

# Professional Achievement Points Project – MIS2402

## Web API – Proof of concept

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### Read this first

This project is being offered to MIS2402 students who are looking to earn additional MIS professional achievement points. This project is not extra credit. Participation in the project will not improve or reduce your grade in MIS2402. This project is optional. You don't need to do this project if you don't want to. The incentive for doing this project is MIS PRO points, and the joy of learning/applying a new skill: programming.

If you take advantage of this opportunity you may earn 0, 25, or 50 portfolio points based on my evaluation of your work.

### The project

As you have seen in class, there are web APIs available to programmers that will allow them to do a variety of tasks. There are APIs designed to supply data (e.g. USA state codes), and there are APIs that perform actions. Actions include tasks such as authentication, sending a text messages or generating QR codes, as well as many other things.

Your assignment is to research an API, develop a working proof of concept, and provide a recommendation as to how the API could be used in an application for business or entertainment purposes.

Additional details follow.

### Research

Google is a great place to start. For example – searching Google for “free QR code api” generates good results for APIs that can be used to generate or read QR codes. Your API should be either free, free-to-try, or very inexpensive. A good API will have a web-site with accompanying documentation that will help you understand how the API works.

### Working Proof of Concept

Once you have found an interesting API, you are to construct one or more working proof-of-concept pages that demonstrate how the API can be used. The “proof of concept” does not need to be visually appealing. It does not need to be a full featured application. It does not need to be any more complicated than necessary. It does need to reflect your understanding of how the API works. Upload your proof-of-concept work to the class server: [misdemo.temple.edu](https://misdemo.temple.edu).

An example of a working proof-of-concept page can be found here:

[https://misdemo.temple.edu/jeremy/pro\\_point\\_demo](https://misdemo.temple.edu/jeremy/pro_point_demo)

### Recommendation

Provide a recommendation regarding how the API could be used in an application. The recommendation does not need to be long, or detailed, but it does need to be well thought out.

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For example:

“The API found at <http://goqr.me/api/> could be used in an paperless ticketing system. A user, pays for a ticket, and receives a unique code that represents the ticket. The unique code is the translated into a QR code by the QR code API and the QR image is then displayed on the user’s smartphone. When the user is at the event (movie, sports event, etc.) a ticket agent would read the QR code off of a user’s smartphone and get the code. The code would then need to be validated against a database of valid codes in order to prevent fraud and/or copying of the QR code image.”

### Restrictions

There are some API’s that should **not** be used for the project. Here they are:

1. The <http://goqr.me/api/> QR code. This has been used as an example in this document.
2. A bar code API ... because this is an awful lot like a QR code.
3. <https://textbelt.com/> SMS API (because we used it class last semester)
4. Any API hosted on misdemo (e.g. <http://misdemo.temple.edu/states> )
5. <https://restcountries.eu/rest/v2/all> (because this API was used in a prior semester)

### Assessment

Student work will be evaluated based on the following criteria.

- A. Originality – Please attempt to discover an API that you have not used or seen demonstrated before. **Do not** use an API found on the restrictions list above. Students who do so will not receive PRO points. Likewise, students are not likely to receive full PRO point credit if they reference the same API recommended by many other students.
- B. Functionality – Does the proof-of-concept application work? Does it reflect an understanding of the API’s basic use? Students who merely copy / paste code samples from the internet will not receive PRO points.
- C. Utility – Is the API free? Is the API inexpensive? Does your recommended use of the API make sense? Is the recommendation use of the API plausible?

Students will receive 0, 25, or 50 pro points based on the instructor’s assessment of their work.

### Submit your work / Request your points

When you have uploaded your work to the class server, submit your points request. To submit your points request, log in to the <https://community.mis.temple.edu> site. Open your Dashboard. Open “Professional Achievement Points” and “Add New”. You will have the option of submitting a points request relevant to this course, MIS2402.

Your PRO points request should include your recommendation and a link to your proof-of-concept work on the class server.

Submissions for points must be placed no later than 11:59PM on Friday 12/11.