



Question 3

The graphical user interfaces (GUIs) in Figures 2, 3 and 4 allow a user to enter data about a jigsaw blade. This data is used to create an appropriate **JigsawBlade** object, patterned by the domain classes in Figure 1, when the *Add to Inventory* button is clicked.

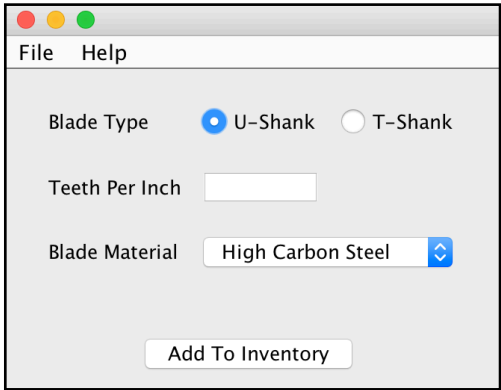


Figure 2

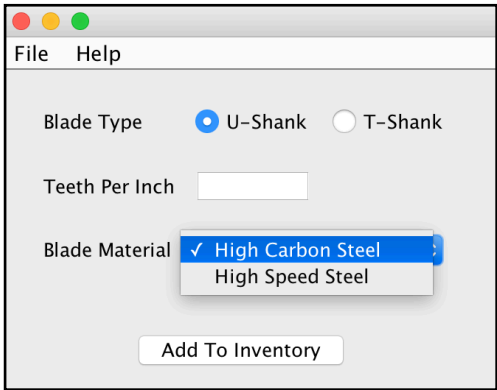


Figure 3

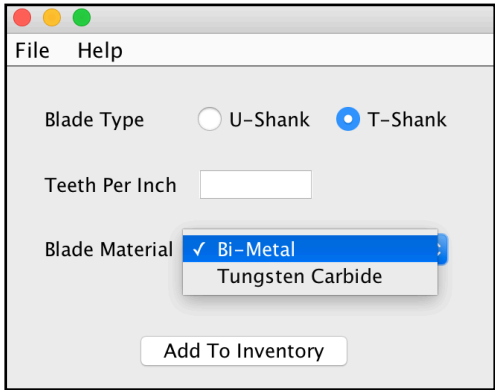


Figure 4

- (a) Apart from **JFrame**, **JButton** and **JLabel** , identify two Swing GUI classes that were used to create the components shown in Figure 2. [2 marks]
- (b) A user is only permitted to select either U-Shank or T-Shank as the jigsaw’s blade type on the GUIs. Explain how this functionality is implemented using code examples. [3 marks]
- (c) When a user selects U-Shank as the blade type, the options for blade material are presented in Figure 3. When a user selects T-Shank as the blade type, a different set of blade material options is presented as in Figure 4. Explain using code examples how this functionality is achieved using the Listener interface and the appropriate GUI components involved. [5 marks]

TOTAL MARKS: 10 marks
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