# Individual Project: Model Car 个人项目：模型小车

我得先在3D软件里设计零件，再在3D打印机上打印出来，最后组装在一起，这就是制作模型小车的基本步骤。

I have to design the parts in 3D software first, then print them on a 3D printer, and finally assemble them together. These are the basic steps for making a model car.  
  
在建模的过程中，我巩固了上节课程掌握的知识，并根据情况应用。  
During the modeling process, I consolidated the knowledge I learned in the previous class and applied it according to the situation.

图示, 工程绘图

描述已自动生成

在制作小车的过程中，最困扰我的绝对是公差问题。

In the process of making the car, the most bothering thing for me is definitely the tolerance problem.

在3D软件里设计的零件尺寸和现实中塑料打印件会有公差，哪怕我们已经极力避免了。

There will be tolerances between the size of the parts designed in the 3D software and the plastic printed parts in reality, even if we have tried our best to avoid it.

最先打印的是车身，因为他是最大的一块零件，也因为车身上为轮胎预留的孔洞，在打印时需要支撑，之后会拆除。

The body of the car was printed first, as it was the largest component, and because the holes reserved for the tires on the body required additional plastic support during printing, which would be removed later.

图片包含 游戏机, 电子, 电路

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接着打印轮胎和车轴，轮胎在我打印了第一个版本之后就确定下来，尺寸非常合适，但是车轴却恰恰相反，我打印了三个版本，换了三种尺寸才确定了下来。

Then print the tires and axles. The tires were determined after I printed the first version, and the size was very suitable, but the axles were just the opposite. I printed three versions and changed three sizes before I determined it.

图表

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最后为防止轮胎滑落，我又设计并打印了4个与车轴的直径相对的盖子，以防轮胎滑落。

Finally, to prevent the tires from slipping, I designed and printed 4 covers that were opposite to the diameter of the axles to prevent the tires from slipping.

图片包含 图标

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在确认四个盖子完美粘合在车轴上之后，模型小车顺利完成。

After confirming that the four covers were perfectly bonded to the axles, the model car was successfully completed.

虽然这个项目异常简陋，但他确实涵盖了基础的工业设计知识，我相信这是一个很棒的开始。  
Although this project is extremely simple, it does cover the basics of industrial design and I believe it is a great start.