

COP2337C Project Version 1 - 100 points

For version 1 your job will be to create an Employee class.

Requirements:

- (10 pts) An Employee should have the following fields:
 - First Name
 - Last Name
 - ID number, in the format AA-XXXX
 - Social Security Number, in the format XXX-XX-XXXX
 - Start Year
 - Department
 - Department code
- (10 pts) Constructors:
 - Default constructor that initializes the data members to the following values:
Employee Name: John Doe
Start Year: 2017
 - Parameter Constructor that sets the following fields:
First Name, Last Name, Social Security Number, Start Year, Department, Department Code
- (10 pts) Include mutator methods for the following fields:
First Name, Last Name, Social Security Number, Start Year, Department, Department Code
- (10 pts) Include accessor methods for the following fields:
First Name, Last Name, ID number, Social Security Number, Start Year, Department, Department Code
- (20 pts) Include the following private method called *CreateIDNumber()*.

The purpose of this method is to generate the ID number.

The ID number should be generated randomly, in the format AA-XXXX with the following rules:

- The first letter should be generated from the first character of the first name
- The second letter should be generated from the first character of the last name
- The 4 digits should be generated randomly. For example:

Employee Name: John Doe

ID number: JD-8232

Note: This method should be called from both constructors.

- (10 pts) Include a *toString()* method. You can decide the format of the string.
- (10 pts) Create a UML diagram to represent your Employee class.
- (20 pts) Create a driver class called *EmployeeTester*. Be sure to fully test your class.