



APPLICANT 7 – GOLF CHIPPING TARGET (GCSE Project)

What does/did your project aim to achieve? Please write up to a maximum of 300 characters

Many golfers find it hard to practice their skills such as chipping, when off the course. I am engineering a solution, which involves creating a target for the player to aim at.

Please describe and explain your project making clear and direct reference to your supporting documentation. Please write up to a maximum of 1000 characters

I had to decide what system I wanted my product to use, as well as how the product would solve the problem I was faced with. I had to decide how I would use the electronic components that I already knew about to solve the problem. I began by researching existing products, electronic components (inputs, processes and outputs), materials and mechanisms.

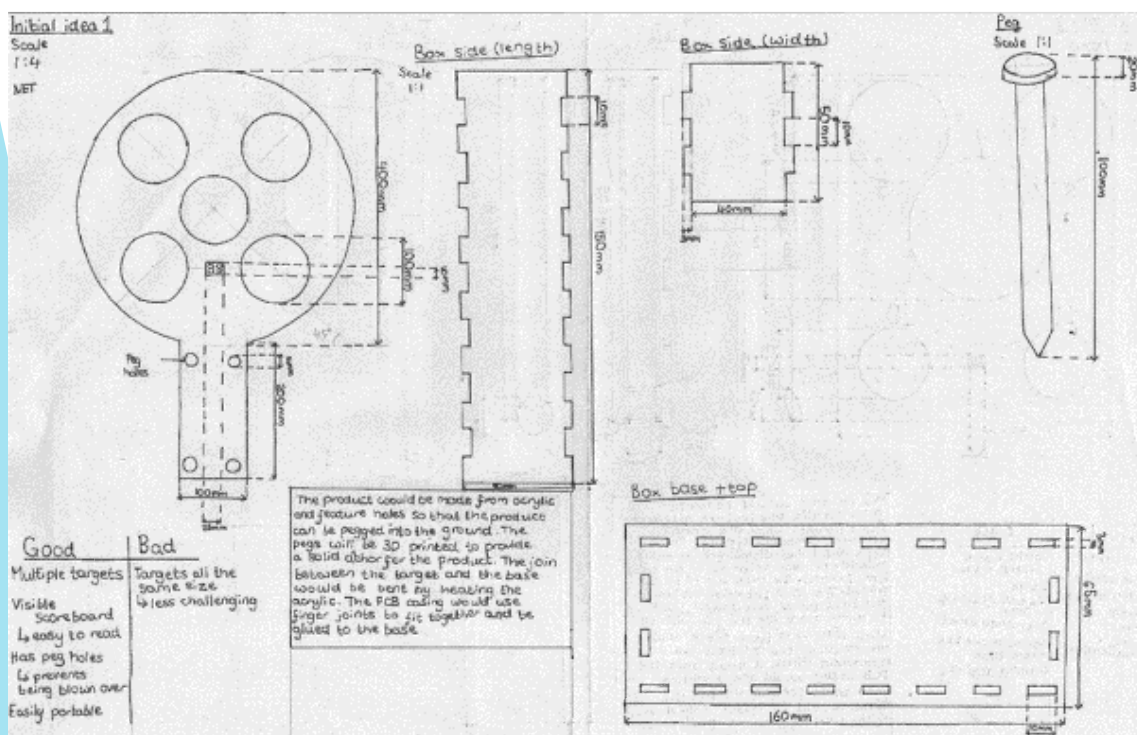
What have been the successes and failures of your project so far? Please write up to a maximum of 500 characters

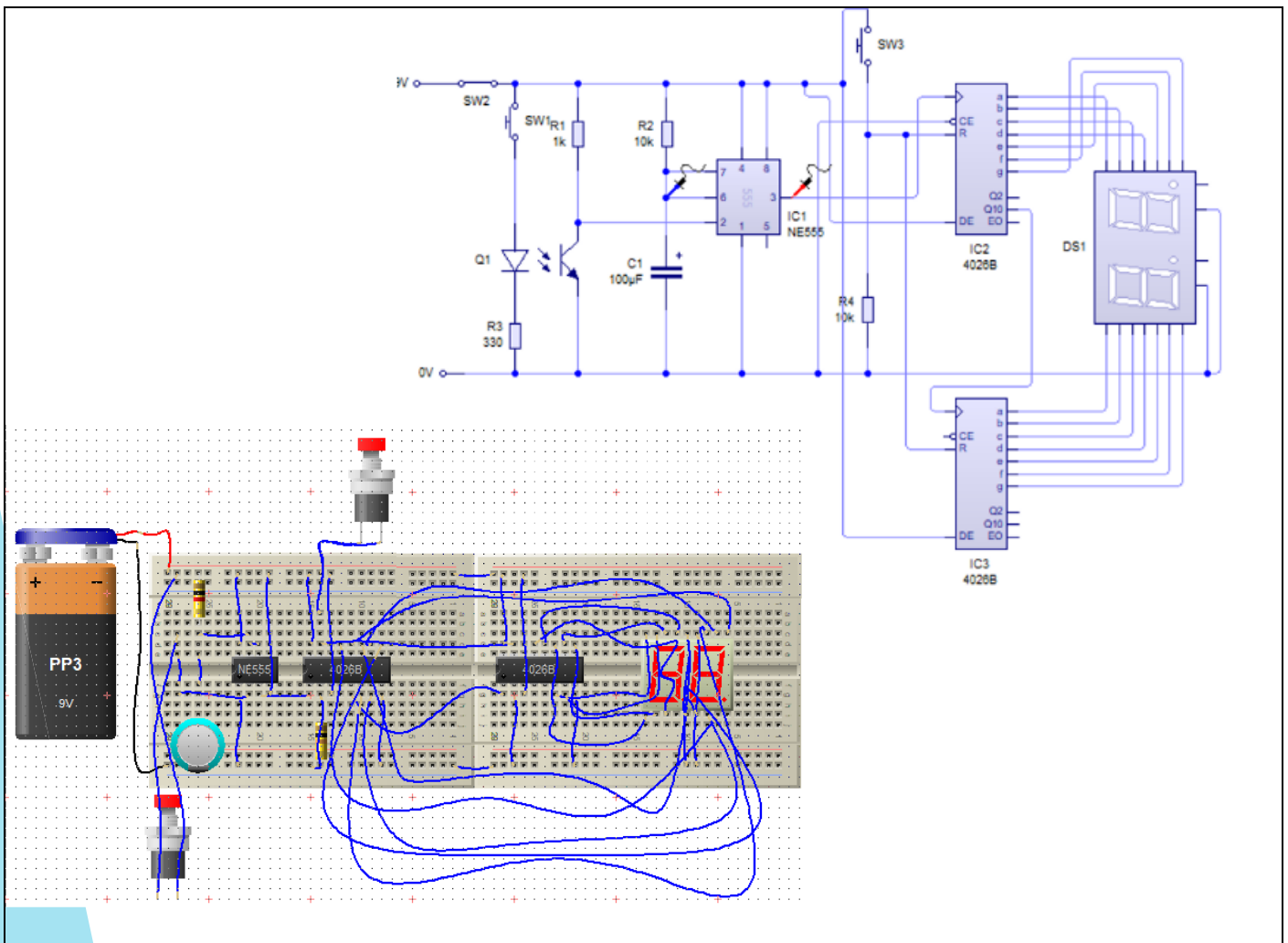
I chose to use a monostable and cascading 4026B system attached to a dual 7 segment display, with an infra-red LED and photo-transmitter input. I decided to use acrylic to make my prototype's PCB casing and target, due to its low mass. I have also decided to use a rack and pinion mechanism to adjust the angle of the target. The input I originally wanted to use was a reflective opto sensor, but it does not have a range larger than 5mm, so I had to use an infra-red LED and photo-transistor.

What lessons of an engineering nature have you learnt from working on this project? Please write up to a maximum of 500 characters

I have used time management to continue my project and complete a working breadboard and a PCB design. I have also learnt to compromise. I have compromised on the materials I have used, due to cost, and the electronic components due to availability. I have learnt that compromising is used constantly in the engineering industry.

VISUAL EVIDENCE





MARKER'S COMMENTS

This applicant could have included more detail about the aims of the project. For example, what feedback does the golfer receive if they are successful with their chip?

Just a fraction of the available characters have been used to describe and explain the project. We advise you to use as many characters as possible. More detail about the materials and mechanisms to be used, and why these were chosen, would have further improved this good write up. Direct reference to the supporting documentation and images could also have secured more marks: for example, by using "Please refer to image #1" to direct the marker to the relevant part of the project. This is, none the less, a project which lends itself well to acting as a display of the applicant's engineering potential.