# CS 255 Model Application Short Paper

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## Process Model Application

First, I would determine system requirements by interviewing potential users then I would apply a process model to the DriverPass design scenario by designing the process flow by breaking down each task into its individual actions or parts. Then you place each part on a line in sequence like a timeline connecting each one with a line between them ending with an arrow. After this I would label each of the sections appropriately along with the lines connecting them. This allows us to see the full expose of how the app is going to work.

## Object Model Application

And object model is “a logical interface, software or system that is modeled using object-oriented techniques. It enables the creation of an architectural software or system model prior to development or programming” (2013). To apply an object model to DriverPass you must first break down the application into classes or fully formed objects, then fill out each one with the variables on top and the methods on the bottom. Connect each class with a line showing inheritance such as subclasses and then show the main of the program so we know the starting and then ending point.

## Process and Object Model Comparison

Each model has pros and cons to it. Some of the pros of a process model are:

1. Simple to use and employ
2. Visual implementation that is easy to understand
3. Fosters clarity and better software structure

Some of the cons are:

1. Adopting new technologies and developing the project model using this model is very problematic.
2. Customers may not be interested after seeing the initial model.
3. There may be inadequate or incomplete analysis.

These pros and cons make for a complete process model and a desirable reflection of what this is supposed to be.

Some of the pros and cons of the Object model are as follows:

1. It helps for faster development of the software
2. It’s easy to maintain.
3. A programmer can fix a module while others are up and running.

Some of the cons are:

1. Steep learning curve- The thought process may not be natural for some people. (2021)
2. Larger program size- There may be more lines of code.
3. Not suitable for all types of problems- Some problems don’t lend themselves to object-oriented design.

These are some of the advantages and disadvantages of the object model.

Overall, these models are the major process models used in programming today. They make for easier design methods and help with programming decisions. Often choosing between them is a difficult decision.

Finally, the object and process models are the major modeling paradigms available today. Both have many advantages and disadvantages associated with them. Some of the advantages of the process model are listed above with the disadvantages, the same with the object model. Using these models speed up the software development process as well as make it easier for the client and users to understand. It also makes the program easier to develop for the engineers involved in the program development process. Nevertheless, these models have disadvantages as well. The most common of which is the steep learning curve associated with understanding them. Another one is the analysis may be incomplete or broken. The pros outweigh the cons in most circumstances which makes modeling the most beneficial way of planning software development.

## References

Microsoft. (2013, December 13). *Object Model*. Bing. Retrieved September 28, 2021, from <https://www.bing.com/videos/search?q=how%2Bto%2Bapply%2Ba%2Bprocess%2Bmodel%2Bto%2Ba%2Bpiece%2Bof%2Bsoftware&docid=608027417756175515&mid=1B81A25B7494DDFEF3331B81A25B7494DDFEF333&view=detail&FORM=VIRE>.

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