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namespace Drupal\student_enrollment\Form;
use DateTime;
use Drupal;
use Drupal\Core\Form\FormBase;
use Drupal\Core\Form\FormStateInterface;
use Drupal\node\Entity\Node;
use Symfony\Component\HttpKernel\Exception\AccessDeniedHttpException;
* Provides a Student Enrollment form.
class StudentEnrollmentForm extends FormBase {
  * {@inheritdoc}
  public function getFormId() {
   return 'student_enrollment_student_enrollment';
  /**
   * {@inheritdoc}
   */
  public function buildForm(array $form, FormStateInterface $form_state, $course_id
= NULL) {
    // Prevents administrators from enrolling for a course. They are redirected to 4
03 page (access denied).
    $current_user = Drupal::currentUser();
    if (in_array('administrator', $current_user->getRoles())) {
     throw new AccessDeniedHttpException(); /* throws new exception for denied acce
ss to the current page.
      The 403 page is displaying.*/
    // Build the enrollment form elements here.
    $course_name = Node::load($course_id) -> label();
    $form['course']
      '#type' => 'label',
      '#title' => '<h2>' . $this->t('Enroll for the course') . " " . $course_name .
'</h2>',
    $form['course_id'] = [
  '#type' => 'hidden',
  '#value' => $course_
    $form['submit'] = [
   '#type' => 'submit',
      '#value' => $this->t('Enroll'),
    1;
    return $form;
   * {@inheritdoc}
  public function validateForm(array &$form, FormStateInterface $form_state) {
   // Implement validation logic if needed.
  * {@inheritdoc}
  public function submitForm(array &$form, FormStateInterface $form_state) {
    // Implement submission logic to record the enrollment in the database.
    $user_id = \Drupal::currentUser()->id();
$course_id = $form_state->getValue('course_id');
    $course_start_date = new DateTime(Node::load($course_id) ->get('field_start_date')
) ->value);
    $now_date = new DateTime();
```

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// Check if the user is already enrolled in the selected course.
    if (!$this->isUserEnrolled($user_id, $course_id)) {
     if ($now_date > $course_start_date) {
        // Record the enrollment.
        $this->recordEnrollment($user_id, $course_id);
        $this->messenger()->addMessage($this->t('Enrollment successfull.'));
        //$this->notificationService->sendEnrollmentNotification($user_id, $course_i
d); // send an email for successfull enrollment.
        $this->messenger()->addMessage($this->t("Enrollment time for this course has
 expired because it is after the start date."), 'warning');
     else {
     $this->messenger()->addMessage($this->t('You are already enrolled for this cou
rse.'), 'warning');
  * Check if a user is already enrolled for a course.
  * @param int $uid
      The user ID.
   * @param int $course_id
      The course ID.
      TRUE if the user is already enrolled, FALSE otherwise.
 private function isUserEnrolled($uid, $course_id) {
   // Implement logic to check if the user is already enrolled for the course.
    $query = \Drupal::database()->select('student_enrollments', 'e');
    $query->fields('e');
    $query->condition('user_id', $uid);
    $query->condition('course_id', $course_id);
    $result = $query->execute();
   return !empty($result->fetchAssoc());
  /**
  * Record a user's enrollment in a course.
  * @param int $uid
      The user ID.
  *  * @param int $course_id
      The course ID.
  * /
 private function recordEnrollment($user_id, $course_id) {
    // Implement logic to record the user's enrollment in the database.
    \Drupal::database()->insert('student_enrollments')
      ->fields(
        'user_id' => $user_id,
        'course_id' => $course_id,
        'created' => \Drupal::time() ->getRequestTime()
      ->execute();
```