Developing a design for a wooden jewellery box

Iterative design development

This design exercise will develop your iterative designing capability.

Iterative design development is the process of analysing, evaluating and modifying designs, then repeating the process until you develop your best design.

You will start with a hazy idea for a jewellery box then develop the idea into a clear and detailed design.

An idea for a wooden jewellery box is illustrated below. There are lots of things about the design that are still uncertain. The design development process will involve developing the hazy idea of a jewellery box into a clear and detailed design. You must work out:

- how the four sides of the box will be fixed together
- how the top and bottom of the box will be fixed to the sides
- how the box will open
- how the box will stay shut
- the thickness of the sides of the box
- the type of wood that should be used to make the sides of the box
- the thickness of the top and bottom of the box
- the type of wood that should be used to make the top and bottom of the box
- the finish that should be applied to parts of the box
- the details of the inside of the box, if it is not to be an empty wooden box
- the features that will make it safe to use
- the features that will ensure that it will be robust enough for constant use.

These are just some of the details that should be considered and included in your design work.
What you must do

Draw the outline of the jewellery box as shown in the illustration.

Develop the design so that all problems are solved and you have a design that could be made. Your design must have sufficient detail and information on it for someone to be able to make the jewellery box without needing extra information from you.

You may use notes and sketches to record your ideas as they develop but your final design must be drawn to scale using orthographic projection.