**Project Requirements:**  
Remote database  
Use a LAMP stack.  
Use JSON to communicate between client and server. During the presentation, you must show access to at least one API endpoint using SwaggerHub.  
You will use a web page as the client. (A web page must be AJAX enabled that accesses the API.)

The program is a personal contact manager. Each user needs a login. For each user, they can add their own contacts (not shared contacts). They can search for and delete contacts. When the initial page appears, users can either log in or sign up (register).

The user interface should be clean and professional. The project should be as professional as possible. The source and support files must be in github (You will add the link to the sign up sheet).

**Deliverables:**  
Unzipped PowerPoint presentation -- (all members must submit before the presentation) First, make sure you put your github link into the spreadsheet [https://docs.google.com/spreadsheets/d/18vRIwn6nS8V6V21yJ3s93g3ooiNc1BJug\_-z2r3EJNA/edit#gid=0 (Links to an external site.)](https://docs.google.com/spreadsheets/d/18vRIwn6nS8V6V21yJ3s93g3ooiNc1BJug_-z2r3EJNA/edit#gid=0)

You will get a zero if you miss your team's presentation without prior approval of the instructor.

This is the rubric for the small presentation (but does not indicate a required order)

1. Submission of PowerPoint slides to the Webcourse before the presentation - 10 pts

2. Professional PowerPoint slides - 5 pts

3. All members participate in the presentation - 5 pts

4. Use case diagram - 5 pts

5. Gantt chart - 5 pts

6. Demonstration of at least one API endpoint with swagger hub - 5 points

7. Effect search with partial match

8. Thorough demonstration of working project - 25 pts

9. Project adheres to current standards - 10 pts

10. ERD - 5 pts

11. Explanation of technology used for project - 5 pts

12. API endpoint demonstration - 5 pts

13. There are discretionary points for the instructor to award for project excellence - 10 pts

Suggested presentation elements:

Title page Cade  
Team members and what part they played Cade/Everyone  
Technology used (database, frameworks, github, discord, etc) Cade  
Things that went well Cade  
Things that did not go well Cade  
Gantt chart  
ERD - David  
API demonstration  
App demonstration  
Time for Questions