**Name**: \_\_\_\_\_Whitney Kenner\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Fill the following table with your solution:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Executable size without using –g :** -----193380------------ | | | | **Why? The executable size is significantly smaller when using -g because all of the symbols in the program (class names, variable names, function names, etc) are placed into a .DSYM file (along with line numbers of where they are defined) which greatly reduces the size of the executable** | |
| **Executable size when using –g :** -------324628-------- | | | |
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|  | | | | | |
| **Bug #** | **Details** | | | **Proposed solution** | |
| File, line | Function name | Description | Description | Modified code |
| **1** | Department.cpp line 161  Main.cpp line 67 | Department::getAllProjectIDs()  main | An indexing int was uninitialized | Initialize int I = 0 | Int I = 0 |
| **2** | Department.cpp line 20 | Department::Department(String N, int id) | The ternary operator was incorrect (swapped order). If the ID was above 0 it would set the id to -1 | Switch the order in the ternary operator | (id > 0) ? ID = id : ID = -1; |
| **3** | employeeClass.cpp line 16 | Employee::Employee | Similar to above, the ternary operator is switched, resulting in IDs being set to 0 instead of the input value | Switch the order of the ternary operator | (id > 0) ? ID = id : ID = 0; |
| **4** | employeeClass.cpp line 13/18 | Employee::Employee | Having the same variable name for the input string for job title as the member variable for job title is causing the job title to not be appropriately set | Change either the member variable name or the input variable name | String inputJobTitle |
| **5** | Department.cpp lines 123-125 | Department::getProgrammersByLanguage | By pulling a temporary copy of a programmer out and checking the language of that programmer, we cannot then use that temp to push back the programmer to the programmer vector. | Pass by reference by using & | Result->push\_back(&programmers->at( |
| **6** | Department.cpp lines 160, 161, 169 | Department::getAllProjectIDs | An indexer that was being used by 2 separate for loops was being initialized outside of the for loops, causin gone of them to not even be run after the first one was run | Initialize the index inside the for loops | For(int I = 0……. |
| **7** | Department.cpp line 26 | Department::calculateMaxSalary | The index is being initialized as a double instead of an int and it’s messing with indexing | Initialize the Index as an int | Int I = 0 |
| **8** | Employee.h line 30 | Print() | The employee print was being called over the other types of class prints resulting in the supervisors, project IDs, prog langs and years of experience not being printed | Change void print in employee to virtual | Virtual void print()(; |
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Add rows when necessary.