1. Describe at least two advantages of using prototypes rather than documents for the self-parking car software we discussed in earlier assignments.

The advantages of having a prototype for the above requirements are;

* 1. The user will be more satisfied as they experience watching the car parking itself. It becomes a visual treat to the user. We will get a quicker feedback from user.
  2. The prototype can be used as a evolutionary prototype which in turn can be modified as per the feedback given by the user. This reduces the time to create a new model entirely.

1. Describe at least two risks of using prototypes rather than documents for the self-parking car software we discussed in earlier assignments.  What could possibly go wrong?

The disadvantages of having a prototype are ;

* 1. The complexity of the system will be increased as the prototype may expand beyond the original requirements.
  2. If there is a defect, we must build the prototype again.

1. Your consulting customers at Driverless Cars have asked you to build a prototype of a software module that would allow cars to change lanes at highway speeds simply by turning on the turn signal.   Will you deliver a prototype, or will you convince the customers that extensive documentation along with the prototype is a better plan?   Justify your decision by describing the advantages, disadvantages, and  costs of delivering just a prototype versus a prototype plus extensive analysis and documentation.

I would prefer to deliver prototype and document.

**Advantages**: Even though documentation takes time, it would contain all the information that are abstracted in the prototype. The protype provides are visual satisfaction to the customers. Errors can be detected earlier. Missing functionality can be identified easily.

**Disadvantages**: It will take time to make the extensive documentation. If the prototype fails, we must build a new protype and change the document accordingly. This will increase the complexity of the system.

**Cost**: Even though the cost is more for prototype and extensive documentation, it clearly states all the details meticulously. It provides other members in the team with good knowledge.