

Inheritance

In this lab, we will expand the types of people that can be hired, including contractors and interns.

Builds On - Moqlab

Overview

- Define new classes
 - *Contractor* - contractors make a fixed rate X 50 hours
 - *Intern* - interns are always paid a stipend of \$50
 - *HumanResource* - the base class for contractors, interns, and employees
- Define tests for the new classes
- Update *Company* to contain *Human Resource* objects

Steps

1. Create new classes, *HumanResource*, *Company*, *Intern*
2. Change *Employee* to inherit from *HumanResource*
3. Pull up from *Employee* to *HumanResource* the common fields and properties
 - first and last name
 - Hiredate
 - YtdGrossPay
4. Define *Pay* as a abstract method in *HumanResource*
5. Define a constructor in *HumanResource* taking first and last name as parameters
6. Fix up *Employee* class
7. Change *Contractor* and *Intern* to inherit from *HumanResource*
8. Re-run unit tests - company and employee tests should still succeed
9. Create new classes *ContractorTest* & *InternTest*
 - implement tests to specify *Pay* results
 - verify new tests fail
 - implement *Intern* & *Contractor* so that tests pass
10. Update *CompanyTest* to mock *HumanResource* rather than *IEmployee*
11. Update *Company* to contain *HumanResource* objects