Howdy!    
  
Thank you for your interest in FrogSlayer and taking the time to apply.

In the corresponding ‘layout.cpp’ file, you will find a coding exercise. Please follow the instructions explicitly - you may only write code where specified and nowhere else. We've included reference material that should give you enough information to provide the correct and fully working solution. This is not a trick problem; the problem is solve-able within the given constraints.   
  
It's okay if you can't get a fully working solution; just submit what you have completed. We're more interested in seeing how well you can learn something new and put it into practice with limited direction.   
  
**Overview of the problem:**

Only writing code where indicated (the bodies of the `extract\_x`, `extract\_y`, `call\_foo`, and `call\_bar` functions), make this program output the values of:

thing.x

thing.y

thing.doStuff()

thing.doStuff2()

**Some useful references:**

<https://en.wikipedia.org/wiki/Virtual_method_table>

<http://www.openrce.org/articles/full_view/23>

<https://en.wikipedia.org/wiki/Pointer_(computer_programming)#C_arrays>

<https://en.wikipedia.org/wiki/Pointer_(computer_programming)#Function_pointer>