

Final Exam Project ([CMSC335 \(Spring 2024\)](#))

Overview

The goal of this final exam class project is to practice concepts covered in class by implementing a Node.js application. What the application does is up to you. For this work you can work with classmates (up to three persons per group) or by yourself. **There is no late deadline for this work.** The deadline for your submission is Friday, May 17, 11:55 pm. **IMPORTANT: ONLY ONE SUBMISSION PER GROUP.** Please do not ask whether your group can have more than three people; the maximum will be three.

Requirements

1. Design and implement a Node.js application.
2. Your application must rely on Node.js and Express.
3. Your application must rely on MongoDB.
4. Your application must have at least one form where users provide some data.
5. Your application must use some CSS.
6. Your application must rely on at least one API that provides some data for you. Some API resources (you are not restricted to only these resources):
 - a. <https://rapidapi.com/>
 - b. <https://rapidapi.com/blog/rapidapi-featured-news-apis/>
 - c. <https://developer.vonage.com/blog/2021/03/15/the-ultimate-list-of-fun-apis-for-your-next-coding-project>
 - d. <https://apipheny.io/free-api/>
 - e. <https://github.com/public-apis/public-apis>

Grading

1. (40%) Application relies on Node.js and Express.
2. (10%) Application relies on MongoDB.
3. (10%) Application relies on at least one form.
4. (5%) Application makes use of some CSS.
5. (30%) Application makes use of some API.
6. (5%) Application is deployed online (e.g., using a company that provides a free-hosting option e.g., <https://render.com/>).

Additional Information

1. Your application can be as simple as you want. You will get full credit as long as you satisfy the above requirements.
2. You can work by yourself or in teams of at most three people.
3. The complexity of your application will not depend on the number of people in your group.

4. You should use this work as an opportunity to create an app that you can add to your resume and can show during a career fair :). Also, you might be considered for recommendations or a TA position if excellent work is completed.
5. Feel free to help classmates (even if they are not part of your group).
6. **Applications that are extensions of class projects will not receive any credit.**
7. You must have a text file called README.md in the main directory of your application. This file will have the information specified below.
8. Please, check the clarifications Piazza folder associated with this work often.
9. Feel free to use the Piazza **finalexamclassproj** folder to find classmates for a group.

README.md file

You must have a text file called **README.md** in the main directory of your application with the following information:

1. **Who Submitted the Project in the Submit Server** - Name and directory id of group member that uploaded the application to the submit server.
2. **Group Members** - Add the name and directory id (in parentheses) of each member of your team. If you are working by yourself, add your name and directory id too.
3. **App Description** - One or two line description.
4. **YouTube Video Demo Link** - Link to a YouTube video that provides a demo of your application. This video is very important. **We will not grade a project unless a video is provided.** The video does not need to have audio (narration).
5. **APIs Information** - Names and link to API(s) used by your application.
6. **Contact Email** - Which group member should we contact if we have questions.

Below we included an example of the information we are expecting. Please follow this format. Please use markdown (<https://markdowntohtml.com/>) so we can select links you provide in the information.

```
Submitted by: Rose Smith (directory id: superterp)
Group Members: Rose Smith (superterp), Peter Santos (pmegaterp)
App Description: Allow users to find images, songs of an author and sto
YouTube Video Link: https://www.youtube.com/MyAmazingAPP
APIs: VideoApp (http: notrealvideoapp.what), SoundApp (http: notreadlsound
Contact Email: superterp@notreal.address.what
```

Submission

1. **PLEASE, ONLY ONE SUBMISSION PER GROUP.**
2. Remove the **node_modules** folder from your application. Make sure we can recreate this folder when executing **npm install**.

3. Make sure the README.md file described above is part of the project. It should appear in the main directory of your application.
4. Upload a zip file with your work using the submit server entry "Final Exam Project."
5. **Make sure that after uploading your work, you download the work and verify you are not missing any files. If you are missing any files, you will be penalized -12 pts.**
6. **We will only grade the last submission you provide.**

Examples of Previous Projects

Information about projects completed by students in previous semesters can be found at [Previous Projects](#).

[Web Accessibility](#)
