

Lab 13 - VaccineRecord

Learning Objective: demonstrate creation of a class.

To organize and keep track of individuals who got the COVID-19 vaccine we are creating the back-end of the system. The most fundamental part of the project is securely storing the data for each vaccination.

Part 1: Start your class definition. Name it *VaccineRecord* and create the `__init__` method. Your method should assign parameter values for the following data:

first name

last name

date of birth

dose 1 manufacturer, batch number, date, and location

dose 2 manufacturer, batch number, date, and location

The identifier for each variable is given in the UML diagram in `vaccine_record.py`.

Test your method in `main.py` by creating a *VaccineRecord* object.

Part 2: Write the `__str__` method which returns a string of all instance variables for a *VaccineRecord* object.

Test your method in `main.py` by printing your *VaccineRecord* to the console.

Part 3: Write an accessor method for each variable of the *VaccineRecord* class. Remember to follow naming conventions by starting each with `get_` then the identifier for the variable.

Add the methods to the UML diagram.

Test each accessor method in `main.py`.

Part 4: Write a mutator method for each variable of the *VaccineRecord* class. Remember to follow naming conventions by starting each with `set_` then the identifier for the variable.

Add the methods to the UML diagram.

Test each accessor method in `main.py`.

Part 5: Often we want additional functions in a class definition that will be helpful to use with objects of that type.

Create a `format_date` function in `vaccine_record.py` that takes three inputs: month, day, year. The function should return a string with the date formatted as `mm/dd/yyyy`.

Add the function to the UML diagram.

Test the function in `main.py`.

Submit: There are automated tests for this lab so make sure they pass before submitting. As always, stop by student hours, send an email, check in with a peer, or stop by the STEM Center if you need any assistance.