

Backend: C# API

Groups must create a backend API that includes:

- At least 4 database tables
- At least 1 join in a query
- A Data Access Layer injected into the API controllers
- Dapper for Database ORM
 - Stored Procedures for some/most of the database work
- At least 3 API endpoints
- A mixture of HTTP methods including at least one example of GET, POST, PUT/PATCH, and DELETE

Front-End: Angular & CSS

- At least 6 components
- Angular routing between components
- At least two services

Workflow Expectations:

- All tasks/user stories should be worked on a separate branch that is merged into main branch
- Branches should correlate with a user story or task found on your Trello Board
- All branches should have a pull request and be reviewed by one team member before merging to main branch

Steps to Take Beyond MVP:

- Improve your API error handling – return more information in the response and/or HTTP error codes
- Further error handling in Angular – if you get an error from an API, don't just send it to the console, display information to the user
- Refactor your code – cleaner, more documented, more modular
- Improve your CSS – really make the sire pop. Dig into CSS animations
- If it makes sense with your project, incorporate a third-party API

Note: Please notify us of any major changes from your initial pitch



Fallback Project

While we strongly encourage every group to develop a unique project that meets the above requirements, this serves as a fallback for any group that cannot come up with something.

- Select a specific user from a drop-down. An individual user has one of three levels of access:
- Regular users can:
 - View a list of courses
 - Enroll or unenroll from a course
 - Enter a course they are enrolled in and see modules, assignments, and resources
- Admin users can:
 - Create a course
 - Assign a teacher to a course
 - Create a new user
 - Assign teacher or admin rights to a user
- Teachers can:
- Add modules to a course
- Add assignments to modules
- Add resources to modules
- Rearrange the order of materials within modules and between modules
- Remove students from their courses

Ideas for stretch goals:

- Teachers can create quizzes in their courses, and regular users can take them (Sequence of multiple-choice questions?)
- Teachers can create slideshows in their courses and regular users can navigate through them
- Teachers can post YouTube videos in their courses
- Incorporate your own ideas