Axis - Standards Based Grading Application
Use Case Scenarios

1. **Teacher Account Creation**
    a. A teacher downloads our app from the app store, and then follows the process of creating an account, which includes three steps. First, they indicate that they are a teacher by selecting the "Teacher" radio button, which enables the "Next" button. They click "Next", and they see the form to input their basic info such as their name, email, password, and school information. Entering input in each field enables the "Create Account" button. When they click "Create Account", they see the third step, which says "please check your email and verify your email address to continue". They navigate to their email, click on the link that says "Verify", and they are redirected to the teacher dashboard.

2. **Student Account Creation**
    a. A student downloads our app from the app store, and then follows the process of creating an account, which includes three steps. First, they indicate that they are a student by selecting the "Student" radio button, which enables the "Next" button. They click "Next", and they see the form to input their basic info such as their name, email, password, and school information. Entering input in each field enables the "Create Account" button. When they click "Create Account", they see the third step, which says "please check your email and verify your email address to continue". They navigate to their email, click on the link that says "Verify", and they are redirected to the student dashboard.

3. **Forgot Password**
    a. A teacher or student forgets their password, so they click on the "Forgot password?" link on the login screen. They see a form that has a single input field for their email address. After entering their email address, the "Send Reset Password Email" button is enabled, so they click it. They are taken to a screen similar to step 3 of the sign up process, which simply says "please check your email and reset your password to continue". They navigate to their email, click the button labeled "Reset Password", where they are linked back into the application, to a form with Password and Confirm Password input fields. After entering in a valid password that is identical in both inputs, the "Reset Password" button is enabled, so they click it, and their password is updated in the database. They are redirected to the login screen, where they enter their email and new password before being redirected to their dashboard.

4. **Course Creation**
    a. A teacher logs into their account and they are routed to the teacher dashboard. They click on the "Create Course" button under the "Courses" section of the dashboard. It takes them to a page where they can enter in the course name, course code, add topics to the course, and add concepts to each topic. When they finish creating the course, they click a final "Create New Course" button that submits the data. The teacher is redirected back to the dashboard, where their

newly created course shows up at the top of the list of courses in the courses section.

5. **Manage Sections**
   a. A teacher logs into their account and they are routed to the teacher dashboard. They see their "Sections" section, where they see a list of their ongoing sections, along with the season and year of the semester (Spring 2025 for example). They select a section from the list, and they are routed to the Section View, which shows the semester, the course and section codes and course name, and a list of the students enrolled in that section. They select a student from the list and are routed to the Student View, which shows the semester, course and section codes and course name, and the students name, and the list of topics with their concepts and associated checkpoints/testpoints for each concept. They select a checkpoint and a dropdown menu appears with the options "Not attempted", "Attempted: not satisfactory", "Attempted: needs revisions", or "Attempted: satisfactory". They select the option that they'd like to update the students grade to, and the "X" that represents that checkpoint changes colors to depict the status. A grayed out "X" indicates not attempted, a red "X" indicates a unsatisfactory attempt. A yellow "X" represents an attempted point that needs revisions. And a green "X" represents a satisfactory attempt at a point.

6. **Course Deletion**
   a. A teacher logs into their account and navigates to the Courses section on the dashboard. They see a list of courses they have created. They click on a specific course and scroll to the bottom of the page, where they see the "Delete Course" button. A confirmation pop-up warns them that deleting the course will permanently remove all associated data, including topics, concepts, and student records. The teacher clicks "Confirm", and the course is removed from their dashboard.

7. **Add Co-Teacher to Section**
   a. A teacher logs into their account and selects a section they are managing. They click on "Manage Teachers" and see a field to enter an email address. They enter the co-teacher's email and click "Invite". The co-teacher receives an email with a link to accept the invitation. Once accepted, the co-teacher gains access to the section and can view student progress, update grades, and manage checkpoint statuses. However, they cannot delete the section or make administrative changes—only the original teacher retains full control.

8. **Student views grades**
   a. A student logs into Axis, is routed to their dashboard, and wants to view their grades. They go to manage their sections and go to the view grades section. They want to view their grade for checkpoint 3.5 and test point 3.6. They see that for their 3.5 checkpoints, they have one green X, one red C, and one gray X. These grades mean that they have one satisfactory attempt and one unsatisfactory attempt and that they have not attempted one checkpoint. For test point 3.6, they have one red X, meaning that they had an unsatisfactory attempt.

9. **Student adds course**

a. A student logs into Axis and is routed to their dashboard. They want to add their MATH 3250 class to their sections. They go to manage sections and click add sections. They see a screen that prompts them to type a code for a new section. They type the new section code and click add course. After they click add course they are routed to their dashboard for the course, where they can see the course information, including their teacher and their unattempted checkpoints.

10. Student statistics

a. A teacher logs into Axis and is routed to their dashboard. They want to view the progress of their students. They go to manage their sections and click on a section that they want to view. They go to the "view statistics" page and see the checkpoint data of their students. They also see a prediction report of students projected grade.

Teacher

Manage Semesters → Create Semester
Manage Semesters → View Semester
View Semester → Delete Semester

Manage Courses → Create Course
Manage Courses → View Course
View Course → Delete Course

Manage Sections (Teacher) → Create Section
Manage Sections (Teacher) → View Section (Teacher)
View Section (Teacher) → Delete Section
View Section (Teacher) → Update Grades

User

Manage Sections (Student) → Add Section
Manage Sections (Student) → View Section
View Section → Unenroll
View Section → View Grade