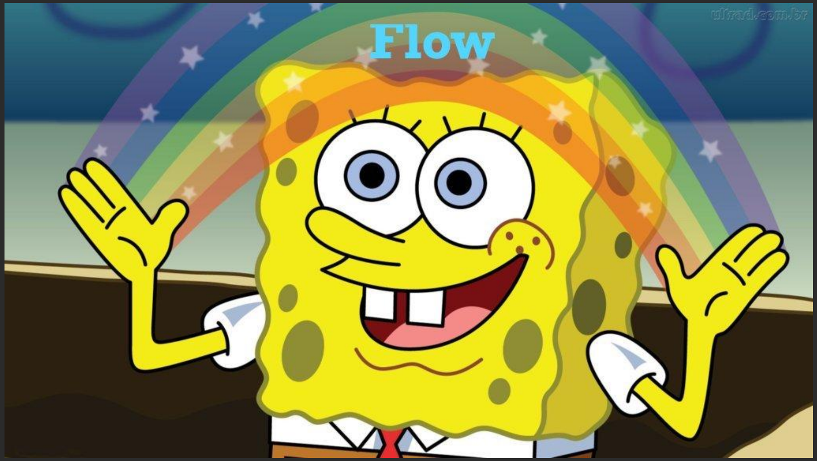
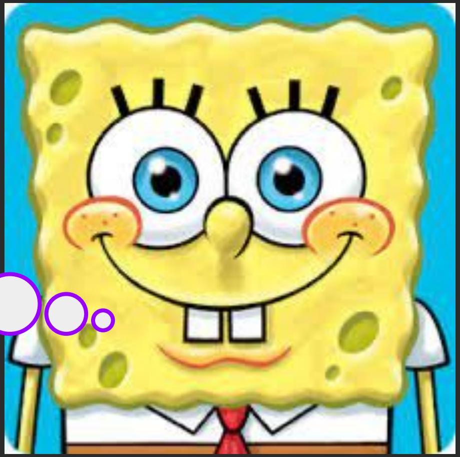
Flow

Under the water



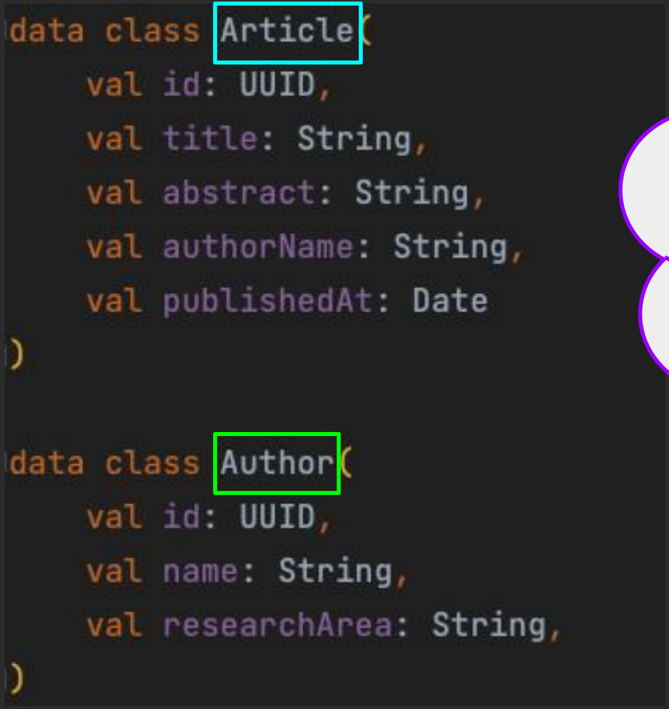
By Moro

Happy to show a code using Flow...



Flow… I don't have this flavor

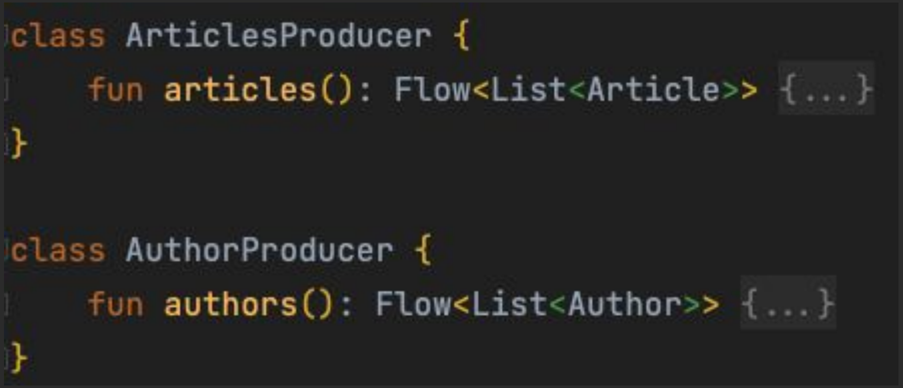
Patrick it is not a flavor 🤣 I will explain better



```
data class Article(
    val id: UUID,
    val title: String,
    val abstract: String,
    val authorName: String,
    val publishedAt: Date
)

data class Author(
    val id: UUID,
    val name: String,
    val researchArea: String,
)
```

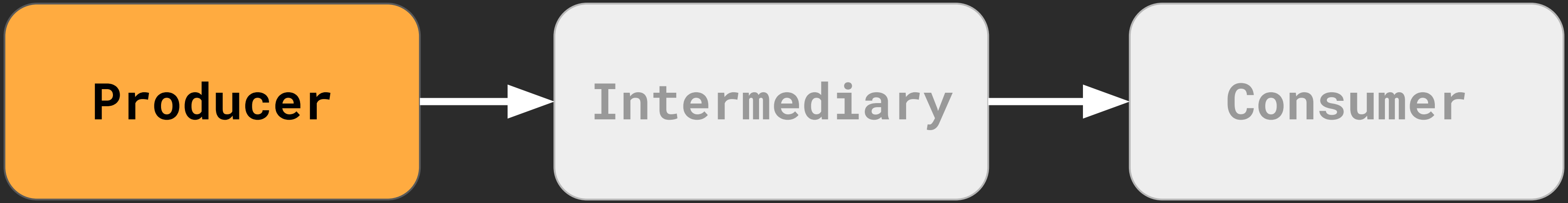
I'm doing an app to show all articles we have created here in Bikini Bottom.

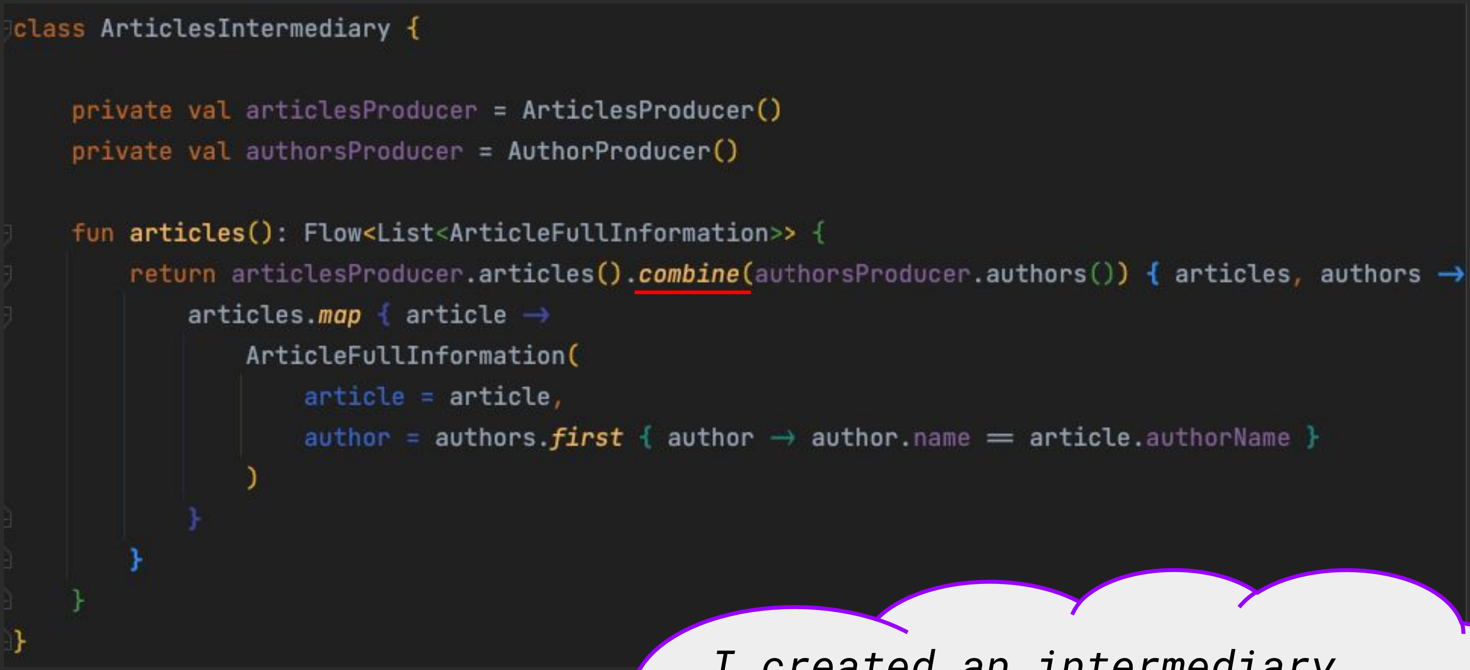
These are the model classes…



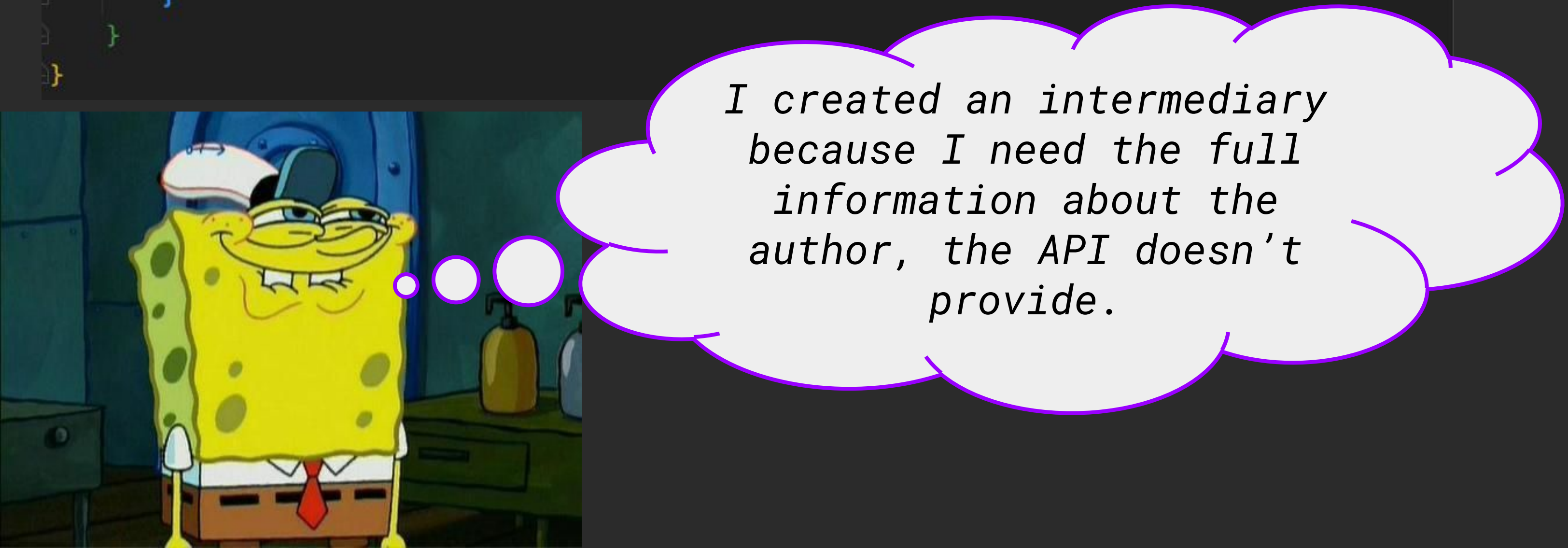
```
class ArticlesProducer {
    fun articles(): Flow<List<Article>> {...}
}

class AuthorProducer {
    fun authors(): Flow<List<Author>> {...}
}
```

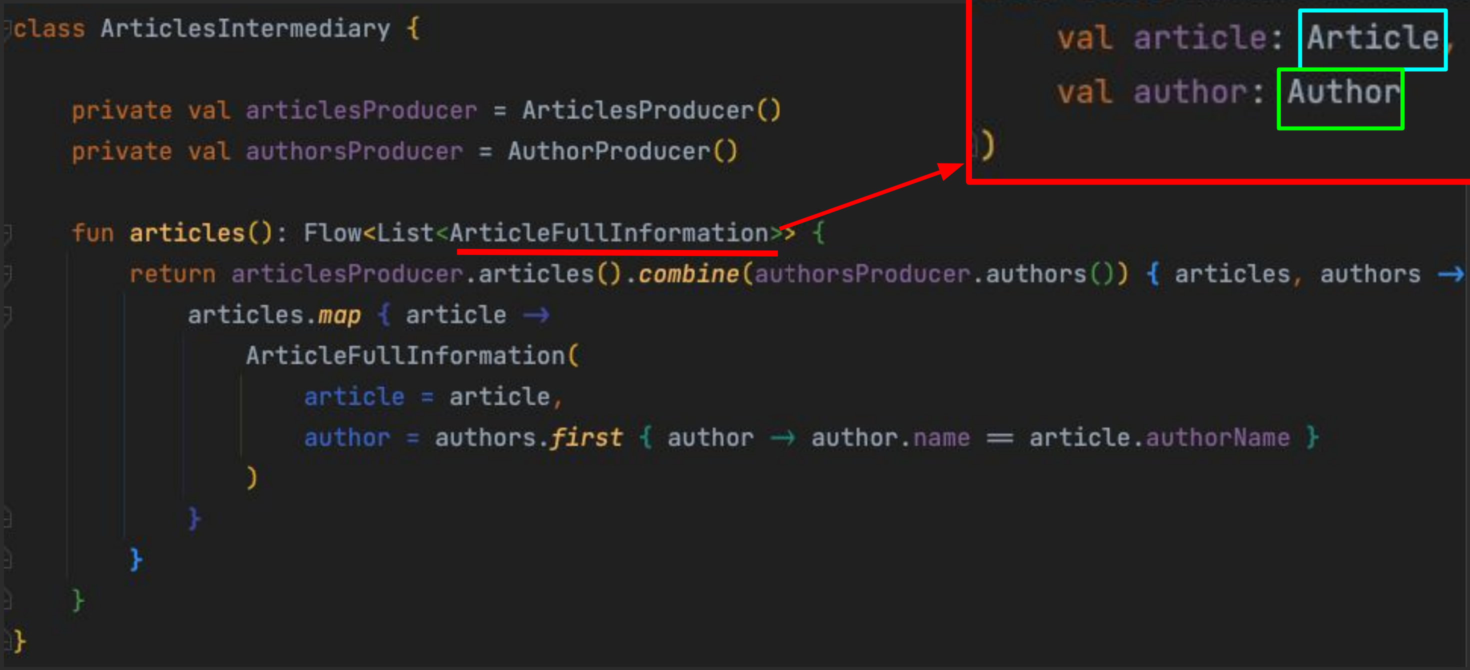
*Creating the **producers** to fetch the information…*



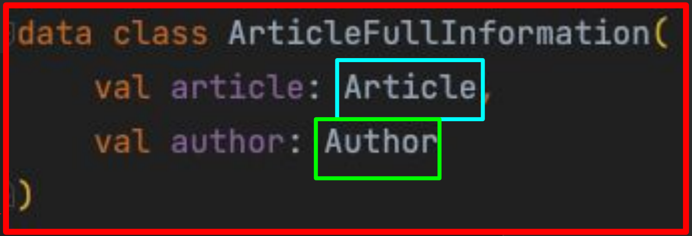


```kotlin
class ArticlesIntermediary {

    private val articlesProducer = ArticlesProducer()
    private val authorsProducer = AuthorProducer()

    fun articles(): Flow<List<ArticleFullInformation>> {
        return articlesProducer.articles().combine(authorsProducer.authors()) { articles, authors →
            articles.map { article →
                ArticleFullInformation(
                    article = article,
                    author = authors.first { author → author.name == article.authorName }
                )
            }
        }
    }
}
```

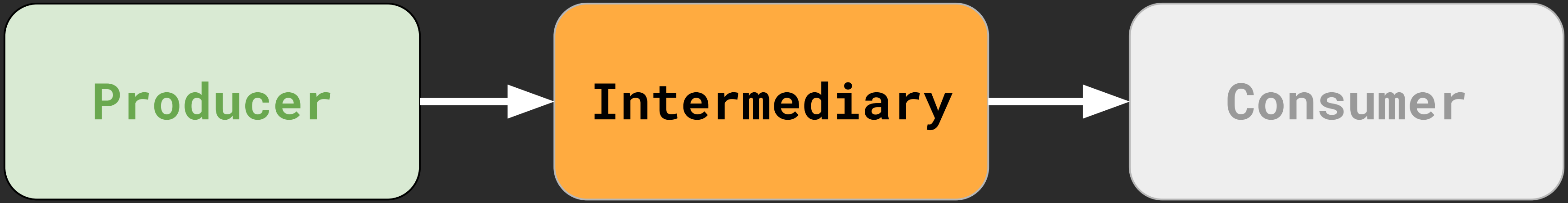

I created an intermediary because I need the full information about the author, the API doesn't provide.

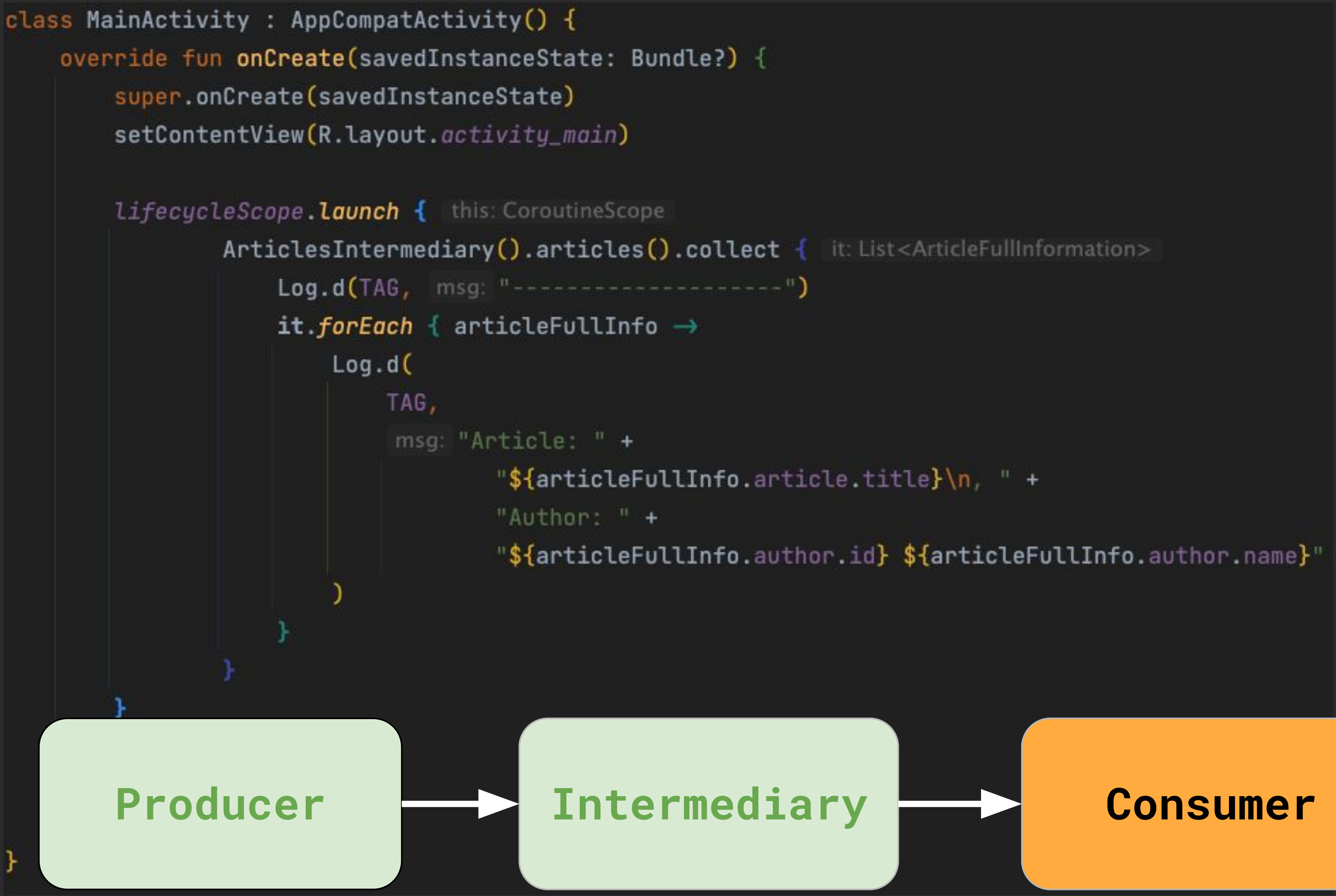


```kotlin
class ArticlesIntermediary {

    private val articlesProducer = ArticlesProducer()
    private val authorsProducer = AuthorProducer()

    fun articles(): Flow<List<ArticleFullInformation>> {
        return articlesProducer.articles().combine(authorsProducer.authors()) { articles, authors →
            articles.map { article →
                ArticleFullInformation(
                    article = article,
                    author = authors.first { author → author.name == article.authorName }
                )
            }
        }
    }
}
```

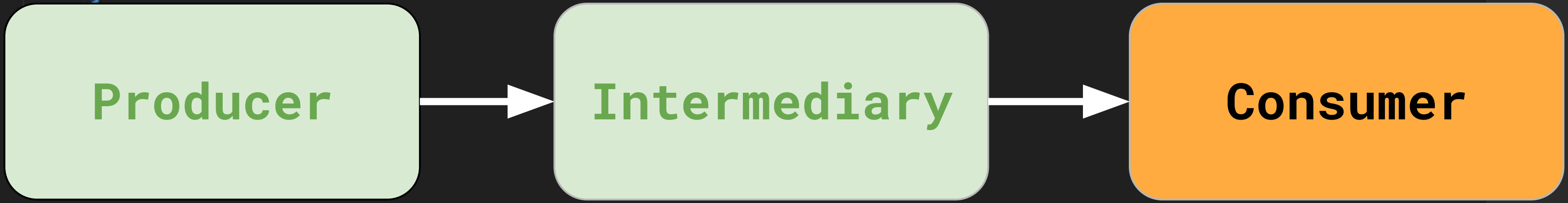


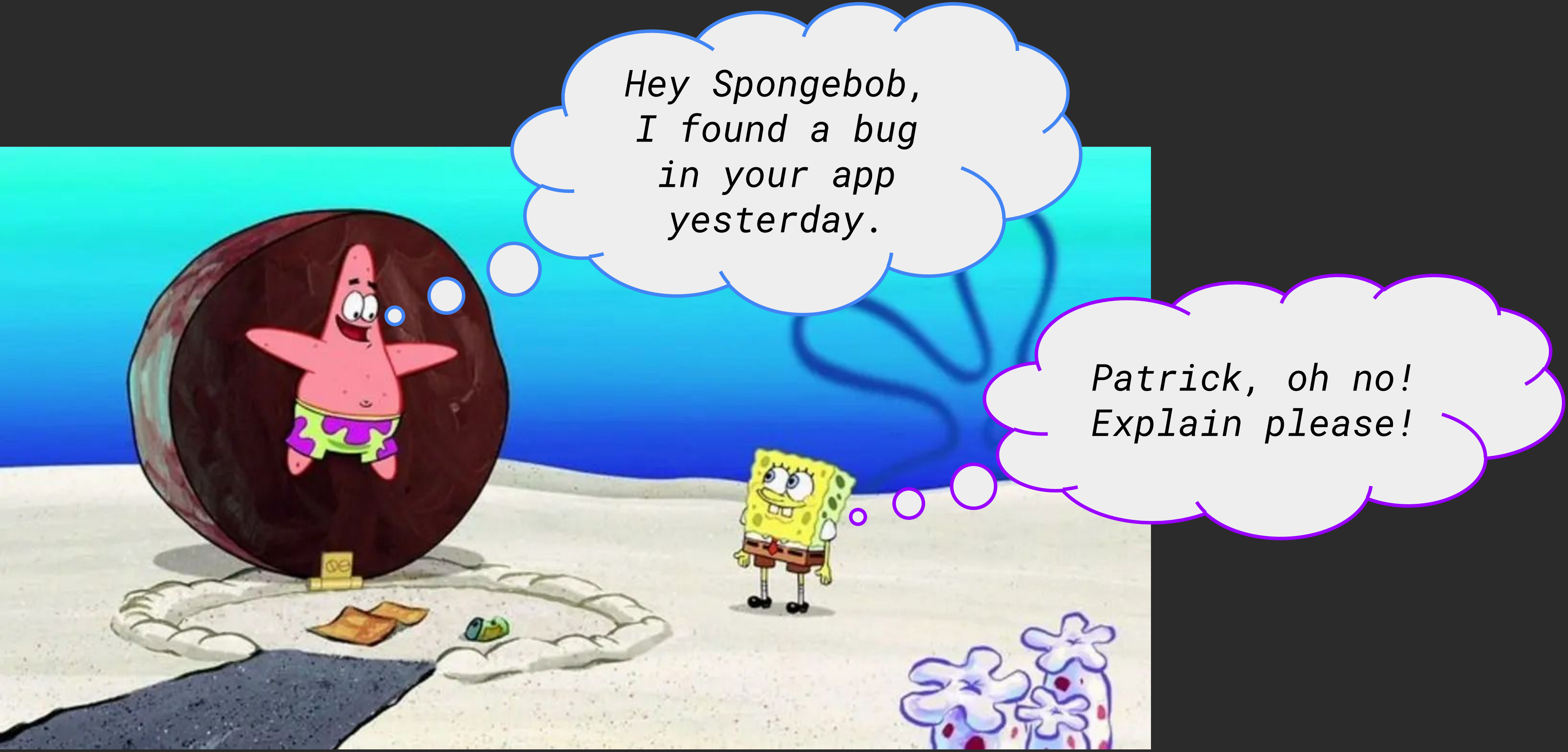
```kotlin
data class ArticleFullInformation(
    val article: Article,
    val author: Author
)
```



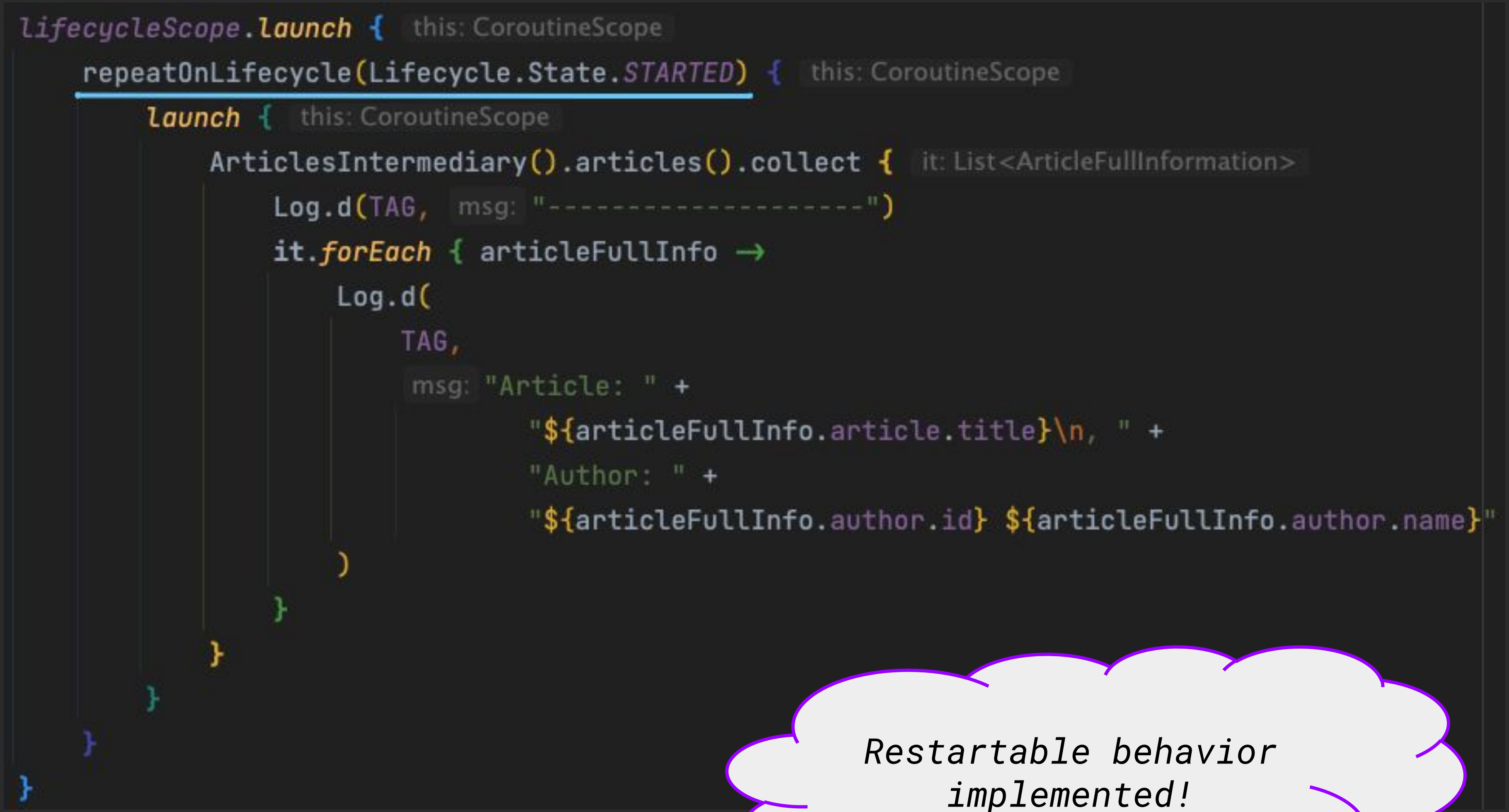


```
class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)

        lifecycleScope.launch { this: CoroutineScope
                ArticlesIntermediary().articles().collect { it: List<ArticleFullInformation>
                    Log.d(TAG, msg: "-------------------")
                    it.forEach { articleFullInfo ->
                        Log.d(
                            TAG,
                            msg: "Article: " +
                                    "${articleFullInfo.article.title}\n, " +
                                    "Author: " +
                                    "${articleFullInfo.author.id} ${articleFullInfo.author.name}"
                        )
                    }
                }
        }
    }
}
```

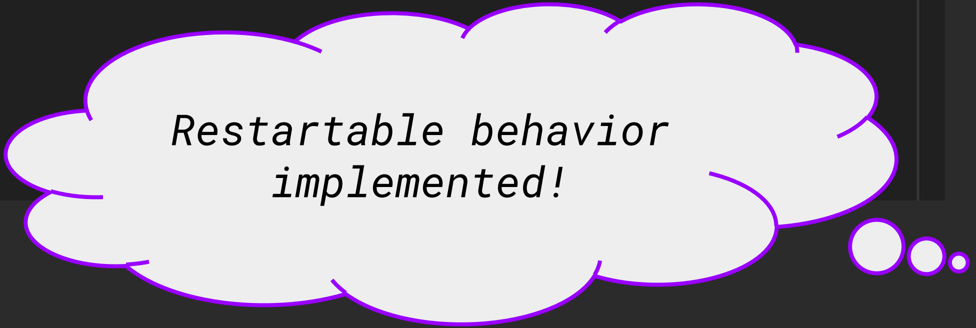



Hey Spongebob, I found a bug in your app yesterday.
Patrick, oh no! Explain please!

I had the app opened. Squidward said you wrote a new article, but the app didn't show when I opened it.
Yes, the app is not working
I will fix. Give me few seconds!



```
lifecycleScope.launch {  this: CoroutineScope
    repeatOnLifecycle(Lifecycle.State.STARTED) {  this: CoroutineScope
        launch {  this: CoroutineScope
            ArticlesIntermediary().articles().collect {  it: List<ArticleFullInformation>
                Log.d(TAG,  msg: "-------------------")
                it.forEach { articleFullInfo ->
                    Log.d(
                        TAG,
                        msg: "Article: " +
                                "${articleFullInfo.article.title}\n, " +
                                "Author: " +
                                "${articleFullInfo.author.id} ${articleFullInfo.author.name}"
                    )
                }
            }
        }
    }
}
```



By Moro