11/13/2020

Cohort 4.2

Techcareers

Team A-to-Z

Capstone Project Proposal

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# **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 |
| 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*