

## Anti-theft phone case

What was the problem we wanted to focus on when making our invention?

Firstly, we researched on the most troublesome problems mobile phone users face.

These were:

1. Spam/ unwanted texts
2. Prank sales/ calls
3. Phone theft
4. Slow internet speed

Then, we used a problem chart to calculate the wattage of each problem to see which was the most important

### Problem Chart

Criteria	Importance of solving the problem	Difficulty of solving the problem	The cheapness of materials	Total (Choose highest)
Problem				
Spam/ unwanted texts	1	1	5	7
Prank sales/ calls	1	3	5	9
Phone theft	5	5	1	<b><u>11</u></b>
Slow internet speed	2	3	3	8

After analysing the above chart, we concluded that mobile phone phone theft was the problem with the highest wattage, so we decided to design our product based on it.

What is mobile phone theft?

Due to the growing popularity of mobile phones, they are fast becoming a favourite target of thieves. They can be sold for lots of money, or for stealing personal information. Mobile phone theft often occurs in bars, nightclubs, restaurants or on public transport.

### What is our big idea?

We wanted to make a phone case that could make it less likely for the phone to be stolen. At first, we started off simple, coming up with a cover that looked more like a box than a phone so as to deceive potential thieves' eyes and deter them from attempting to steal the phone; as well as two holes for a lock to be placed. But we found that this idea was very inconvenient as the size of the case would mean it is very difficult to put into one's pockets, also there were much better alternatives currently in the market. Hence, the final idea we settled on was a phone bag with an alarm system under a fake cover that would be triggered should anyone attempt to open it. The real way of opening it was to pull apart the hoop-and-loop fasteners behind it, which should only be known to the owner and potential thieves would be tricked into attempting to open the cover.

### The construction process

#### **The Prototype:**

We built it out of cheap materials, mostly cardboard and scotch tape.

The inner case:



Taping the cover on:



Last but not least, some tape on the sides to represent rubber linings:



**The Final Product:**

This was a cotton bag instead of a case as originally planned. There was a fake cover that was connected to an alarm system that would be activated should anyone open it. The real way to open it is to use the hook-and-loop fasteners which from a distance would only be visible to the owner.

The phone cover on the outside:



Then, the alarm system:



Last but not least, the fake cover:



