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| --- | --- |
| **Java** | **Go** |
| Requires virtual machine to interpret compiled code | Does not require any virtual machine, directly compiled into binary code |
| It has big library | Smaller library |
| Compiling time is more | Compiling time is less as there is no need of virtual machine |
| STW is longer during GC | STW is minimized to 1ms during GC |
| It has error handling | No error handling |
| Less platform dependent | Requires binary file to be created for every platform |
| Reflection is easier | Reflection is complicated |
| Uses inheritance to combine some desired behavior | Uses composition |
| Declaration required to implement certain interface | No declaration required |
| Does not support concurrency | Supports concurrency |
| Suitable for both small and large services | Suitable for small services |

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| **Python** | **Go** |
| For data scientists | For server-side commands |
| Slower language | Faster language (40 times) |
| Shareable | Non shareable |
| No concurrency | Supports concurrency |
| Has error handling | No error handling |
| Large standard library | Smaller library |
| Dynamically typed language | Statically typed language |
| Used for web applications | Used for systems |
| Object oriented programming language | Does not support object-oriented programming |
| Supports inheritance | Doesn’t support inheritance |