

Create a project called `lab8` (if using Visual Studio), and copy the file `UMLPersonMI.cpp` from Blackboard into `lab8.cpp`. Also download the file `UMLPerson.pdf` class hierarchy diagram for your reference.

Your group will add the following class hierarchy definitions and implementations to `lab8.cpp`:

- Add the `PerCourse` class as a derived class of the `PayKind` class. `PerCourse` will have one member variable, an unsigned called `_feePerCourse`. Declare and implement any additional functions required by `PerCourse`.
- Add the `EmployeeKind` base class (with no member variables). Declare and implement any additional functions required by `EmployeeKind`.
- Add the `PartTime` class as a derived class of `EmployeeKind` (with one member variable, an unsigned called `_maxHours`). Declare and implement any additional functions required by `PartTime`.
- Add the `Adjunct` class as a derived class of `Faculty`, `PerCourse`, and `PartTime` (with one member variable, an unsigned called `_maxCourses`). Declare and implement any additional functions required by `Adjunct`.

Also, change existing class(es) as follows, along with any changes to functions that may be necessary as a result:

- Add `PartTime` as a base class for `Grader`.

Update the `main` function to accommodate your changes to existing classes. Also, declare and display an instance of your new `Adjunct` class.

When finished, one member of your group should upload your completed `lab8.cpp` source file to Blackboard.