## Design Paradigm

For this Project 3&4, we decided to choose Service Oriented Design paradigm for our prototype. There are few kinds of reason that can support our ideas to identify this design paradigm. Namely, IP network, Web PHP development, and Independent and convenient.

Firstly, for our prototype, we are designing a video chat room that contains users to communicate, sharing files and video throughout the web page, and mostly transfer the data through IP address to the service, and the service decide where it should be to another IP address. It is same as service Oriented Design that it is enabled by technologies and standards that facilitate components' communication and cooperation over a network. Moreover, the PHP, which is the language we decided, is part of technologies which helps the services to coordinate client-side scripting with server-side technologies. So basically service oriented design would be adaptable for our prototype.

In addition, Service Oriented Design is a design paradigm where services are provided to the other components by application components, through a communication protocol over a network. So web development is a major part that go through entire prototype. For our prototype, a service that providing two components communicate through network is very important. And because we use PHP, web development will be the priority things that we need to implement and design.

In order to search our text message online, service that can be accessed remotely and acted upon and updated independently will be the part of working that should be concern. And

this is the part of service-oriented design. People can search their history record, such as text message, file, and picture online in service. And these kinds of data will be hold independently in the service and can accessed remotely by user. And in most case, people will no be aware of the service's inner workings because everything done through service network. So it is obviously convenient for consumer to use. Therefore, service Oriented Design is suitable for our chat room prototype.

Even though other design paradigm like object-oriented paradigm also is fit partially with chat room, Service Oriented Design is adjust to this prototype perfectly.