

Andy Fleischer

Prof. Karla Fant

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Program 2 GDB Writeup

For this project, the debugger I used to assist in programming was the GDB. In general, the GDB was pretty effective at helping me solve many issues such as backtracing segmentation faults and lost memory from my data structures. However, with this program the biggest reason why the GDB was helpful was to track what structures were created and which functions were being called at runtime with dynamic binding. It helped me really see how the virtual function lets you go straight to a child class' version of the function first. Also, I used the GDB to track various edge cases of dynamic binding, like how and when different constructors or destructors are invoked, how data can be overwritten by different constructors, and more.

It was very clear how the GDB can be used to enhance the programming experience, since I probably would have been staring at my computer for hours sifting through code without it. As with program 1, I still would like to learn more about how to use watch points to check for when and how my variables changed, especially address changes of pointers in my data structures. However, I think that this was not super necessary in my coding yet, so my approach to using the GDB was valid and still very helpful in debugging my code.