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Web App Plan

Potential Submission Feature: Checkpoint Submissions – Students can upload "snapshots" of their code at certain intervals or checkpoints. This allows for early feedback and iterative development while also discouraging last-minute cramming of assignments.

Requirements

Actors

- Student
- Instructor
- Admin

User Stories

- As an instructor, I want to create courses so I can organize students and assignments
- As an admin, I want to create instructor accounts and configure their settings to follow policy
- As an instructor, I want to create assignments with multiple problems, problem descriptions, milestones, a rubric, and deadlines.
- As a student, I want to see a dashboard that shows my upcoming deadlines and progress on my assignments
- As a student, I want to open an assignment, code directly in the browser via an integrated editor, run tests, and submit
- As a student, I want to upload multiple checkpoint submissions before the deadline before submitting a final solution
- As an instructor, I want to view all checkpoint and final submissions, see the differences between them, and grade/leave feedback.
- As a student, I want to view feedback on checkpoints and final submissions
- As an instructor, I want to see flags for potential plagiarism
- As an instructor, I want to post announcements that can be viewed by all students in the respective course
- As a student, I want to see all posted announcements from my instructors

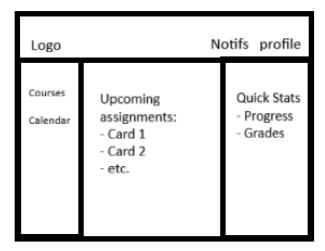
Site Map

- Login
- Dashboard
 - Student dashboard
 - Instructor dashboard
 - o Admin dashboard
- Course page
 - Syllabus
 - Announcements
 - Student roster
 - Assignments list

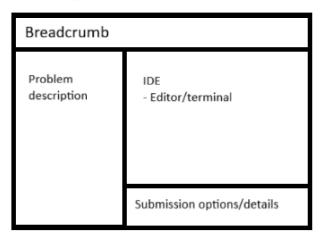
- Assignment page
 - Assignment overview/description
 - o Problems list
 - o Deadlines
- Problem page
 - o Problem description
 - o Integrated IDE
 - Submission options (checkpoint/final)
 - Submission history
- Submissions and feedback
 - o Submission viewer
 - o Checkpoint difference viewer
 - o Inline/general feedback
- Grading console
 - o Submission list
 - Submission viewer
 - o Difference view
 - o Inline comments
 - o Rubric scoring
 - o Plagiarism flags
- Course management
 - Create/edit assignments
 - Set deadlines and milestones
 - Set rubrics
- Admin tools
 - User management
 - o System settings
 - o Permissions

Wireframes

Student Dashboard



Problem page



Submission Viewer

Breadcrumb	
Snapshots list	Feedback panel

Grading console

Breadcrumb	
Submission queue	Submission viewer - Diff tool - Checkpoint selector - Run results
	Score (editable)

Relationships

Chapter (Course) Control Courses Description Chapter (Courses) Servers Description Courses (Courses) Servers Courses (Courses) Servers Courses (Courses) Courses