# CS 255 Model Application Short Paper

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## Process Model Application

The process model is used to explain the actions that is preformed on the data which can be transformed, stored, or distributed. These process models will help improve and create an understanding for the analysts, developers, and managers the software. The model will help categorize the different functions, actions, behaviors, and all the classes of the system.

The process model starts off with requiring the customer to complete an application which they would answer some questions that will contain all the necessary detailed information about the customer. They will continue by ordering the package that is offered by DriverPass. This puts the package into their cart and proceed to the check-out process. DriverPass will receive the order from the customer and start to make the arrangements if the customer requested on-the-road training. This would be for a driver and the time slot that is requested. The course progress will depend on the package that they customer has ordered. There will be a detailed training report and daily progress report given to the customer from DriverPass. Security will follow the process of starting the security requirements for the program and they should always have rules for resetting the password of the customers if needed. The administrators process would require many different characteristics and choosing the best route for them.

## Object Model Application

An Object model in the system design and analysis is based on data orientation. There is form of diagramming through object models called class diagramming. Using a UML diagram will be the best way to describe the system as an object model. This UML diagram will explain and describe the system through classes, methods, and attributes.

The first thing with a UML is that the classes must be discovered to know what we are working with. In our system the first class will be the customer. This class will contain strings which will be the customer’s name and email address. This class will have integers which will be the age and phone number. The methods that go with the customer class are add the customer, delete the customer, modify the customer, book appointment, modify appointment, cancel appointment, take practice exam, view driver, take course, and view progress reports. Employees should also have a class. They will have the ability to cancel, modify, book appointments. The next class will be IT. This class allows for the IT and IT administrator to fix bugs, update the system, add and remove employees, reset passwords, and unlock the account if needed. The last class will be the Boss class. This class should have the ability to access all features as the previous classes. As an overall this method goes more in detail than the process model.

## Process and Object Model Comparison

There are many advantages and disadvantages when it comes to process and object models. One of the disadvantages of using a process model, is that this type of model does not do a great job of explaining the behavior of the system. It just shows the system and the important parts of the processes. This disadvantage in the process system makes for a huge advantage in the object model. As this model help show the behavior better through tools like UML diagrams and Gantt charts. Especially with the Gantt chart, this chart details the overall scope of the project and can be seen in a better view. I think that for this system that DriverPass wants to create that the Object model has more advantages than the process model due to the visualization. With the UML diagram like listed above the whole system can be seen, with the classes variables and methods. Another advantage od the object model is that it allows for encapsulation and abstraction. This can be seen through a UML Diagram. In the overall conclusion the advantage of the process model is to see the simplified representation of the process. While the object model provides and a more in-depth view of the details of the system. I would choose the object model over the process model for what the system is needed.