**DS5110** 

# Final Project

By Kevin Cooper and Felipe Quiroz Fall 2024



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### Introduction

- Many people can tutor for classes, but it's hard to know who and for what
- Centralized database
  - Easy to find classes and peers
  - Can host resources and contact information easily
  - Provide scheduling information

### The Website

- CSS is simple and easily loaded but good-looking
- Function over form
- Fast loading times and a light touch
- Automatically generated

Below is a list of courses that are supported by this program.

#### Courses

DS5110

DS5110 Tutors: Felipe Quiroz Email: quiroz.w@northeastern.edu Phone: 617-777-7777 Availability: I can tutor only on Friday mornings Kevin Cooper Email: cooper.ke@northeastern.edu Phone: 617-777-7777 Availability: Email me for tutoring Jon Jones Email: bones@ufc.com Phone: 617-777-7777 This person is not available to tutor at this time Tony Ferguson Email: tonv@ufc.com Phone: 617-777-7777 This person is not available to tutor at this time Resources: syllabus screenshot commands video schedule Return to index

#### **Home Page**

Lists which classes we have information for

#### **Class Pages**

Lists tutors, their contact information, and relevant resources

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# The Code

- Python
- Object-oriented
- Dominate
- Reads from CSV
  - Can be easily updated to use Google's API to scrape from a Sheet, live
- Uses "with" statements for memory and error-handling benefits
- Outputs easily
  - "file.write(str(doc))"

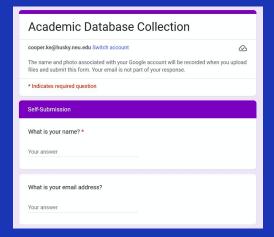
```
class Course:
    def __init__(self, name, tutors, resources):
        self.name = name # String, name of the course
        self.tutors = tutors # List of Tutors
        self.resources = resources # List of Resources
class Tutor:
    def __init__(self, name, email, phone_number, can_tutor, availability):
        self.name = name # String
        self.email = email # String
        self.phone number = phone number # String
        self.can tutor = can tutor # Boolean
        self.availability = availability # String
class Resource:
    def __init__(self, name, link):
        self.name = name # Name of the resource
        self.link = link # Link to the resouce
```

#### **Object declarations**

- Easy to work with
- Each object corresponds to something that exists in real life

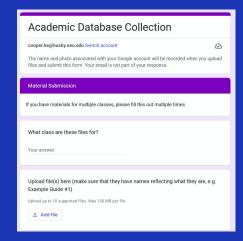
# Data Collection

- Automatic ERD
- Data comes from Google Form
- Forms outputs a Google Sheet
- Google Sheets converts to CSV



#### **Tutor**

 Which classes have you taken



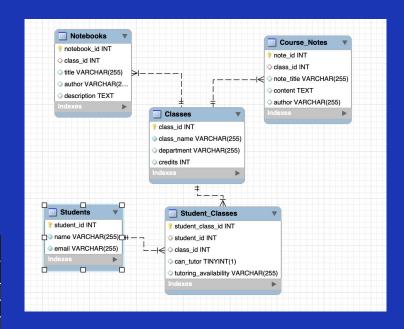
#### Resource

 Upload up to ten things at a time

# **Database**

- 5 tables
- Coded on MySQL
- Files loaded in locally.
- For storage and security

| student_class student class_id can_tutor tutoring_availability |      |        |      |                                     |
|--|------|--------|------|-------------------------------------|
| 7  | 1    | ds5110 | 1    | I can tutor only on Friday mornings |
| 8  | 2    | ds5110 | 1    | Email me for tutoring               |
| 9  | 3    | ds5110 | 0    | NULL                                |
| 10   | 4    | ds5110 | 0    | NULL                                |
| NULL   | NULL | NULL   | NULL | NULL                                |



# Thank you

Any questions?

