

Tammy

A modular Matrix messenger

connect2x, 20.09.2024

Introduction



Michael



- TI-Messenger client: Timmy

Why should I care?

- There are not enough Matrix messengers...

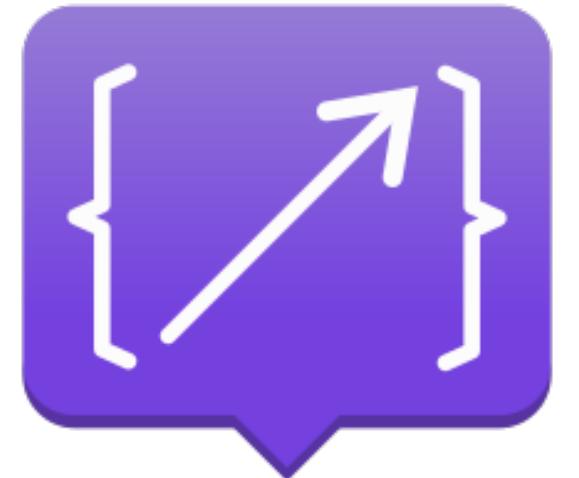
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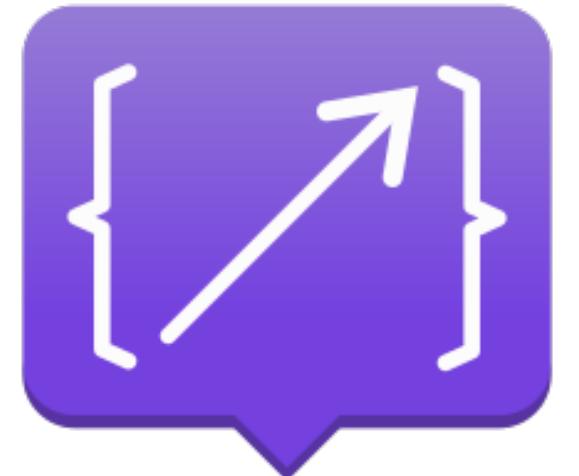
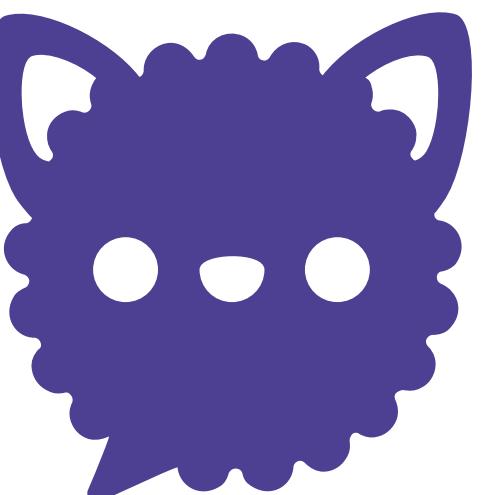
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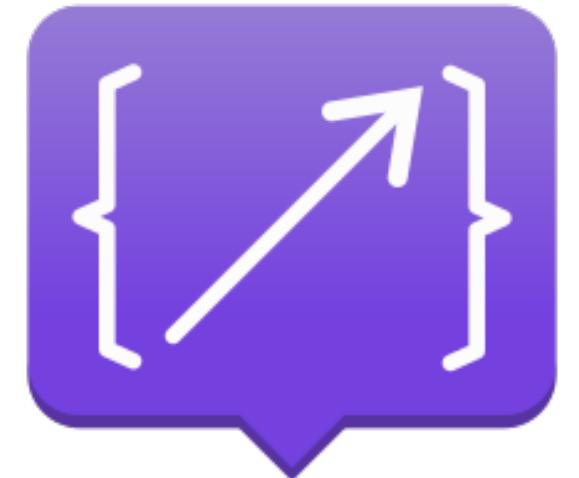
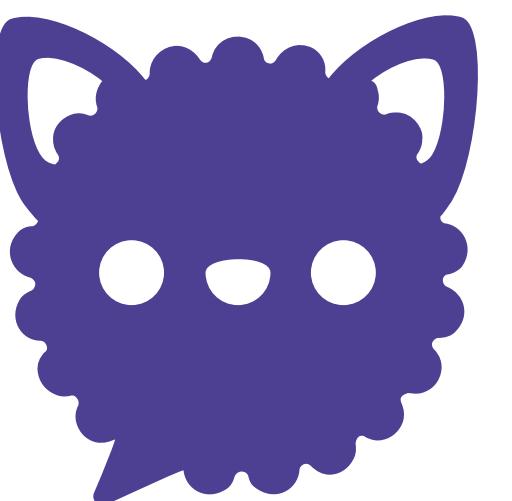
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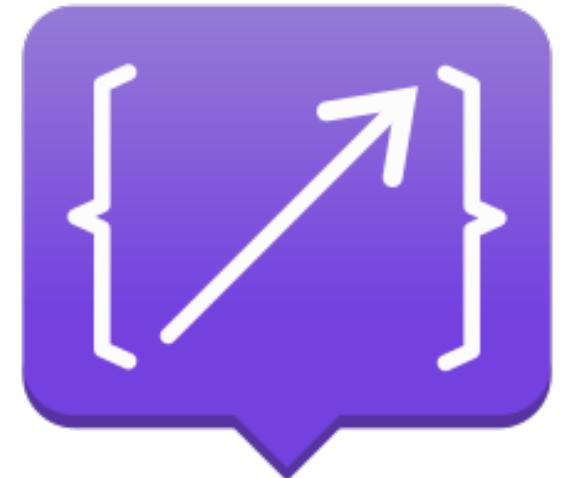
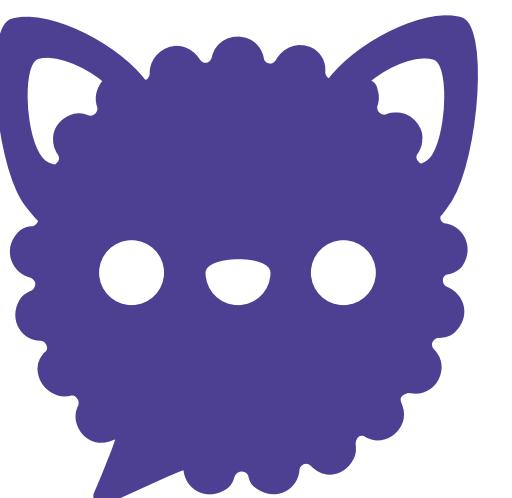
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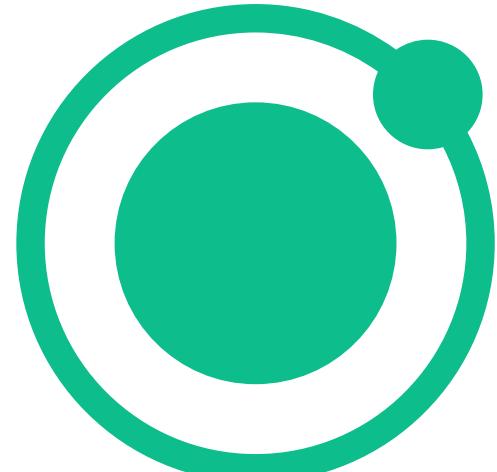
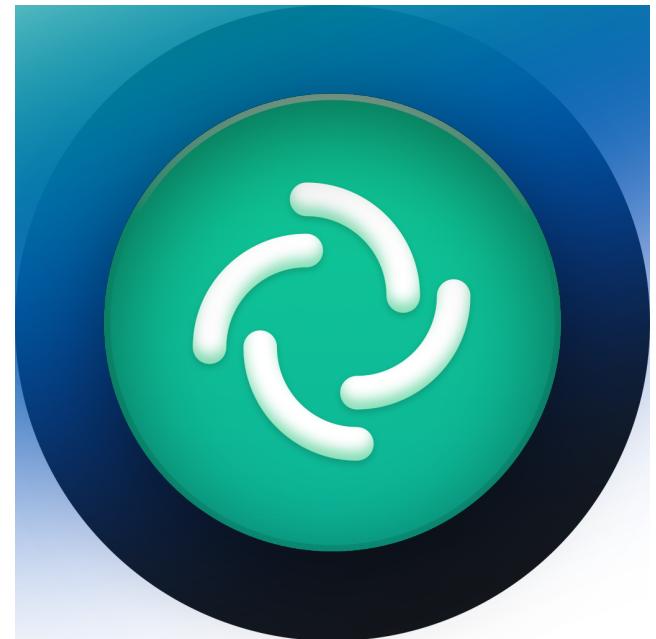
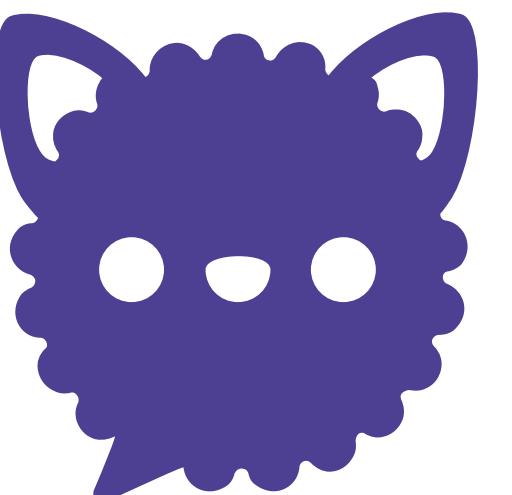
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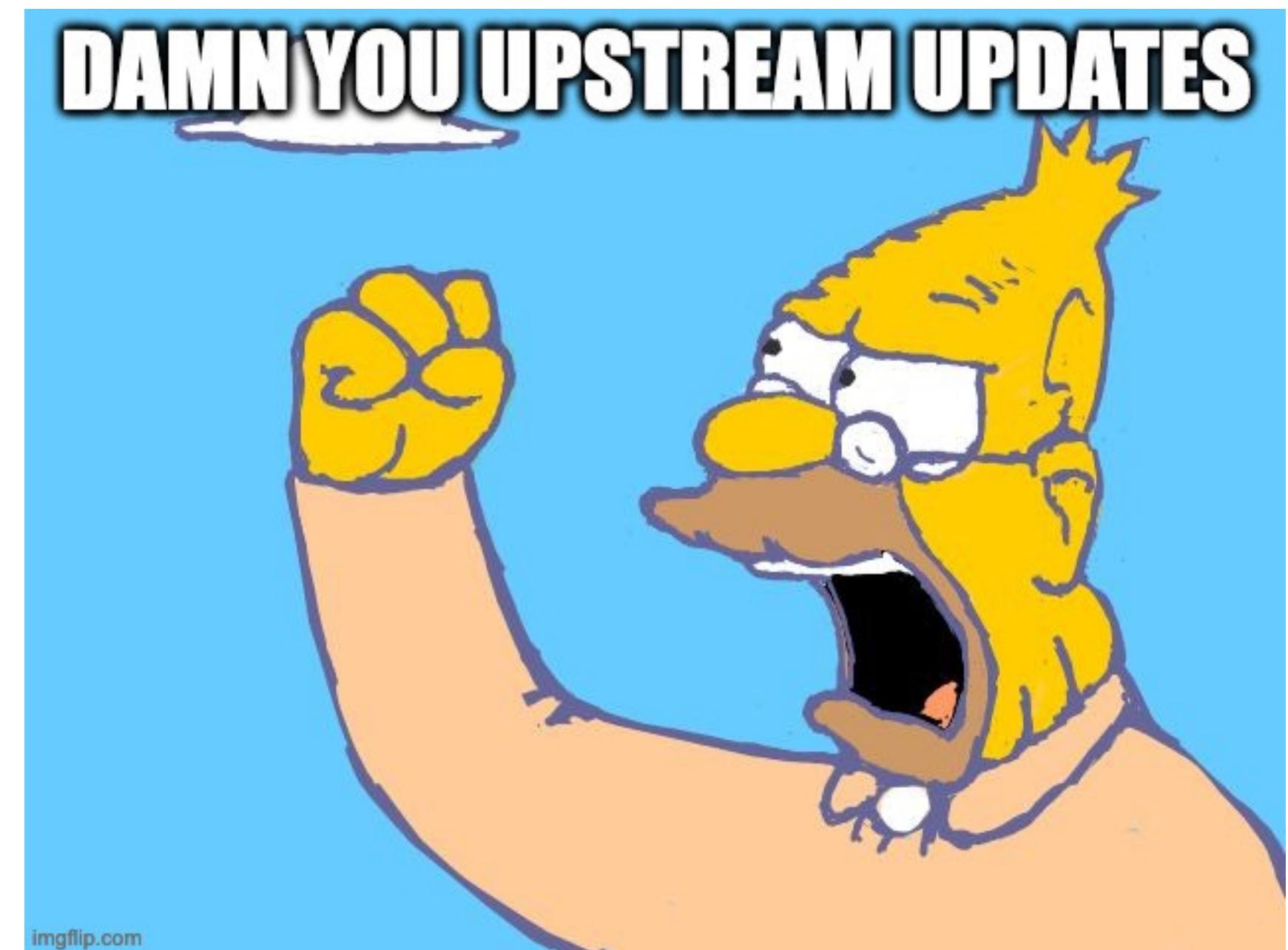


Why should I care?

- Messengers sometimes need the special „oomph" to be really useful in your domain
- Fiddling around with messengers is fun, but then...

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Why should I care?

- Messengers sometimes need the special „oomph" to be really useful in your domain
- Fiddling around with messengers is fun, but then...
- How to make extending a messenger both fun and long-living?



Looking back

Looking back

Matrix Summit 22: Trixnity

Looking back

Matrix Summit 23: Trixnity Messenger

Matrix Summit 22: Trixnity

Looking back

Matrix ~~Summit~~ Conference 24: Tammy

Matrix Summit 23: Trixnity Messenger

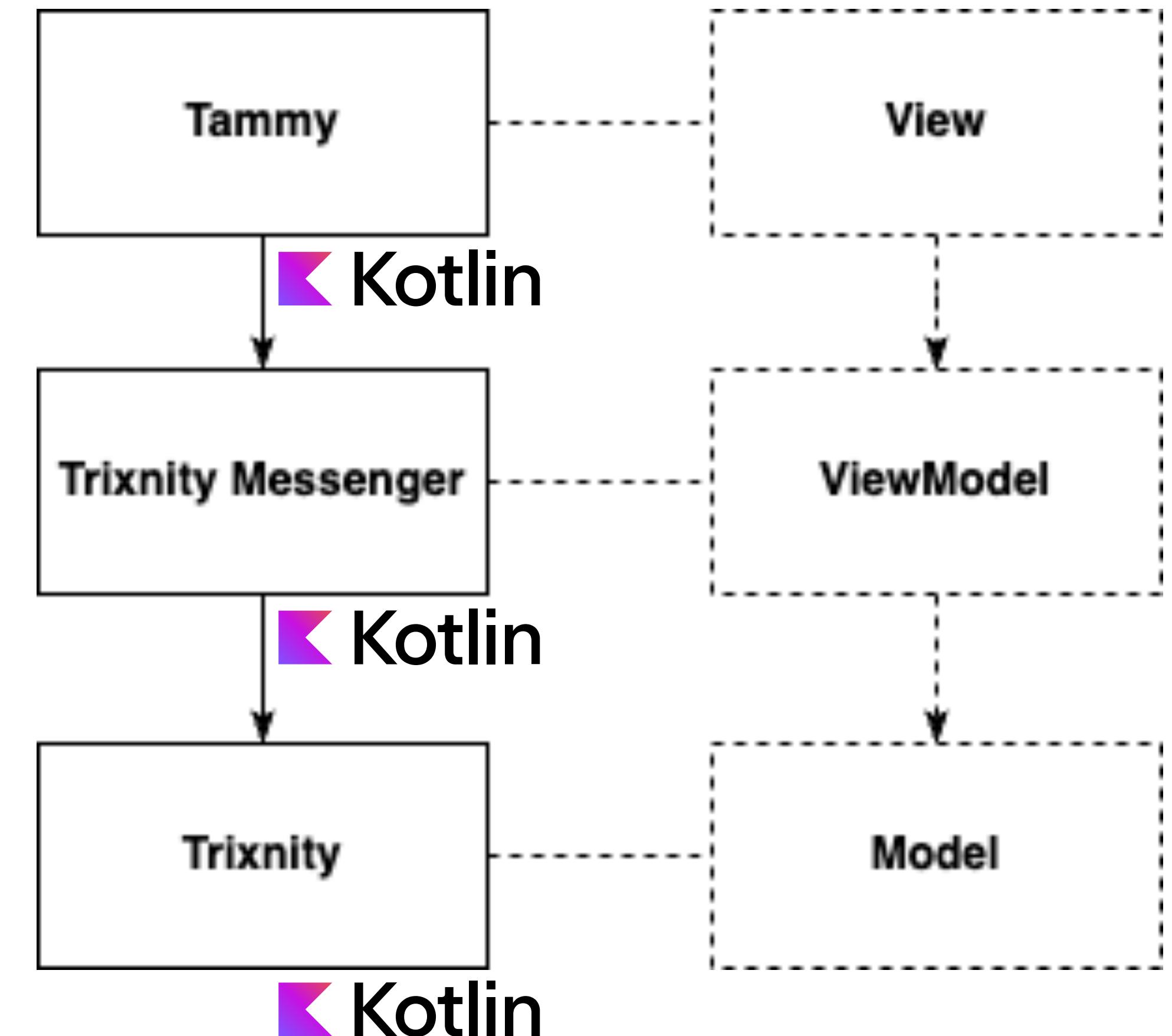
Matrix Summit 22: Trixnity

Looking back

Matrix ~~Summit~~ Conference 24: Tammy

Matrix Summit 23: Trixnity Messenger

Matrix Summit 22: Trixnity



Demo

- No really, no text here. Please look at the demo app. Thank you!

Can you spot the difference?

```
fun main(args: Array<String>) = startMessenger(  
    appName = BuildConfig.appName,  
    version = BuildConfig.version,  
    configuration = messengerConfiguration(),  
    args = args,  
)
```

```
fun main(args: Array<String>) = startMessenger(  
    appName = BuildConfig.appName,  
    version = BuildConfig.version,  
    configuration = timConfiguration(),  
    args = args,  
)
```

Tammy vs Timmy

- ~ 20 features added or changed
 - Access control
 - Search
 - QR code, etc.
- ~ 15 new or altered view components
- White labeling different

What just happened?

What just happened?



Tammy vs Timmy

```
fun timMatrixMessengerModule(configuration: TIMConfiguration.() -> Unit = {}): Module {
    val config = TIMConfiguration().apply(configuration)
    return module { this: Module
        singleOf(::CheckMatrixMessengerConfiguration) { createdAtStart() }
        singleOf(::CheckTIMConfiguration) { createdAtStart() }
        single { config }
        single<RootViewModelFactory> { this: Scope it: ParametersHolder
            object : RootViewModelFactory {
                override fun create(componentContext: ComponentContext, di: Koin): RootViewModel =
                    TIMRootViewModel(componentContext, di)
            }
        }
        single<TimeZone> { TimeZone.of(zoneld: "Europe/Berlin") }
        single<TimelineEventSubViewmodelFactory> { this: Scope it: ParametersHolder
            TIMTimelineEventSubViewmodelFactory(DefaultTimelineEventSubViewmodelFactory())
        }
        includes(platformPinManagerModule())
        includes(platformDeviceIntegrityScannerModule())
        includes(platformHttpClientFactoryModule())
        includes(platformPinSecurityDeviceInfoModule())
        includes(platformSessionHandlerModule())
        includes(i18nTimModule())
    }
}
```

```
fun timViewModule() = module { this: Module
    includes(i18nViewModule())

    single<ClientView> { TIMClientView() }

    // common
    single<MatrixUsernameView> { TIMMatrixUserNameView() }
    single<ServerInputFieldView> { TIMServerInputFieldView() }

    // profiles
    single<ProfilesView> { TIMProfilesView() }
    single<ProfileSelectionView> { TIMProfileSelectionView() }

    // timeline
    single<RoomSettingsView> { TIMRoomSettingsView() }
    single<SearchUsersView> { TIMSearchUsersView() }
    single<MessageBubbleView> { TIMMessageBubbleView() }
    single<SendAttachmentSendButtonView> { TIMSendAttachmentSendButtonView() }
```

Deconstruction and Construction again



Logic



UI

Deconstruction and Construction again

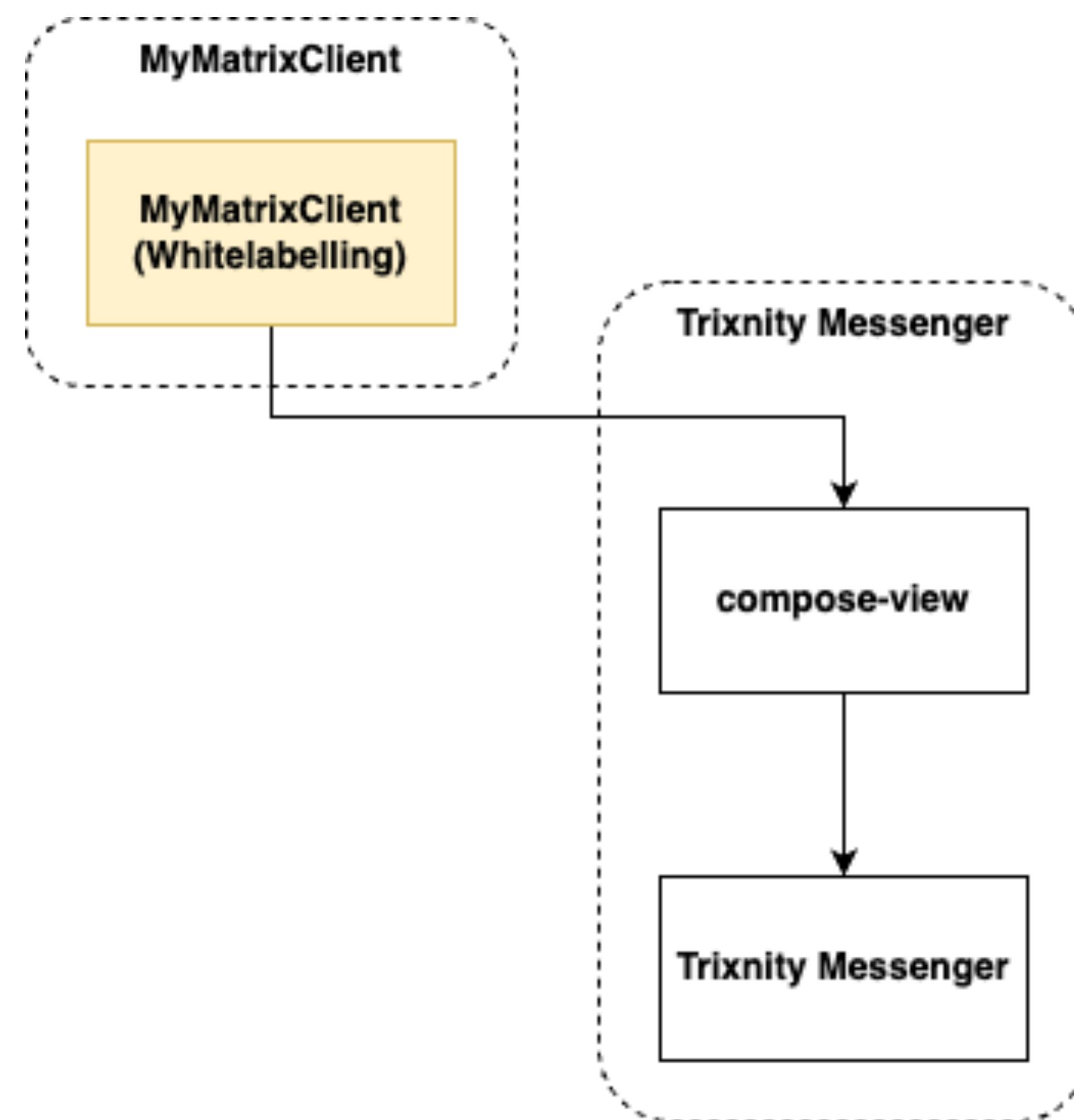


Logic

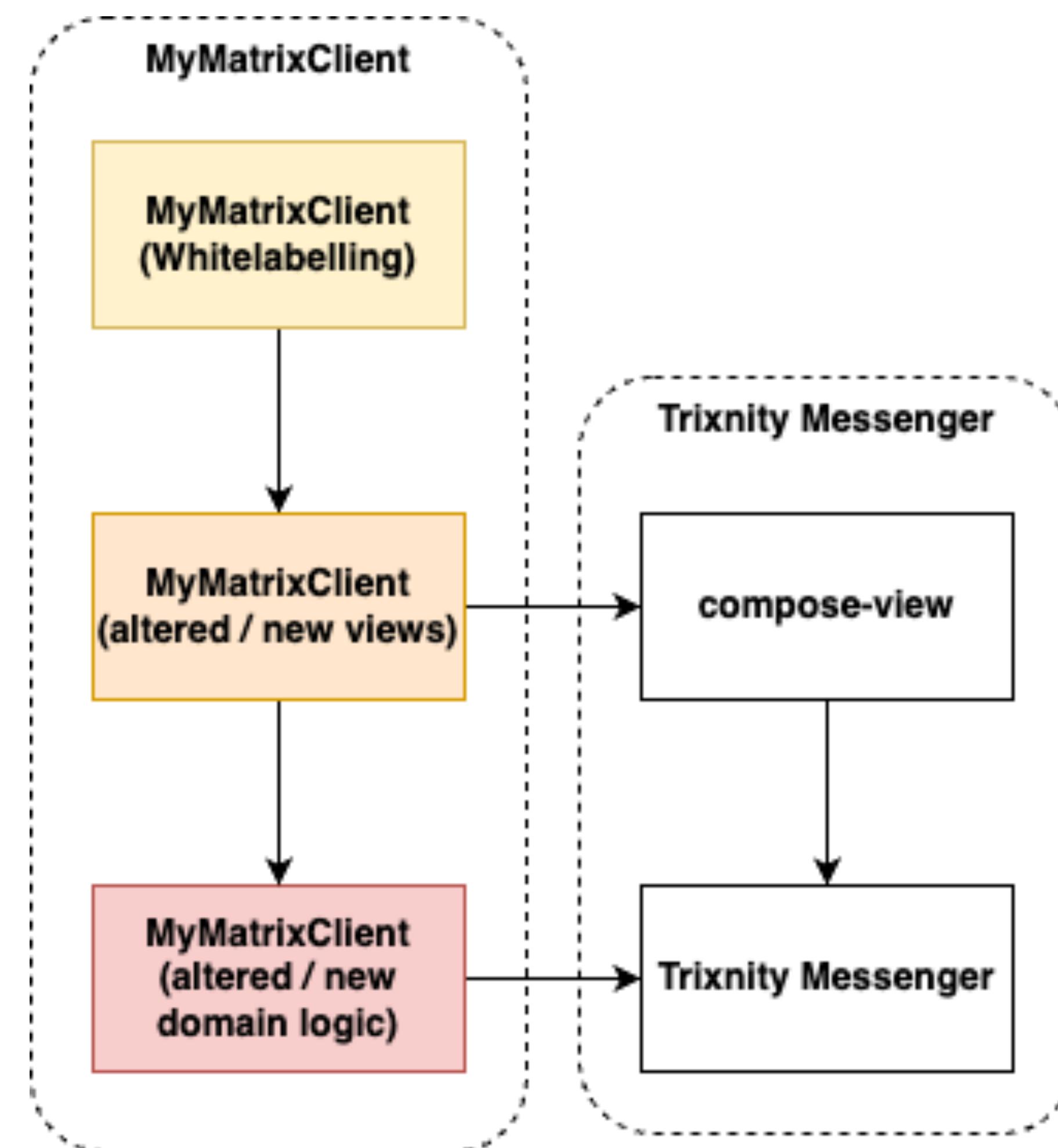


UI

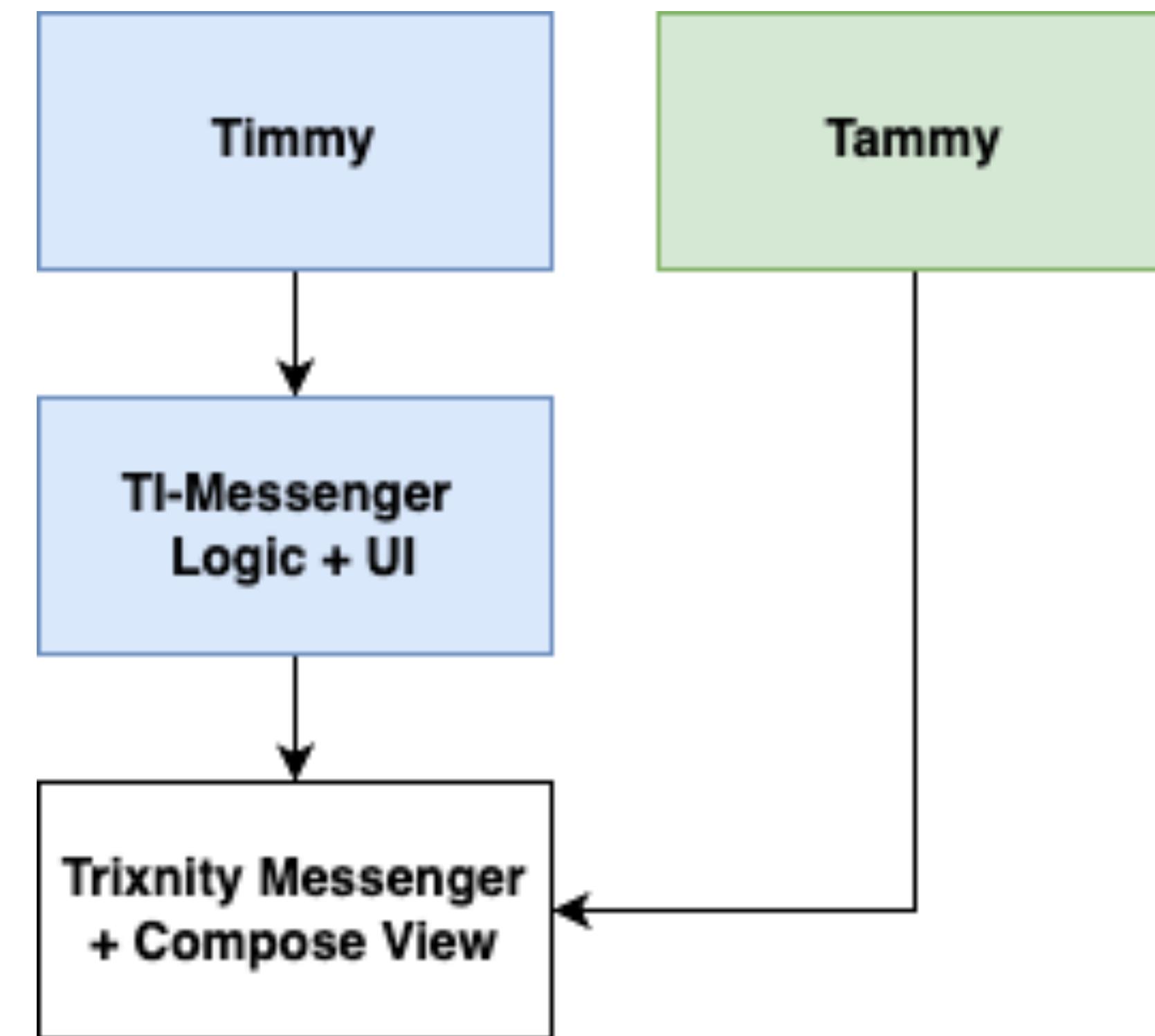
White Labelling



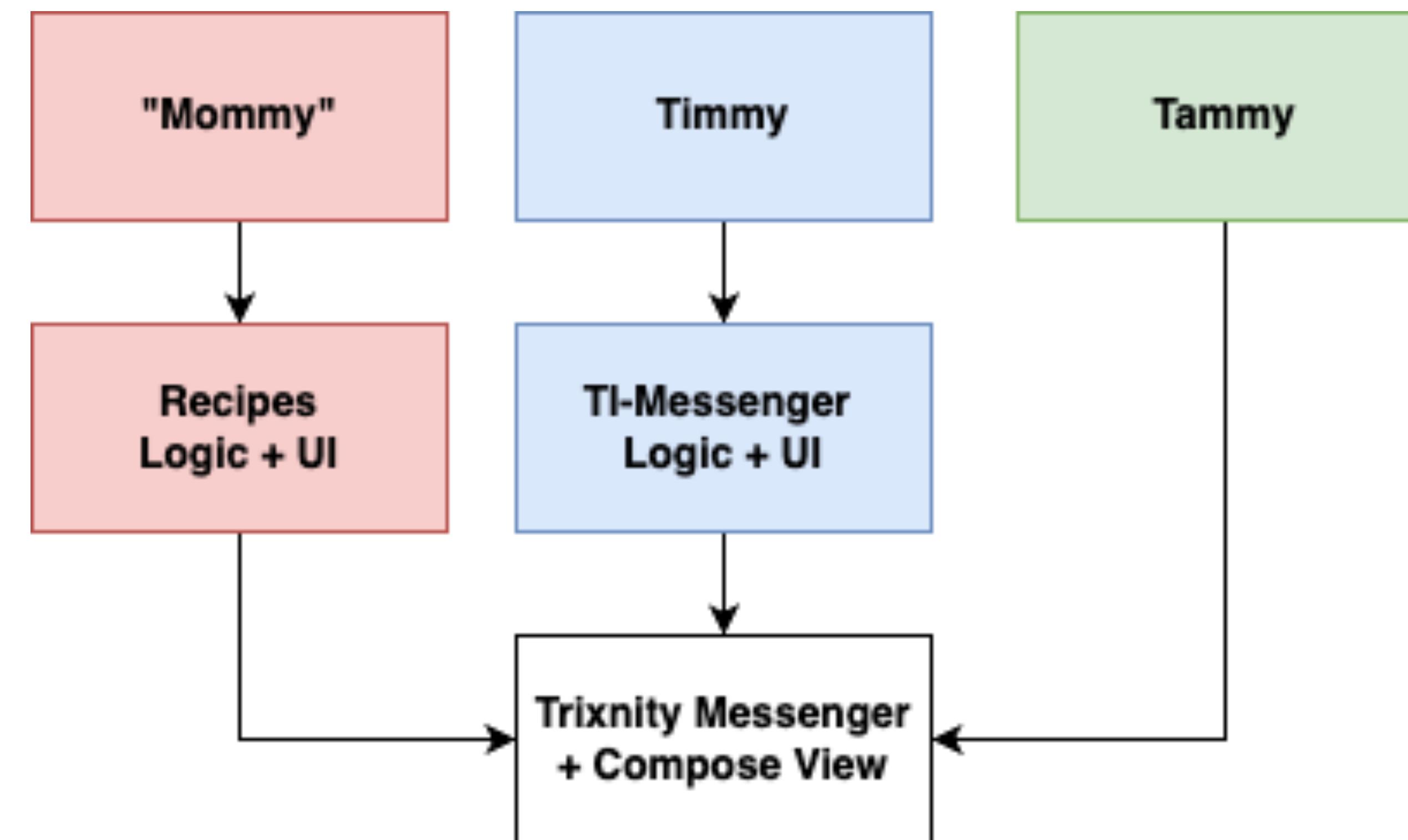
Changing the Logic & UI



Build your own messenger!



Build your own messenger!



Where to find all this stuff

- <https://gitlab.com/connect2x/trixnity-messenger/trixnity-messenger>
- <https://gitlab.com/connect2x/tammy>
- [#trixnity-messenger:imbitbu.de](#)