

Project Proposal

To: Dr. Goli
From: Tung Nguyen (Thomas)
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Re:

- I will be making a 3-D model of a simple helicopter
- The reason I want to model this is that it is not too complex, but still gives me what I want to learn from Solid Edge while leaving rooms for creativity. Although I really want to do something more complex, that does not exactly sound realistic at this time
- First I'm going to use the Loft or Sweep Command to draw the front part of the helicopter. The most important parts of the helicopter would be the gears on the back and main rotors, to help the propellers function (both the main one to help the helicopter fly and the one on the back that helps with direction - also called tail rotor). Moreover, to help the parts look more visually separate, I will need to use the Split command and then draw each part with a different color. For the landing gear, I think the commands such as Extrude, Round or Chamfer and Mirror would come in handy
- The number of parts for the model and also the use of certain commands like loft or helix would be a problem. First of all, I think I will not have enough parts to meet the requirements, but I can always look more in-depth into the design of a real helicopter to add more parts. The same solution can be used for the problems with commands like helical and loft(the problem is that I was not sure how I can use them for any part of the helicopter). Moreover, another big concern is how to draw the gears of the main rotor system right inside the main body of the helicopter, this will take precision in the way I visualize the helicopter
- Here is an example of how my helicopter would look like, but I will probably ignore the powerplant part (on the lower right corner) as well as the transmission (if it has nothing to do with the mechanical process of the gears in the main rotor)

