# CS 255 Model Application Short Paper

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## Process Model Application

Though it may come off as bias, I would use an agile process model for DriverPass. I currently work as a Jr. software engineer and our company uses agile. Most of the other software processes are a bit outdated and can cause frustration. One being waterfall as you basically finish the project before getting any feedback. Since we’re developing an application for DriverPass as a third party, we would for sure not to use waterfall. This is because the client doesn’t always know specifically what they may want or what they may want to change. Agile allows us to use scrum and planning to account for said changes and get these defects or improvements into a sprint. While still giving us time to be on track for our specified deadline. I’ve never programmed in a company that uses waterfall, but I’ve had several seniors tell me they would never go back. Or even reject a job offer if a company is using waterfall as a process model. One of my biggest worries is the ever-changing client expectations. Agile also allows us to have recurring scrum meetings, with not only our C level staff but gives us time to talk with the client as well. The client will be able to see the project in real time, how we’re progressing and change an area on an almost weekly basis if needed. Another thing I like about agile that will be useful is the collective team effort and overall learning capability of Agile. If someone is new to the company, it gives them an opportunity to look at different aspects of the code. This allows you to develop your team even further and give the Jr’s. a chance to become even stronger coders. This is something I value a lot being apart of a small team. I rely heavily on my seniors to get into a lot of code I may be intimidated to investigate. However, it’s not just the team that benefits from agile. It’s also the shareholders, C levels and clients who benefit from the scrum meetings. Seeing the progress weekly on how everything’s coming along, being able to see their vision come to life is vital and give’s everyone a sense of ease. I wouldn’t do this every week, but every 1-2-week short sprints to keep everyone updated and happy.

## Object Model Application

Object model applications are important, in this project as well as we will want to split the code into different sections to make it even easier to debug. Splitting each module out into its own section also allows for easier readability and for faster problem solving. Having everything in one area can get confusing, especially to those just starting on the team or trying to overtake the upkeep of DriverPass when it’s given to the client. For Driver Pass we will want to split it up into several object modules. There are the test sections for Driver Pass where the clients can schedule online testing’s and information from the DMV. This will be a vital module for this application. There will also be scheduling for on-road tests as well that will need to be split into a separate area as they also want an audit system for this. Examples given are cancelations, changes, or just simply setting up an appointment with their corresponding DMV. Along with this, it needs to also take in times for driving lessons and different cars. Everyone has their own preference, and what kind of make and weather it’s a stick shift or not will matter when they want to take their test. The drivers will want to know they have to comfort of choosing what type of car they learn in. Liam also has different package options to be weighed upon as well, a 6 hour an 8 hour and even a 12-hour session to schedule. Liam also wants the leisure to turn off a module if needed to no longer off one of these times if the DMV can no longer offer them. Liam also wants to be able to store driver information and be have users to reset their password as well which will be in a different module. According to his sketch, it looks like there is quite a bit of information that will needed to be stored from the user like their personal information that will need to be secured. On top of special needs that they might need if they have any disabilities when taking a test. Overall, there is quite a bit of modules that will need to be implemented for this application and be broken out.

## Process and Object Model Comparison

There are several advantages for this process module, everything Liam wants to do is straight forward. I really like his idea on everything he wants to do and wish there was a resource like this application ages ago when I had taken my tests for my permit and driving courses. However, it does seem like quite a lot of work and requirements he wants finished in quite a short time line. There are several things that will have to be setup, especially DB side that must be taken into consideration. Liam also wants to be able to view information while offline but maintain the site being updated. This will require a lot of database space for tests and in app storage. Not to mention the amount of developers that will be needed to get this project accomplished in just 6 short months. Another thing is that Liam is Ok with information not being able to be saved when offline. This is going to make things a bit difficult and might frustrate customers as well when trying to update their information. Proper errors will have to be decided, or even graying out the save button when trying to enter information letting the end user know they’re offline so their information will not be saved. I think this is a bad call in general, and there will be quite a lot of talk around. I would suggest only certain sections of the application be available offline, like testing documents and information that the end users can have to study. Applying something like this within the application will keep end user frustration down and keep them on your application. All in all, everything Liam wants to do is overall manageable and shouldn’t impose too much trouble if the resources are paid for and the team size isn’t strained too much. If not, I could see their being time strains with getting not only the project done, but each module completed on time. There is a lot that still needs to be talked about, and a lot Liam needs to consider.