoverification (id, status,
status_changed, user_id, name, face_image_url, photo_id_image url, receipt_id,
created_at, updated_at, submitted_at, reviewing_user_id, reviewing_service, error_msg,
error_code, photo_id_key, window_id, display)
reviewing_user_id REFERENCES auth_user user_id REFERENCES auth_user window_id REFERENCES
reverification_midcourseverificationwindow
waffle_flag (id, name, everyone, percent, superusers, staff, authenticated, rollout,
note, testing, created, modified, languages) waffle_flag_groups (id, flag_id, group_id)
flag_id REFERENCES waffle_flag
group_id REFERENCES auth_group waffle_flag_users (id, flag_id, user_id)
flag_id REFERENCES waffle_flag
user_id REFERENCES auth_user waffle_sample (id, name, percent, note, created, modified)
waffle_switch (id, name, active, note, created, modified) wiki_articleforobject (id,
article_id, content_type_id, object_id, is_mptt)

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article_id REFERENCES wiki_article
content_type_id REFERENCES django_content_type wiki_articlesubscription
(subscription_ptr_id, articleplugin_ptr_id) articleplugin_ptr_id REFERENCES
wiki_articleplugin
subscription_ptr_id REFERENCES notify_subscription wiki_attachmentrevision (id,
revision_number, user_message, automatic_log, ip_address, user_id, modified, created,
previous_revision_id, deleted, locked, attachment_id, file, description)
attachment_id REFERENCES wiki_attachment previous_revision_id REFERENCES
wiki_attachmentrevision user_id REFERENCES auth_user
wiki_reusableplugin (articleplugin_ptr_id) articleplugin_ptr_id REFERENCES
wiki_articleplugin
wiki_attachment (reusableplugin_ptr_id, current_revision_id, original_filename)
current_revision_id REFERENCES wiki_attachmentrevision reusableplugin_ptr_id REFERENCES
wiki_reusableplugin
wiki_revisionpluginrevision (id, revision_number, user_message, automatic_log,
ip_address, user_id, modified, created, previous_revision_id, deleted, locked,
plugin_id)
plugin_id REFERENCES wiki_revisionplugin previous_revision_id REFERENCES
wiki_revisionpluginrevision user_id REFERENCES auth_user
wiki_revisionplugin (articleplugin_ptr_id, current_revision_id) articleplugin_ptr_id
REFERENCES wiki_articleplugin current_revision_id REFERENCES wiki_revisionpluginrevision
wiki_image (revisionplugin_ptr_id) revisionplugin_ptr_id REFERENCES wiki_revisionplugin
wiki_imagerevision (revisionpluginrevision_ptr_id, image, width, height)
revisionpluginrevision_ptr_id REFERENCES wiki_revisionpluginrevision
wiki_reusableplugin_articles (id, reusableplugin_id, article_id) article_id REFERENCES
wiki_article reusableplugin_id REFERENCES wiki_reusableplugin
wiki_simpleplugin (articleplugin_ptr_id, article_revision_id) articleplugin_ptr_id
REFERENCES wiki_articleplugin article_revision_id REFERENCES wiki_articlerevision
wiki_urlpath (id, slug, site_id, parent_id, lft, rght, tree_id, level, article_id)
article_id REFERENCES wiki_article parent_id REFERENCES wiki_urlpath site_id REFERENCES
django_site
workflow_assessmentworkflow (id, created, modified, status, status_changed,
submission_uuid, uuid, course_id, item_id) workflow_assessmentworkflowstep (id,
workflow_id, name, submitter_completed_at, assessment_completed_at, order_num)
workflow_id REFERENCES workflow_assessmentworkflow

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Consultas utilizadas nos testes:

Consulta 1:

```

SELECT module_definition.code, module.type, module.displayname, course.root,
course_module.order
FROM auth_user, student_courseenrollment, course, module, module_definition,
course_module
WHERE auth_user.id = student_courseenrollment.user_id AND
student_courseenrollment.course_id = course.id AND course.id = course_module.course_id
AND course_module.module_id = module.id AND module.id = module_definition.block_id AND
auth_user.username = "joão" AND student_course_enrollment.is_active = true AND
course.id = 1
ORDER BY course_module.order

```

Consulta 2:

```

SELECT module_definition.code, module.displayname, course_module.order
FROM auth_user, student_courseenrollment, course, module, module_definition,
course_module, courseware_studentmodule
WHERE auth_user.id = student_courseenrollment.user_id AND
student_courseenrollment.course_id = course.id AND course.id = course_module.course_id
AND course_module.module_id = module.id AND module.id = module_definition.block_id AND
auth_user.username = "joão" AND student_course_enrollment.is_active = true AND
course.id = 1 AND courseware_studentmodule.grade = false

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