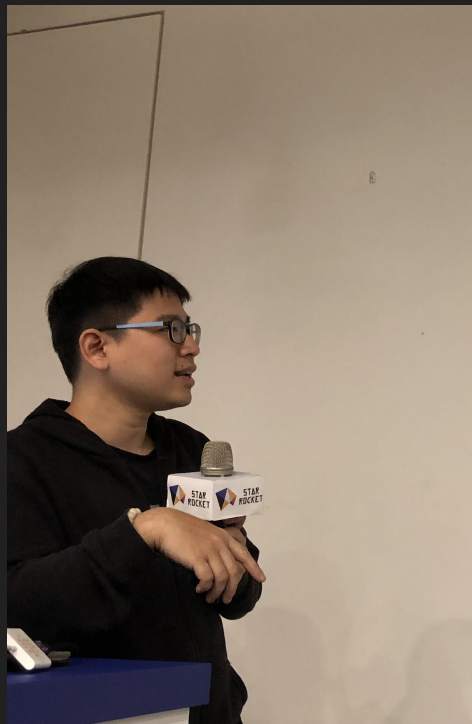


2021 Kotlin 中文開發者大會

Ktor + Exposed 開發 1 2 3

Recca Chao



- 2012 年開始撰寫後端 (PHP)
 - 快速開發很棒，但是處理非同步很麻煩
- 2019 年開始接觸 Kotlin
- JCCnf Taiwan 2020
 - Kotlin coroutine 簡介
- MOPCON 2021
 - Kotlin 的自動測試怎麼做
- 2021 年接手 Taiwan Kotlin User Group 管理

大綱

- Ktor
 - 專案 (project) 建立
 - 結構簡介
- Exposed
 - 引入 Exposed
 - DAO 簡介
- 總結

Ktor

Ktor 框架

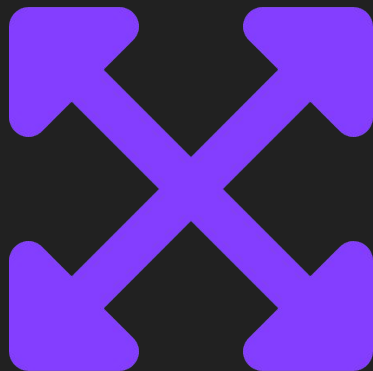


JetBrains 開發的 100% Kotlin 網頁框架

Ktor 框架



輕量



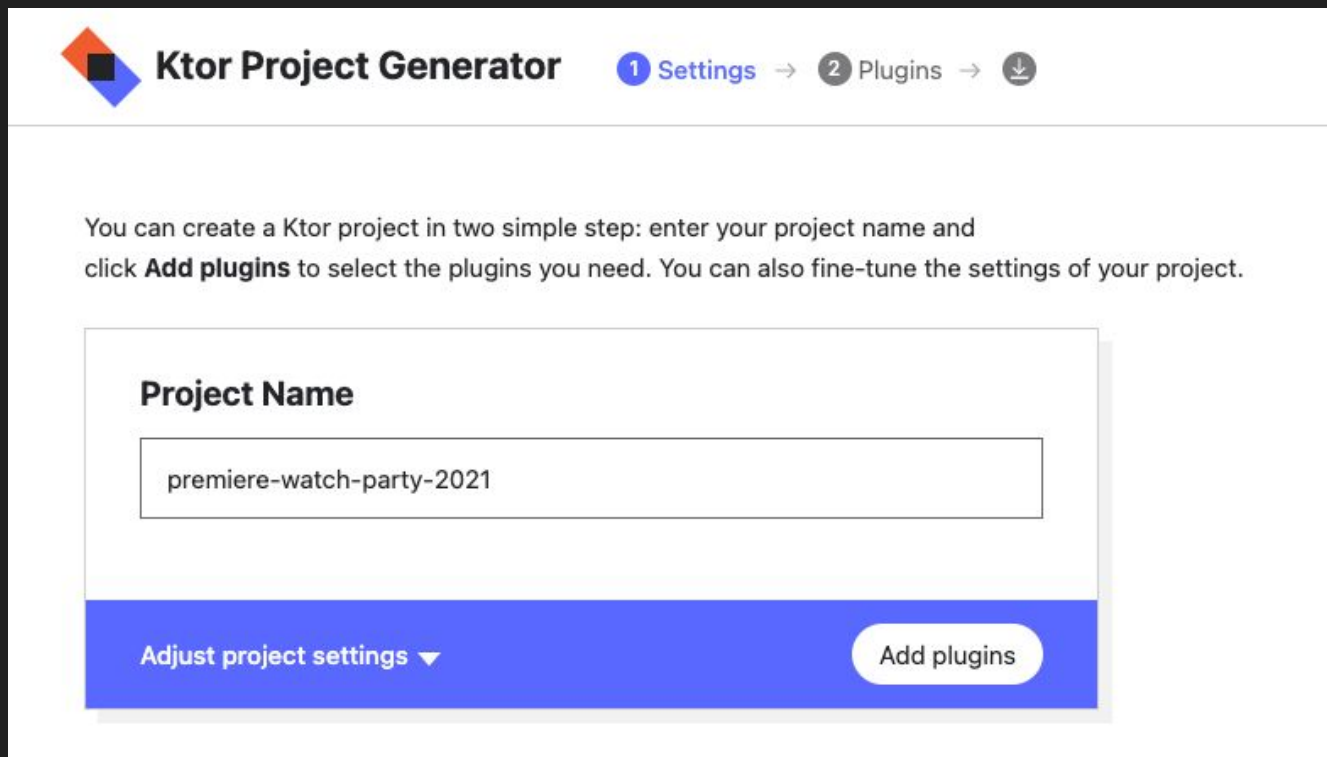
高延展性



非同步處理

Ktor 專案建立 1 2 3

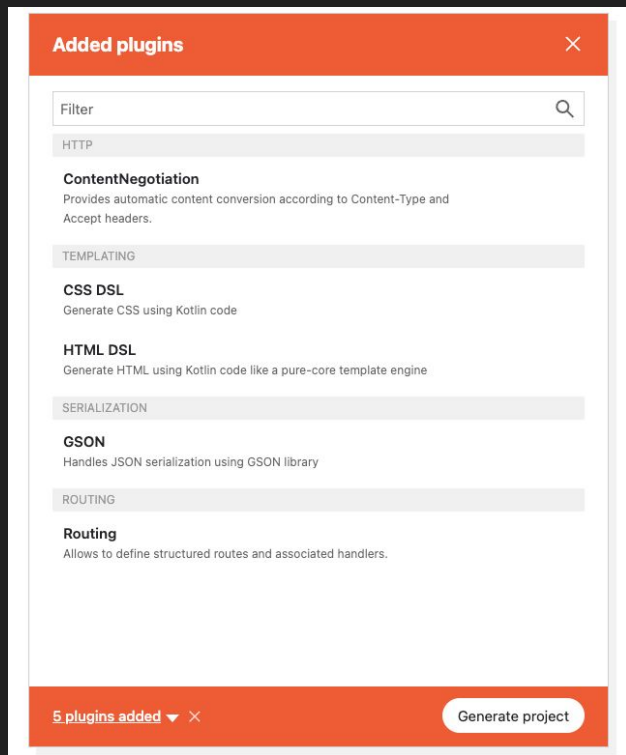
start.ktor.io



The screenshot shows the Ktor Project Generator web interface. At the top left is the Ktor logo (a diamond shape with orange, black, and blue segments) followed by the text "Ktor Project Generator". To the right of the logo are two numbered steps: "1 Settings" with a right-pointing arrow, and "2 Plugins" with a right-pointing arrow and a download icon. Below the header, there is a paragraph of text: "You can create a Ktor project in two simple step: enter your project name and click **Add plugins** to select the plugins you need. You can also fine-tune the settings of your project." Below this text is a form with a "Project Name" label and a text input field containing "premiere-watch-party-2021". At the bottom of the form, there is a blue bar containing two buttons: "Adjust project settings" with a downward-pointing triangle, and "Add plugins".

1、設定專案名稱

start.ktor.io



2、選擇套件 (plugin)

start.ktor.io

Your Project is Ready to Go!

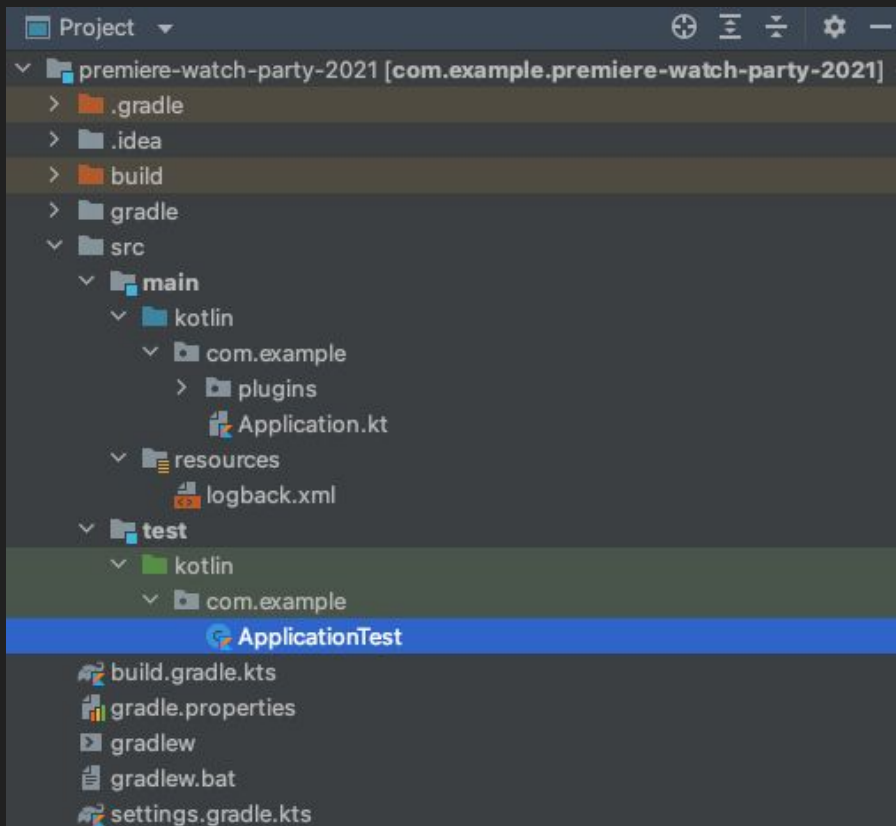
Project **premiere-watch-party-2021.zip** download should start shortly.
If it does not, please, use the [direct link](#).

[Copy Link to Template](#)

[View Docs and Tutorials](#)

3、下載

專案結構



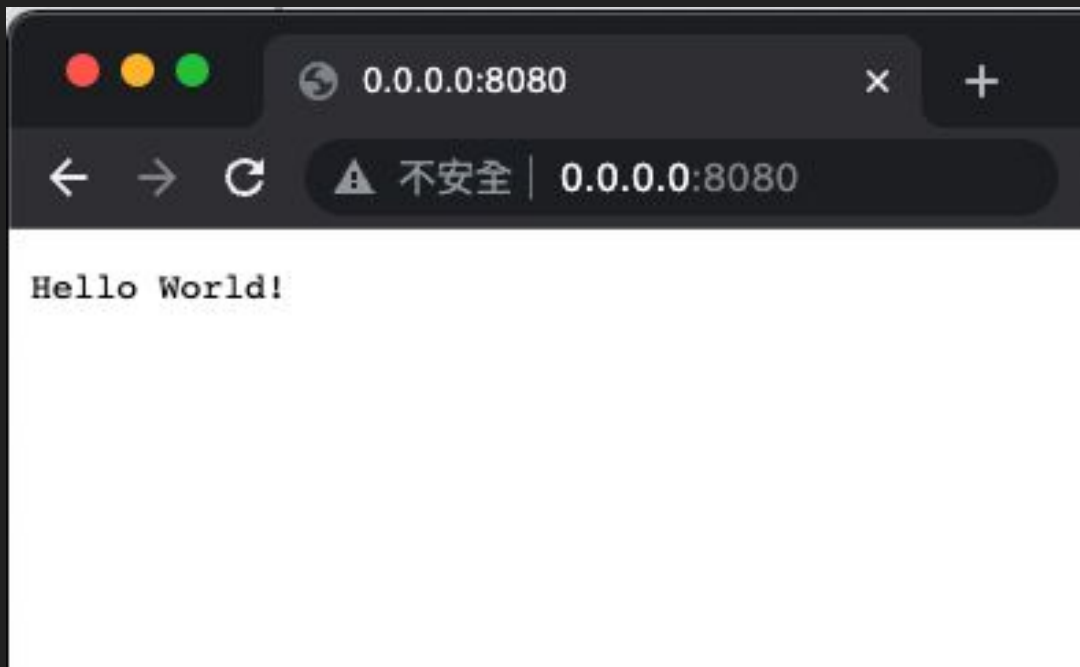
Application.kt

```
fun main() {  
    embeddedServer(Netty, port = 8080, host = "0.0.0.0") {  
        configureRouting()  
        configureSerialization()  
        configureTemplating()  
    }.start(wait = true)  
}
```

plugins/Routing.kt

```
fun Application.configureRouting() {  
    routing {  
        get("/") {  
            call.respondText("Hello World!")  
        }  
    }  
}
```

plugins/Routing.kt



存取第三方 API

存取第三方 API

```
val client = HttpClient(Apache)
```

```
client.get("http://ktor.io/")
```


怎麼和資料庫串接？

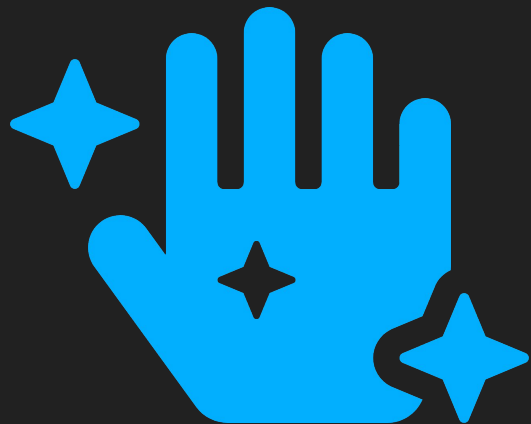
Exposed 框架

EXPOSED



an ORM framework for Kotlin

Exposed 框架



語法簡潔



型別安全

引入 Exposed (build.gradle.kts)

```
implementation("org.jetbrains.exposed:exposed-core:0.34.1")  
implementation("org.jetbrains.exposed:exposed-dao:0.34.1")  
implementation("org.jetbrains.exposed:exposed-jdbc:0.34.1")
```

Exposed 連線資料庫

```
import org.jetbrains.exposed.sql.Database
```

```
Database.connect("jdbc:h2:mem:test", driver = "org.h2.Driver")
```

Exposed DAO

```
object Cities: IntIdTable() {  
    val name = varchar("name", 50)  
}
```

```
class City(id: EntityID<Int>) : IntEntity(id) {  
    companion object : IntEntityClass<City>(Cities)  
    var name by Cities.name  
}
```

Exposed DAO

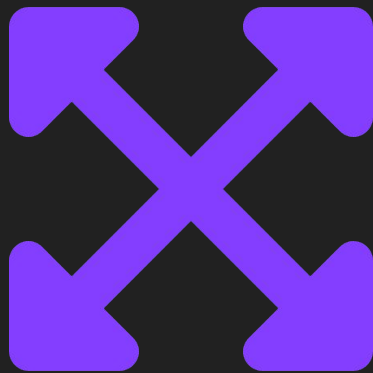
```
transaction {  
    val moscow = City.new {  
        name=""  
    }  
    moscow.name = "Moscow"  
    moscow.delete()  
}
```

總結

Ktor 框架



輕量



高延展性



非同步處理

Exposed 框架



語法簡潔

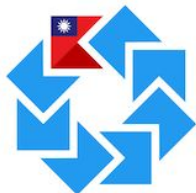


型別安全

最後做個宣傳

taiwan-kotlin-user-group.github.io

Taiwan Kotlin User
Group



TWN

Taiwan Kotlin User Group 的網站，在台灣推廣 Kotlin 程式語言，舉辦相關活動。如果對 Kotlin 有興趣，想要多瞭解一些，歡迎來我們的社群一起聚會！



gitpage.reccachao.net

./ Recca Chao 的 gitHub page

推廣各種後端技術，包含 Laravel 和 Kotlin 後端撰寫。Taiwan Kotlin User Group 管理員。寫一些技術文件、後端開發筆記、讀書心得、雜七雜八。



[View on GitHub](#)



謝謝

