# Project Report for UNO Game

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The software has been divided into two major parts Server and Client, which is obvious from the package structure. The Client is dealing with the USER interface and I/O operation, so it requires the list of commands and how to solve them. The Server oversees controlling the game process and the DATA storage and exchange. Both parts need to understand the protocol which means the protocol should been reachable for both sites.

MVC pattern in this case is naturally applied. Client is born to be the viewer and Server is a Controller. Other class within the server package that helps the server to run and process the game is the model or game logic. So, if I want to upgrade to GUI, I only need to change the client part since its already have all necessary information from the Server or Controller. If I want to improve the possibility of player number, change the Server is more than enough. I want to play some new special rules, I could only change the model, in real application, it does need some other change at other part, but Model-Viewer-Controller are theoretically individual program. For bigger project with multiple people join, Frontend engineer is focus on the user interface and the backend is focus on the server. The only concern is the API or interface need to be built together. In this case it simplified the project control.