# CS 255 Model Application Short Paper

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## Process Model Application

When considering the Process Model, it increases the overall understanding of how the model works. We can break down the actions and behaviors, and separate classes for the team to understand more. This model allows for assistance in real-world issues for the drivers using the application for practice. Thanks to this, we can see how the Process Model will help students prepare more and understand driving concepts when taking their driving tests.

If we’re applying the Process model, we’d have to start with the customers. Having a questionnaire and application form with the user’s info will help start out the process. Once this is done, much like going through a service, we’d have to have a purchase of any of the 3 DriverPass packages. Once this is done, there can be arrangements made between DriverPass associates and the users for the training, classes, and explanations that are included in the purchased options. After the sessions between user and staff, the user will be able to have information on the progress that they’ve made.

For the Process Model Application’s security, requirements would be put into play (ex. Minimal age, ID, driver license confirmation, clear background check etc). This’ll make it easy to check security protocols for the software and safety of the customer/staff. The other security protocol that’d need to be put into place would be the reset password option, which is easiest to do through an email of the user’s choice.

The last thing we’d need for the application would be admin permissions. This is simple as admins would be in control of the models for the program (ex. Mod 1: Learning the basics, Mod 2: Backing out, etc.) Admins can control the layout of the application to fit their audience. When looking at the changes of the app, it’ll be based on Admin’s decision, with the addition of the system changes.

## Object Model Application

For the Object Model Application, we’d have to have the groups of the company broken down. The customer, security, and admins would have to be broken into variables and functions for the launch of the program. For the admins and customers, it’d be having their username, password, user ID, email, phone number, etc. This allows for the different users to have separate privileges based on if they’re part of the company or if they’re paying for the service. The customer object would include things like: login, verify login, update user profile, change package, place package order, and so on. The admin object would have functions like: Update system, change design layout, add users, and delete users.

The security user object would have the system variables included into it. This would include things like usernames, passwords, email address, reset password, and so on. In addition, for safety, there’d be variables like a security credentials authentication code for them, and update security protocols.

## Process and Object Model Comparison

When considering both models, each one has their advantages and disadvantages. The Process model helps as each part (ex. Customer, security team, admin users) describe the behavior of the program. This breaks down the different aspects and simplifies it for the people working with the program. In addition, the process model includes general concepts and how the system works. Unfortunately, this model does not explain how the different parts work together, just that they do. For DriverPass, we can be able to separate each of the parts mentioned, and see how they each work.

Object model, on the other hand, helps breaking down exactly how the system works together. This includes the different variables and methods that explain the system and operator work together through the program. This model basically simplifies the system into object types to view. This process makes it easier for developers to understand how each part of the system works separately, and as a whole. For the DriverPass, we’re able to view how the system works step-by-step, rather than the general concepts of what it’s supposed to do.