Web Development – Mr. Goldman

Project – Bootem Inc.

**Project Overview**

Bootem Inc. is streamlining their retirement options so that they can move out large salary employees and fill their spots with younger people desperate enough to do twice the work for half the money. The idea is to have the opportunity to analyze who needs to stay and who needs to go by seeing the different information in different ways.

**The Page**

Bootem Inc employs 250 people. The important information for this system is the employee’s identification number, the employee’s age, the employee’s age when (s)he started with the company, and the employee’s salary. You can generate random employees based on the following conditions:

* The Employee ID is a 5 digit number. You can generate the numbers randomly.
  + The numbers should be unique.
  + No number should begin with 0 (although other digits in the number may be 0).
* Employee ages range from 24 to 71. Generate the age of each employee randomly.
* An employee may have started with the company at 24 years old or older. Calculate this randomly.
* In order to calculate an employee’s salary, use the following formula.
  + A 24 year old starts at $32,000 a year.
  + If the employee was older than 24 when (s)he started, add $250 per year to the starting salary.
  + In order to generate the current salary, add $750 to the starting salary for each year of service.

None of the employees will be listed on the screen. All of the information is in the back end. Create an interface for the user to find out the following:

1. How many employees are eligible for retirement?
   1. An employee is eligible for retirement if (s)he has been with the company for more than 35 years ***OR*** the employee is 62 years old or older.
2. A list of all of the IDs of the employees who are eligible for retirement and their salaries.

**Programming Hints**

Program in stages, testing each stage as you go.

1. Start with a representation of the employee. How do you want to keep track of 250 employees, each of which has 4 pieces of information?
2. Generate each piece of information for the employees, programming one piece at a time. Create a rudimentary display so that you can view the information and make sure it’s being generated properly.
3. Write a function that determines whether or not an employee is eligible for retirement.
4. Write a function that uses the previous function to determine the eligibility of all of the employees. It should put all of those employees into a list.
5. Write your interface and display.
6. Try the bonus.

**Bonus**

In addition to seeing who’s eligible for retirement, create an interface for the company to determine who is eligible for a particular package. This interface should include 2 text boxes. The first is the minimum age of the employee and the second is the minimum salary. The user will enter this information and then click a button to receive how many employees are eligible for the package, and a list of their IDs.

As an added bonus, remove all employees from the list who are already eligible for retirement.

**Programming Requirements**

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| * You must code your own HTML and CSS. Use of a drag and drop interface or the usage of code downloaded from the internet is not permitted. |
| * Use of deprecated code is not permitted. Use an HTML 5 reference as your guide. |
| * You must comment your name into the top of every page. |
| * Your code must be structured in a consistent and legible manner |
| * Your text must be organized through the use of sectioning tags (div, span, p, h1 – h6). Tables are acceptable for data but not for page design. |
| * Your interface must be smooth and easy to figure out for a client. |
| * Your pages must be formatted using CSS. |

*You project is to be submitted via Moodle. Compress all of the necessary files into a zip file.*