# The Door Buzzer

## Project brief

You have been asked to design and build a prototype door buzzer.  
The buzzer can be affixed to a door handle.  
The door buzzer should make a sound when activated to let the room's occupier know there is somebody wishing to enter.

## Research

As part of your research, it is important to see which products are already on the market and to evaluate how effective they are. Use the Web, to find three other door buzzers that can be purchased or made. For each of the buzzers you look at, make a note of the URL, save an image and write a few lines outlining the advantages and disadvantages of the product design.

### Product 1

* Name
* [Link to product](NULL)
* Advantages
  + Advantage 1
  + Advantage 2
* Disadvantages
  + Disadvantage 1
  + Disadvantage 2

## Initial Circuit Design

Describe here why you can't simply place contacts in your circuit that would allow your finger to complete the circuit.

## Gantt Chart

Insert or link to your Gantt chart here

## Transistors

Give a basic description of a how a transistor works

## Darlington Pair

Give a basic description for how a Darlington Pair works

## Circuit Design

Insert a screenshot of your circuit design and describe how the circuit works

## PCB Design

Insert a screenshot of your PCB design and describe how it was designed.

## Testing the PCB

Describe how you tested that the PCB would work and accounted for the resistance of human skin.

## Case Design

Insert an export (PNG is best), of your case design, and describe how it meets the needs of the project.

## Drilling the PCB

Insert a photo of your drilled PCB and annotate it with the sizes of the holes.

## Soldering

Insert a photo or photos of your soldering. Make sure you also include a photo of your LED with the flying leads.

## Case Assembly

Insert photos here showing how you assembled your case, and describe the process of line-bending.

## Testing

Insert photos (or video) of your finished project, showing it working.

## Evaluation

Evaluate your performance on the project. Ensure you talk about key points such as time management, soldering quality, problems you encountered and how you overcame them.