# CS 255 Model Application Short Paper

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## Process Model Application

To begin application of a process model to the Driver Pass scenario, I would start with planning. Defining the goal and scope is important in any of the modeling techniques as it will lead to a clearer model. Next, I would start to list features that could be used in the application. This list would be made with a priority as to successfully add the most important features first. Seeing as the steps of a process model are important in the planning of the system design and functions, it’s important to have a thorough process model. Starting with the customer, I would add an object for logging in to the application. Since two types of users could be accessing the application, we must add an object to very login details, and another for checking user type. This will be the first split in the model, starting with a branch for admin, they must be given all required information on a display, with branches stemming into objects like, change user information, update website, view logs, view appointments, add notes. The other branch would be for standard users, which would include, schedule appointment, testing module, view previous scores, see instructor notes. Both branches will inevitably return to a logoff object and the process is over.

## Object Model Application

An object model for this application would likely start with a ‘user’ class. Two classes (admin and customer) would inherit from the base class with their own specific functions. Admin could contain functions like updateApplication, modifyCustomerInfo, changeCustomerAppointment, displayTestScores. The customer class can include functions such as; viewScores, viewNotes, launchTestModule, displayCalandar, setAppointment, and updateProfile. The base class would contain universal functions like; verifyLogin and resetPassword.

The customer class would also be connected to classes such as Test, Appointment, Calendar.. Those would contain some of the functions mentioned above for the ‘user’ class.

## Process and Object Model Comparison

The advantage of a process model would be to plan and dictate how the flow of the application should go. Having each branch clearly show the necessary step and what will come next can give the developers a clear path to building the actual system. A disadvantage would be that they do not keep specific details like field types, functions, or classes. It can be used as a guideline for setting up these conditions.

An advantage of an object model is that it *should* clearly display each class and the fields that are contained within them. They also show where the classes inherit and connect to other classes. This gives a strong foundation for developers when they start building out the system to the required specifications. This model does not give any hint to how the program will step through itself. Designing a system purely off an object model can be confusing.

This is why having both models, object and process, are imperative to a strong system design because the developers are able to build the system out with the specifications from the object model and use the process models flow to determine when and where the functions should be called to ensure the strongest and fastest application.