| **COMPARISON FACTORS** | **FUNCTION ORIENTED DESIGN** | **OBJECT ORIENTED DESIGN** |
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| **Definition** | Function oriented design is the result of focusing attention to the function of the program. This is based on the stepwise refinement. | Object oriented design is the result of focusing attention not on the function performed by the program, but instead on the data that are to be manipulated by the program. |
| **Design Approach** | In the **function**-**oriented designed** approach, the system state is centralized and shared among different **functions**. | **In the object**-**oriented design** approach, the system state is decentralized among the **objects** and each **object** manages its own state information. |
| **Function** | Functions are grouped together by which a higher level function is obtained. | Functions are grouped together on the basis of the data they operate since the classes are associated with their methods. |
| **State information** | In this approach the state information is often represented is often represented in a centralized shared memory. | In this approach the state information is not represented is not represented in a centralized memory but is implemented or distributed among the objects of the system. |
| **Approach** | It is a top down approach. | It is a bottom up approach. |
| **Begins basis** | Begins by considering the use case diagrams and the scenarios. | Begins by identifying objects and classes. |
| **Decompose** | In function oriented design we decompose in function/procedure level. | We decompose in class level. |
| **Use** | This approach is mainly used for computation sensitive application. | This approach is mainly used for evolving system which mimics a business or business case. |
| **Importance** | Importance is not given to data but to functions. | Importance is given to data rather than procedures. |