11/13/2020

Team A-to-Z

Capstone Project Proposal

Cohort 4.2
TECHCAREERS

Contents

Project Name

- AZLearn

Problem Statement

- Dispersed classroom timesheet, grading sheet and learning materials, that worsen students experience during their learning journey
- Cumbersome admin work using excel/ google sheets to manage courses and assignments, that diverts instructors attention from core teaching activities, content creation, and delivery

Stakeholders

- TechCareers Students
- TechCareers Instructors

Vision

- Improve education process quality and experience

Value proposition

- Having one-Stop-Shop for course and assignment management that will
  - Improve the student learning experience
  - Focus instructor efforts to course content creation and delivery by reducing administrative tasks
  - Centralize timesheets and grading management
  - Smooth the onboarding process for new students and instructors
  - Have courses and assignments history by cohort

Development Stack

- DotNetCore + WebAPI + MySql + React + CSS + Vanilla JS
  - DotNet Core = C#, Entity Framework, ASP.NET MVC, etc.

How our application covers each of CRUD

- The app will feature several DB records that will be added, edited, deleted, read by instructor and student. Please see below key features section for more details.

Key Features

Related to	Feature	Category	Primary Stakeholder	Student*	Instructor*
Design	Well organized interface	Requirement	Student, Instructor	*NA*	*NA*
Design	Sort options for current ongoing content (by due date)	Challenge	Student	Read	*NA*
Profile	Have user profile	Requirement	Student, Instructor	Write	Write
Profile	Have preferences (e.g., notifications)	Requirement	Student, Instructor	Read/Write	Read/Write
Log in	Secure authentication	Requirement	Student, Instructor	*NA*	*NA*
Notifications	Notifications when the assignment is available, grades available, etc.	Requirement	Student	Read	*NA*
Notifications	Receive an email when the assignment is available, grades available, etc.	Challenge	Student	Read	*NA*
Notifications	Notifications when a student submits their timesheet/grades /any updates made	Requirement	Instructor	*NA*	Read
Course	Display resources related to a course	Challenge	Student	Read	Write
Course	Display everything related to the course (grades, assignments, timesheet)	Requirement	Student	Read	Write
Course	Course calendar	Challenge	Student	Read	Write
Course	Display next topics coming up	Requirement	Student	Read	Write
Course	Display the resources related to the assignment	Challenge	Student	Read	Write
Course	Google Drive API interface for resources	Challenge	Instructor	*NA*	*NA*
Course	Can be able to attach files/resources from local machine or online	Challenge	Instructor	Read	Write
Course	Create a course	Requirement	Instructor	Read	Write

Category	Description	Type	Role	Read*	Write*
Course	Link for the assignments and course	Requirement	Instructor	Read	Write
Course	Could be able to assign courses to the students	Requirement	Instructor	Read	Write
Course	Announcement section, related to upcoming changes or general info	Challenge	Instructor	Read	Write
Assignment	Forum/posts within a course topic or assignment so all related discussions are in one relevant place (replacing homework help)	Challenge	Student, Instructor	Read/Write	Read/Write
Assignment	Badges/ rewards on grades and shoutout (i.e., peer support)	Challenge	Student	Read	Read
Assignment	Create an assignment	Requirement	Instructor	Read	Write
Assignment	Add shoutout form submission within the assignment	Requirement	Student	Read/Write	Read
Assignment	Will be able to leave a comment on the grading	Requirement	Student	Write	Read
Assignment	Rate assignment difficulty level	Requirement	Student	Write	Read
Assignment	Set release date	Requirement	Instructor	Read	Write
Assignment	Could build Rubric for the assignments (not practices)	Requirement	Instructor	*NA*	Write
Assignment	Grade assignment	Requirement	Instructor	Read	Write
Assignment	Leave comments on students' assignment while grading	Requirement	Instructor	Read	Write
Timesheet	Create/ edit the timesheet	Requirement	Student	Write	Read
Timesheet	Show the student avg time spent on the assignment (either from the instructor's input or from previous cohorts)	Requirement	Student	Read	Write
Timesheet	Display how long it took for a particular student to complete the assignment	Requirement	Instructor	*NA*	Read
Reporting	Report section for timesheet	Requirement	Student, Instructor	Write	Read
Reporting	Report section for grades	Requirement	Student, Instructor	Read	Write
Reporting	Display statistics and key performance indicators	Challenge	Student	Read	Read
Reporting	Print functionality for reports	Challenge	Student	Read	Read

*_Read = Read only and Write = Create/Edit/Delete_