# CS 255 Model Application Short Paper

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## Process Model Application

A process model is a visual representation of the work that has to be completed in order for a system to function. This visual depiction demonstrations the goals and tasks for the model. A process model would create visual DriverPass. Using structural elements like connectors and arrows I would be able to visually represent the flow of the business programming process. The end goal of my process model would be to aid stakeholders in analyzing and understanding the workflow of Driverpass. I would use several activity indicators in my process model to demonstrate the flow of where and how the work would be completed. With the use of arrows, I would be able to connect different activities and decisions which in turn would demonstrate influence. The arrows would also demonstrate direction – for example once a user creates an account, they can add items to their basket, after that they can check out, and then it would go to the shipping process – which is also shown using activity indicators. Another structural element – connectors, can help in visualizing later processes of the Driverpass process. I would apply connectors as long arrows towards the shipping process – just in case I feel like I could streamline the diagram even further by deleting other aspects. Yet another structural element that I would utilize is state and end indications – where I can draw and visualize the beginning and end of the process model. This would aid in organization for Driverpass, as I know that the beginning starts with a user creating an account, and it ends with the company shipping their products out. Process models are a great way to begin a project like Driverpass. It helps with visualization, improvement, and in this case creating new processes for an old business model.

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## Object Model Application

In short, the object model views information as sets of objects and classes, usually organized object orientated. This visual representation demonstrates the objects, attributes, actions, and relationships. For example an object is usually a physical part of the program like a car, ship, or flower. A class is the representation of the objects that have similar properties and behavior. With these definitions we see that object modeling develops a formation of the system for the object. It understands and recognizes the relationships between then and can identify each attribute and function of every class. Other elements of the Object model are Abstraction – which recognizes similarities between each object, encapsulation -which is used to hide data, reduce complexity, and increase reusability, and hierarchy – which demonstrates the order of which the system is set up. When creating my Object Model for Driverclass I would first make an order of what is most important – creating hierarchy. Then I would use that data to create a UML diagram with classes such as, Customer, User, Shopping cart, Oder, Shipping Info, Administrator, and Order Details. After I create each class, I would create the attributes such as: CustomerName, address, email, credicCardInfo, shippingInfo, and accountBalance. Then I would think about what functions should be encapsulated such as: register, login, and updateProfile. Using this basic structure, I would create my Object Model using this format.

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## Process and Object Model Comparison

There are many pros and cons of the object model and process model. The main difference between the two models is the object model demonstrates a systems classes and objects, and the process model shows a system processes. One major downside of the process model is that there is a risk of overflow of information. Another is that sometimes it’s too complex – especially when it is a large project, and last would be that if it is developed in an incorrect sequence – you would have to redo the entire model. Advantages for the process model are that is provides a clear understanding for how the process works, it sets clear and transparent expectations, it creates and start and end point which would make developing the project much easier, and it also adds a level of accountability for each member of the project.

I find that there is one major downside of the Object model. That downside is that it can sometimes get very complication and difficult to implement due to combination of Object Orientated practices and relational practices. As for the pros, I find that the object model has many, one it helps in faster development of the software, its easy to maintain, restructure, and upgrade, it helps to reduce developmental risks, and it also enables us to reuse functions, designs, and objects.

## References

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