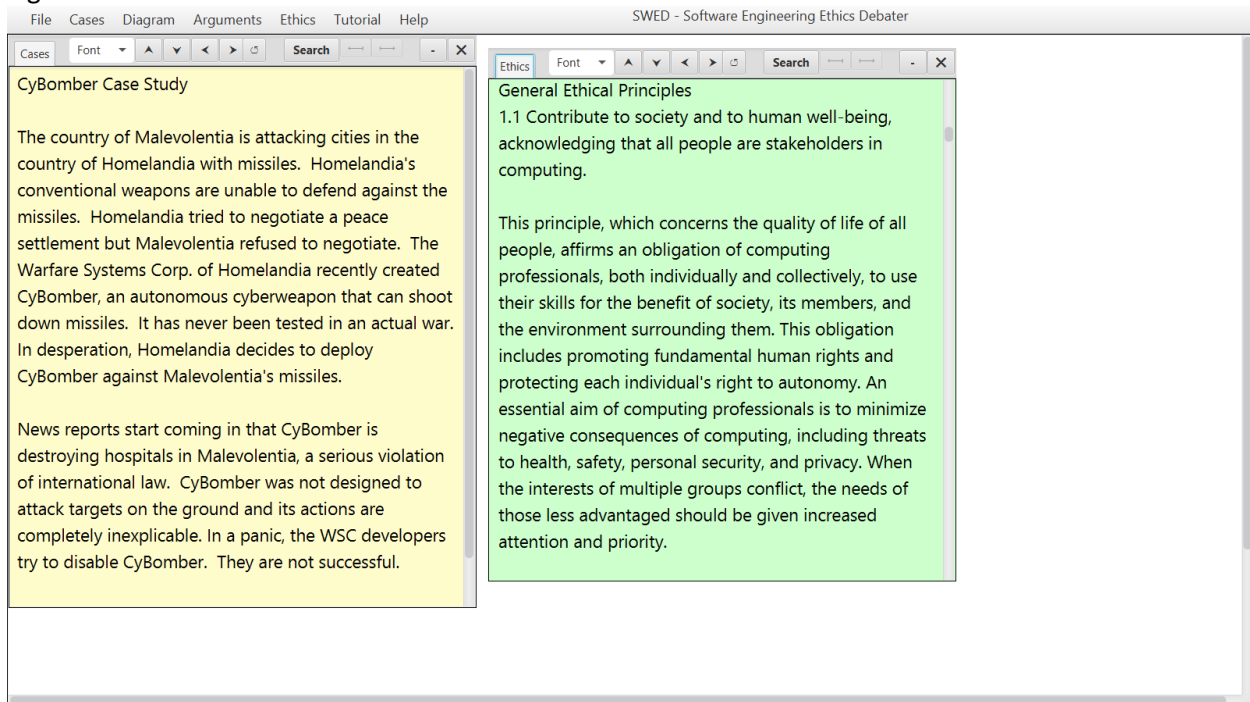


AIED - General Introduction

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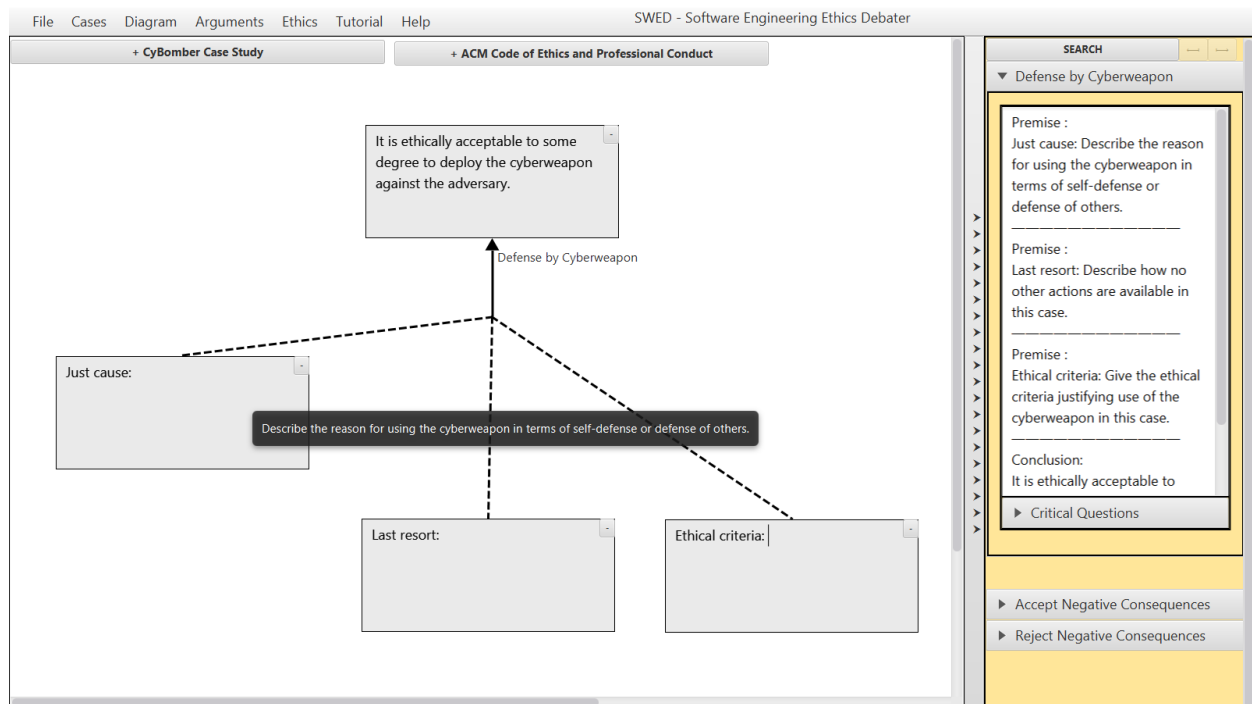
The AI Ethic Debater (AIED), part of the Software Engineering Ethics Debater (SWED) system, is an interactive program for creating arguments about certain issues in the field of AI Ethics. (Depending upon which version of AIED/SWED you are using, there may be minor differences between the screen shots in this document and what you see when you use AIED. Don't worry about it.) AIED provides a set of case studies, codes of ethics, and argument schemes. Figure 1 shows an example of AIED's screen after the user has opened one of the case studies and the ACM Code of Ethics.

Figure 1.



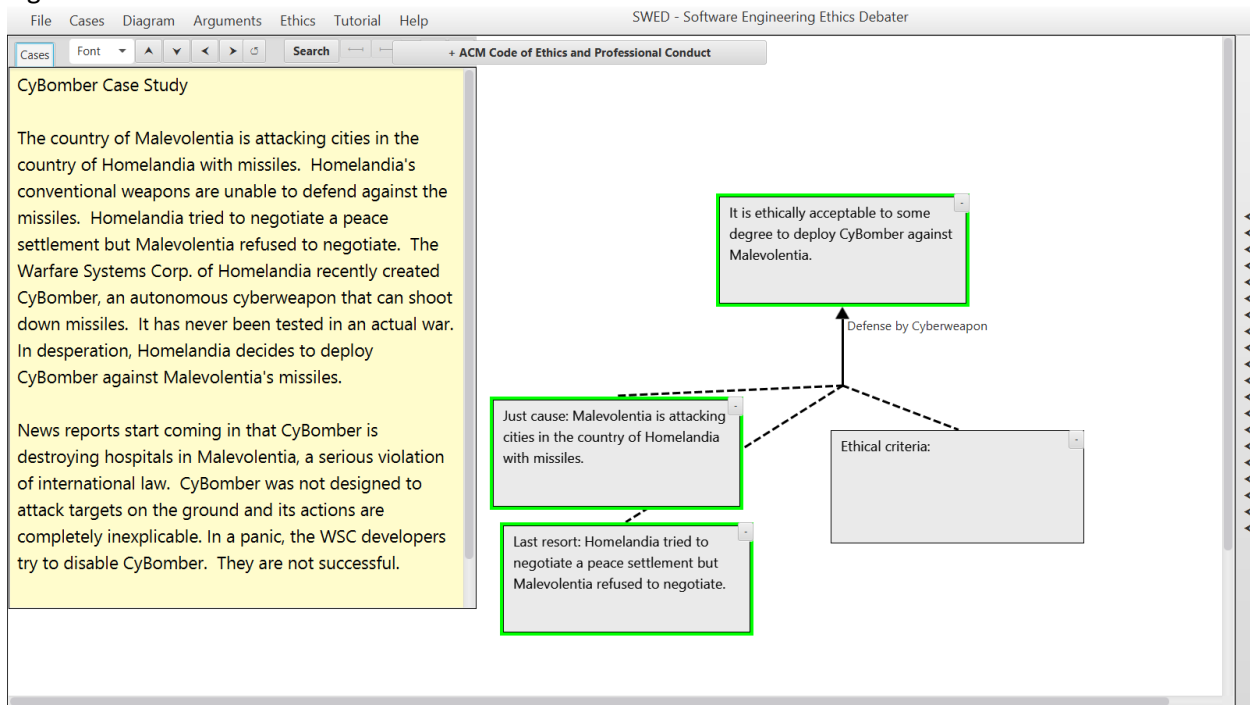
Now suppose that, after reading the above case study, the user wishes to create arguments for (“pro”) and/or against (“con”) the question of whether it is acceptable, ethically speaking, for the country of Homelandia to use its CyBomber cyberweapon against Malevolentia. First, the user must select an argument scheme as shown on the right hand side of the screen in Figure 2. Argument schemes consist of *premises* (or reasons) that support a *conclusion*. In Figure 2, the user has chosen to use the *Defense by Cyberweapon* scheme. After clicking on the name of the scheme and dragging it into the center of the screen, a box and arrow template automatically appeared. The user can hover over a premise to see its definition. (Notice that the user has minimized the case study and code of ethics panes temporarily.)

Figure 2.



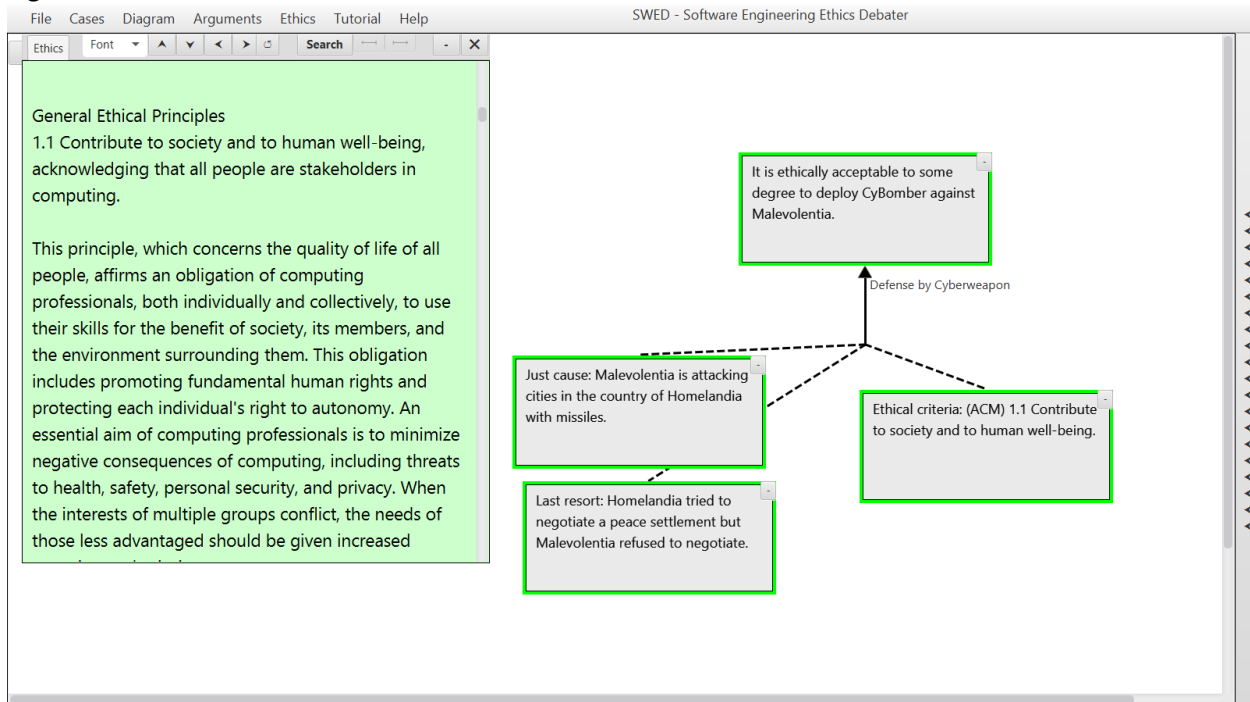
Next, the user can use information from the case study in the conclusion and premises of the argument. As shown in Figure 3, the user has modified the conclusion to refer specifically to this case study, and added some evidence from the case study to the Just Cause and Last Resort premises. Since this is an argument for (“pro”) the conclusion that deploying CyBomber is ethically acceptable (at least to some degree), the user has toggled the conclusion’s and two premises’ borders to green.

Figure 3.



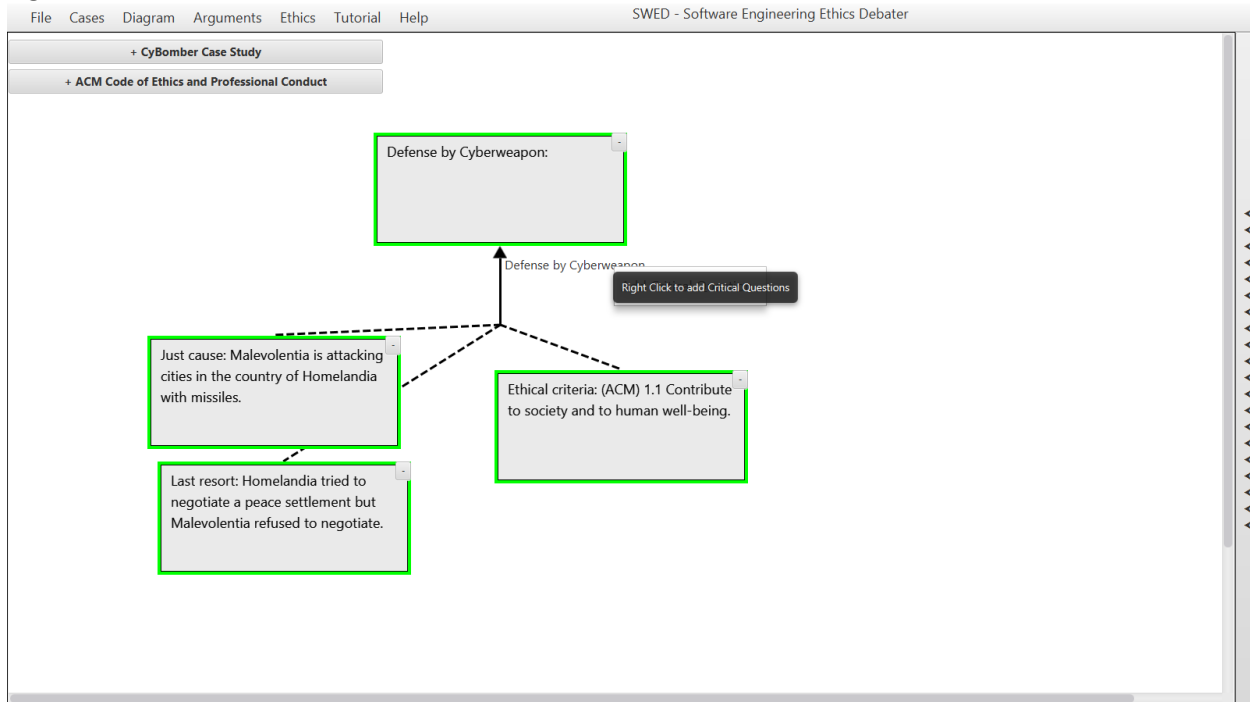
In Figure 4, the user has minimized the case study window and reopened the Ethics window for information to use to fill in the Ethical criteria premise of the argument. Then the user set the border of the Ethical criteria premise to green (“pro”). Notice that in this case study all of the premises are “pro” the conclusion. In some case studies, it’s possible that there is no evidence for a premise and its border can be left neutral. Or, it’s possible that there is evidence *contrary* to a premise, such as if Homelandia could have taken steps to avert war but failed to do so. In that case, the user could explain why deploying the CyBomber was not a last resort, and set the border to red (“con”).

Figure 4..



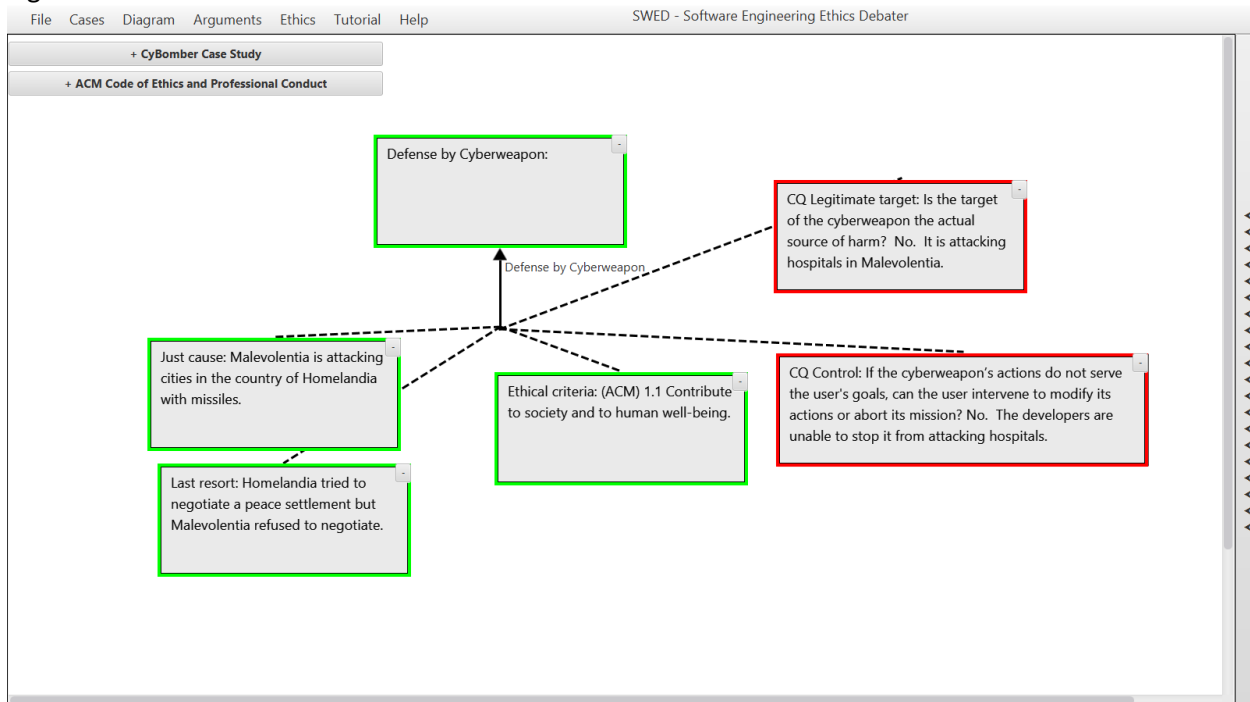
However, the user has not finished his argument. To add potential challenges to an argument, the user can check if any of its *critical questions* are applicable. In Figure 5, the user has right-clicked on the name of the argument scheme, Defense by Cyberweapon, to bring up a list of critical questions that go with that scheme.

Figure 5.



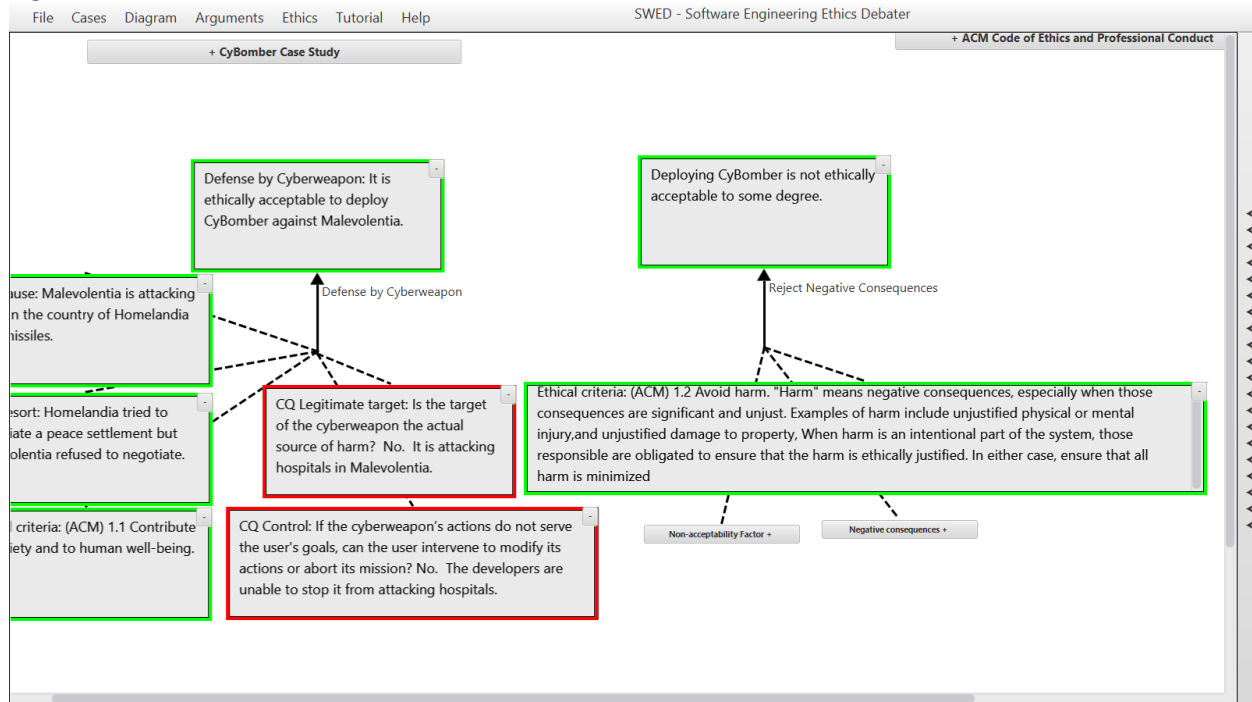
As shown in Figure 6, the user selected two of the critical questions and filled them with evidence from the case study to challenge the position that it is acceptable to use CyBomber.

Figure 6.



As shown in Figure 7, another way to challenge an argument is to create an argument for an opposing conclusion. After rearranging the premises and critical questions of the Defense by Cyberweapon argument, the user selected the Reject Negative Consequences argument scheme, dragged it into the argument diagram workspace, and is using it to build an opposing argument.

Figure 7.



For a video showing the user interface in action, see the Tutorials.