

# Swifter.jl

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<https://github.com/wookay>

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# iOS app development tools

- \* Debugging with LLDB
- \* UI Automation but javascript
- \* XCode 7 UI Testing

# Complicated but convenient iOS app development tools

- \* Debugging with LLDB
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# A tool for iOS app development

- \* REPL, Jupyter notebook

- \* Scripting

  - UI Automation

  - UI Testing

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# Architecture

- \* An RPC Server**

- \* An RPC Client**

# Architecture

- \* AppConsole : RPC Server**
  - Reflection with Swift**
- \* Swifter.jl : RPC Client**
  - Meta programming with Julia**

# Server-side

## \* AppConsole

<https://github.com/wookay/AppConsole>

- Demo/
- notebooks/
- scripts/



# Run the Server

...

```
AppConsole(initial: object).run()
```

# Client-side

**\* Swifter.jl**

**<https://github.com/wookay/Swifter.jl>**

```
julia> Pkg.add("Swifter")
```

```
julia> using Swifter
```

# Swifter.jl

- \* `initial`

- \* `@query`

# Swifter.jl – initial

**initial(url)::QueryResult**

- Create an endpoint by connecting to the AppConsole Server

# Swifter.jl – @query

**@query(expr)::QueryResult**

- Query to excute the expressions

# Demo

- \* REPL

- \* Jupyter notebook

- \* Scripting

# REPL

# Jupyter notebook



# Scripting

# Summary

- \* Tool language**

- has flexible expressions**

- has to be consistent in**

- REPL and Scripting**

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- \* Tool language

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- REPL and Scripting

- \* Waiting for `SwiftCall.jl`

# Q & A

**Thanks**