Needs And Requirements

For our kite we wanted to have a practical use, not just for leisure.

We decided that our kite should be able to lift the weight of such instruments such as a camera or a digital thermometer.
Conceptual Design

For our design we looked into 3 kite designs:
The Box Kite
The Delta Kite
The Diamond Kite

We researched the designs, uses and attributes of these kites thoroughly.
Selection of Final Proposal

We settled on the box kite for our design using a attributes analysis chart. (Shown Below)

<table>
<thead>
<tr>
<th>Use for a task</th>
<th>Suitability</th>
<th>Helps managing resources</th>
<th>Technologically Feasible</th>
<th>Possible Cost</th>
<th>Safety</th>
<th>Totals (Unweighted)</th>
<th>Weight Factors</th>
<th>Totals</th>
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<td>0</td>
<td>1</td>
<td>3</td>
<td>0.2</td>
<td>0.6</td>
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<td>0</td>
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<td>1</td>
<td>0</td>
<td>0</td>
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<tr>
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<td>1</td>
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</table>
Prototype

Here are the dimensions and the SolidWorks Design of the kite. Over the course of several trials we continued to modify the design.
Materials

- Plastic tarp
- Cardboard
- Dowel Rods
- Twine
- Duct tape
Despite a well thought out design and several modifications, our kite still cannot fly without wind and thus it was not able to fly for more than about 11 seconds.
What we learned

Kites are Harder to make/fly than they look
While it may seem uncomplicated, there is a lot more that goes into a kite than first realized