https://youtu.be/ps322cRxQbc

A2: Concrete Architecture

● ● ●

Spencer[1]   Zhangzhengyang   Anson
Tony[2]   Aidan[2]   Brant

[1]leader
[2]presenter

Table of contents

Table of contents

Conceptual architecture

❏   Two modifications made to our previous architecture:
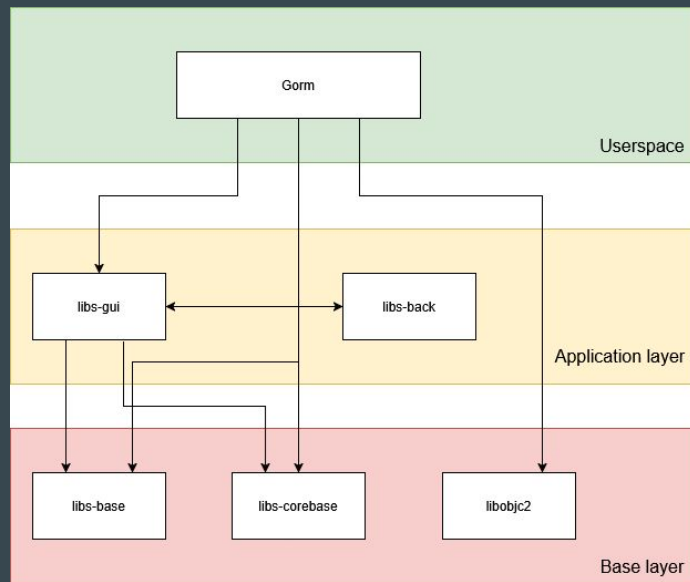   ❏   added libobjc2 and Gorm as components
   ❏   introduced new dependencies
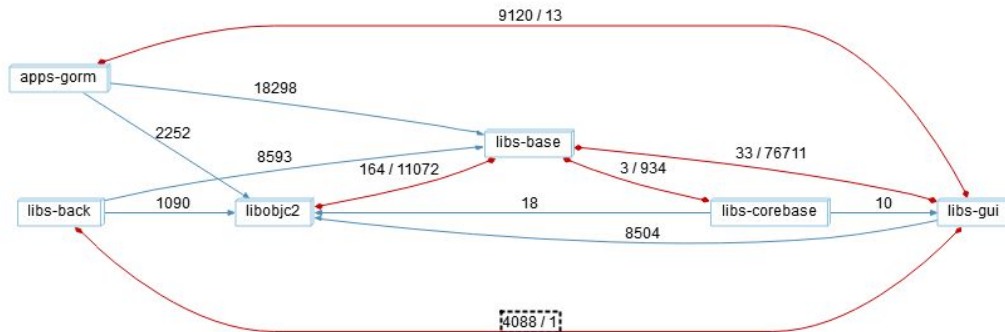

Figure 1. Updated conceptual architecture

Table of contents

Derivation Process

❏ Architecture constructed in Understand
  ❏ Examined taking account possible mistakes
❏ Examined the relation between main components

Figure 2, Structure generated with understand

Table of contents

Concrete Architecture

❑ Same components as conceptual architecture, but many unexpected
dependencies
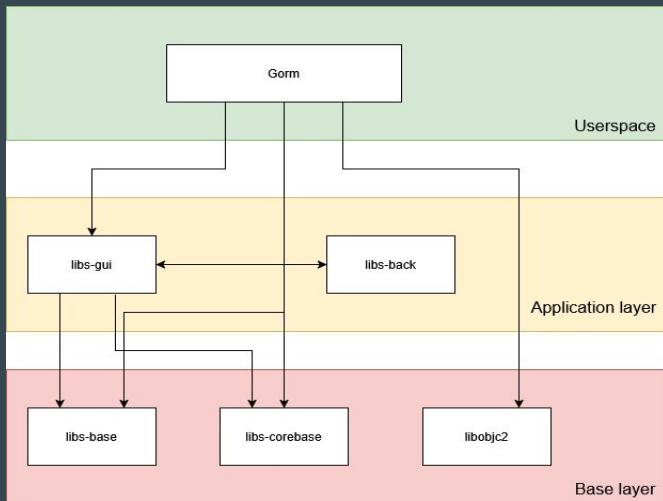
Figure 1. Updated conceptual architecture
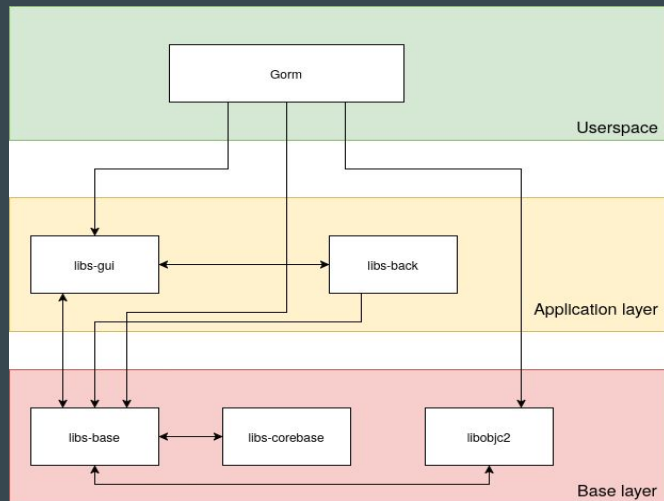
Figure 3. Concrete architecture

Table of contents

Reflection Analysis

- ❏ Base Layer
  - ❏ libs-base ↔ libs-corebase
  - ❏ libs-base ↔ libobjc2
- ❏ Application Layer
  - ❏ libs-gui ↔ Libs-base
  - ❏ libs-gui ↛ libs-corebase
- ❏ Userspace
  - ❏ apps-gorm ↛ libs-corebase

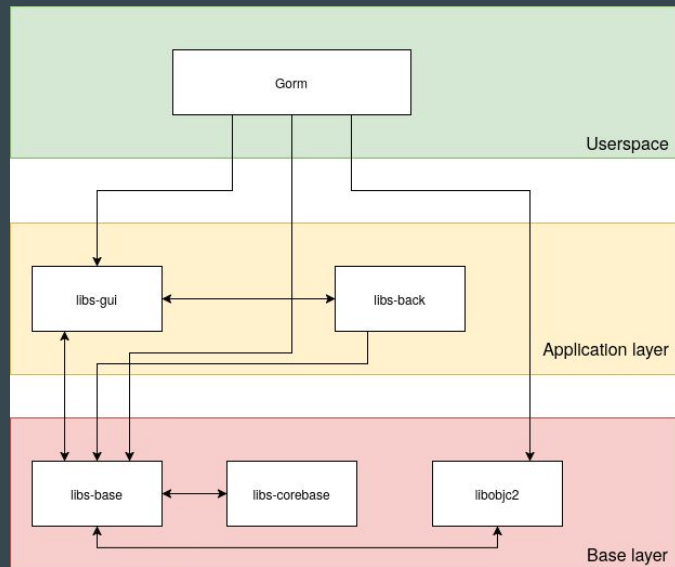Figure 3. Concrete architecture

Table of contents

Gorm Conceptual Architecture

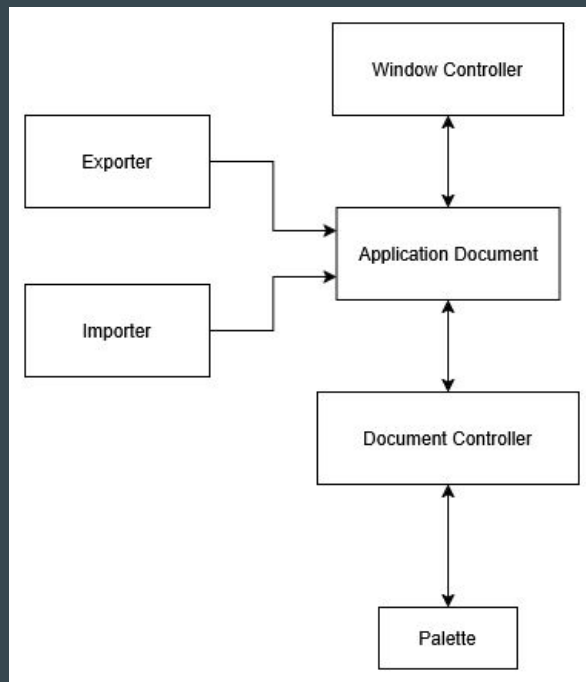❏ Major modifications from our original conceptual architecture

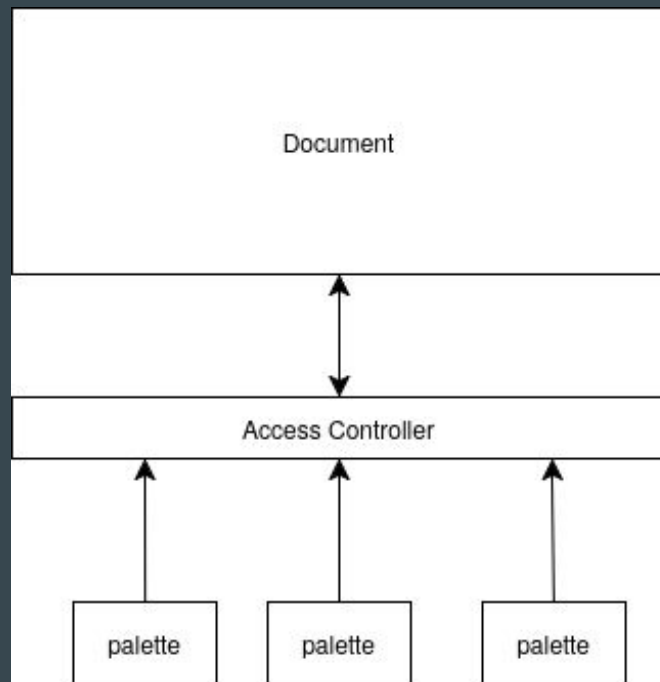Figure 5. Updated conceptual architecture

Figure 5.5 Original conceptual architecture

Gorm Concrete Architecture
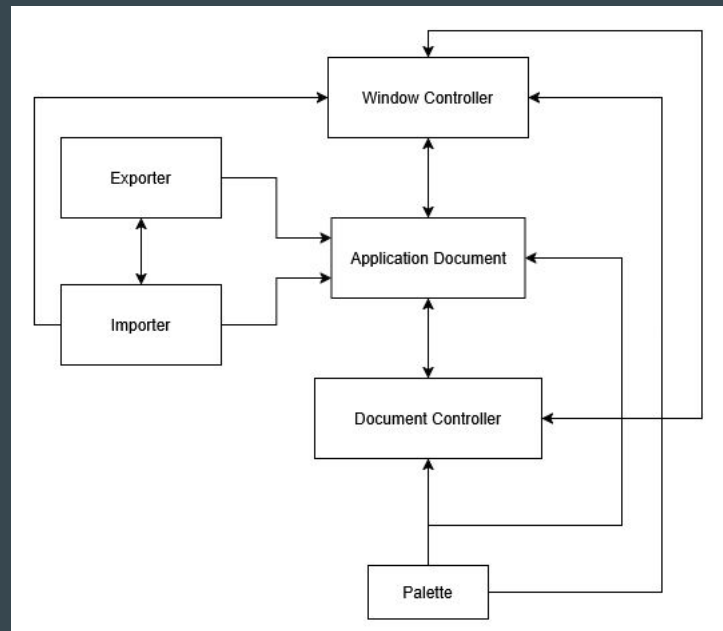
❏ Features six dependencies

Figure 6. Concrete architecture

Gorm Reflection Analysis

❏   Exporter ↔ Importer

❏   Importer → Window Controller

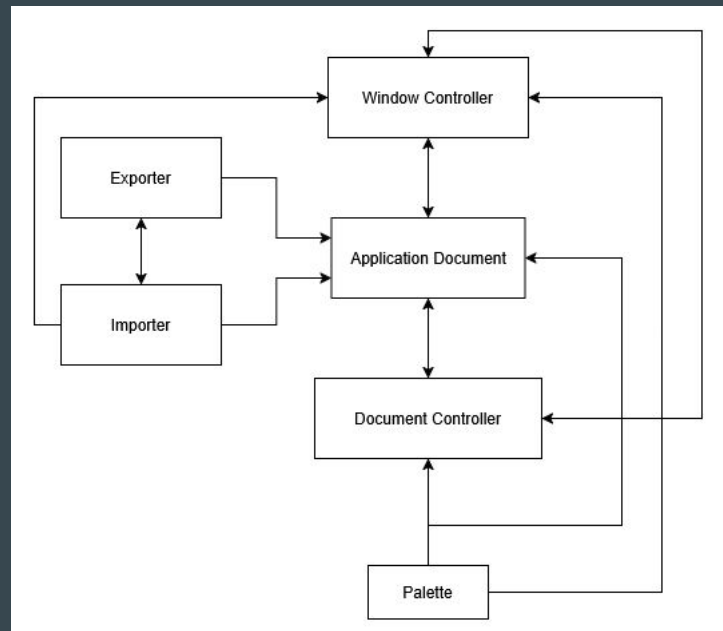❏   Palette → Window Controller

❏   Palette → Application Document

Figure 6. Concrete architecture

Table of contents

Architecture Style of GNUstep

❏   Layered + implicit invocation
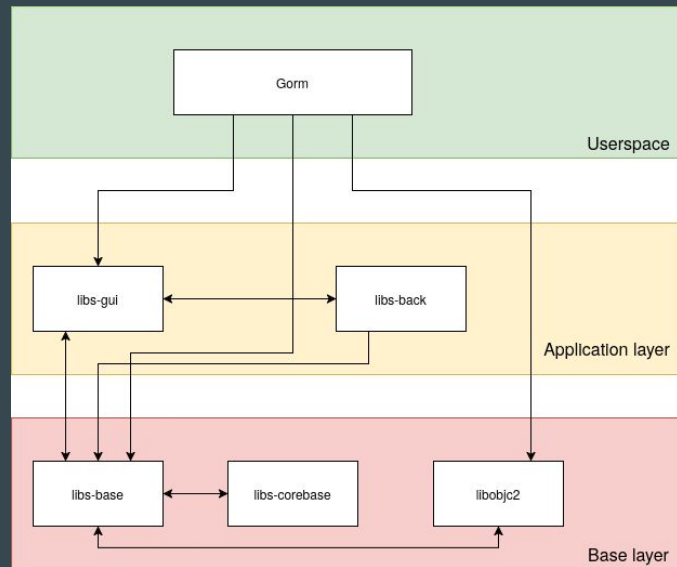

Figure 3. Concrete architecture

Architecture Style of Gorm
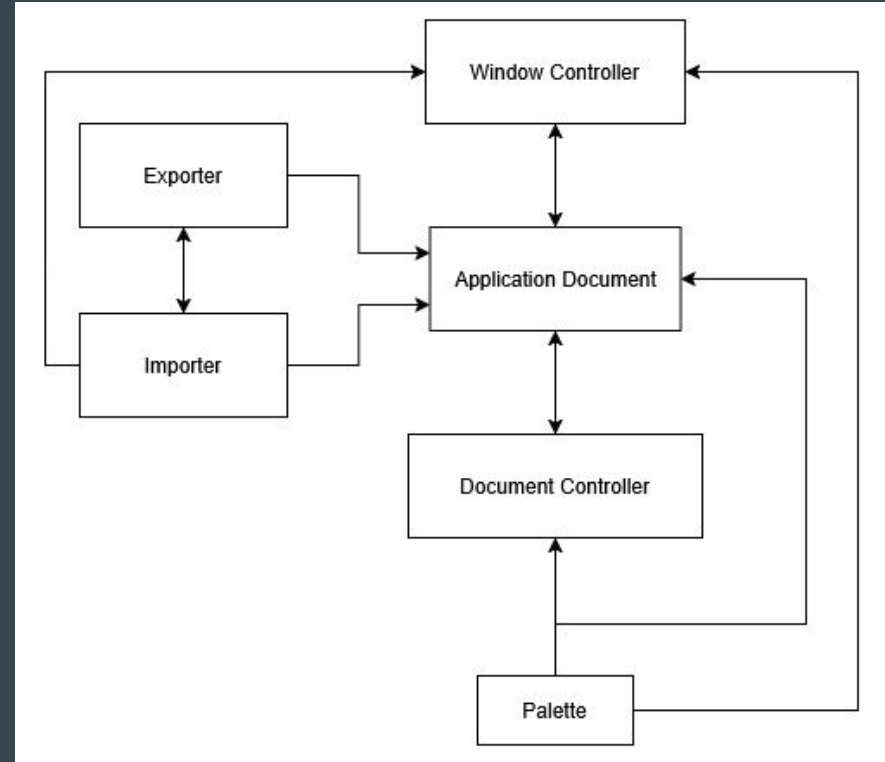
❏   Hybrid repository/object-oriented

Figure 6. Concrete architecture

Table of contents
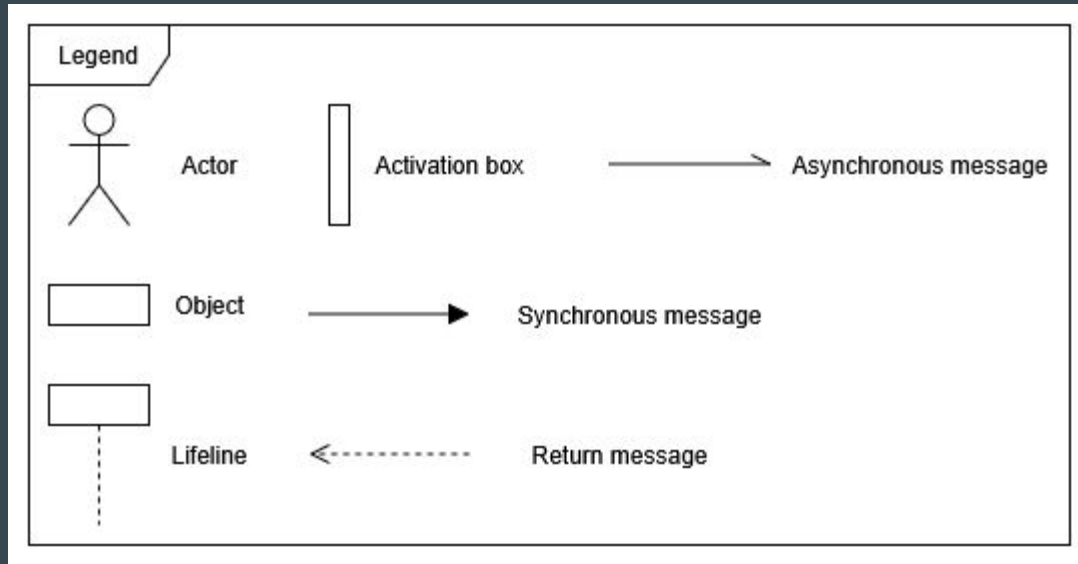
Sequence diagram (legend)

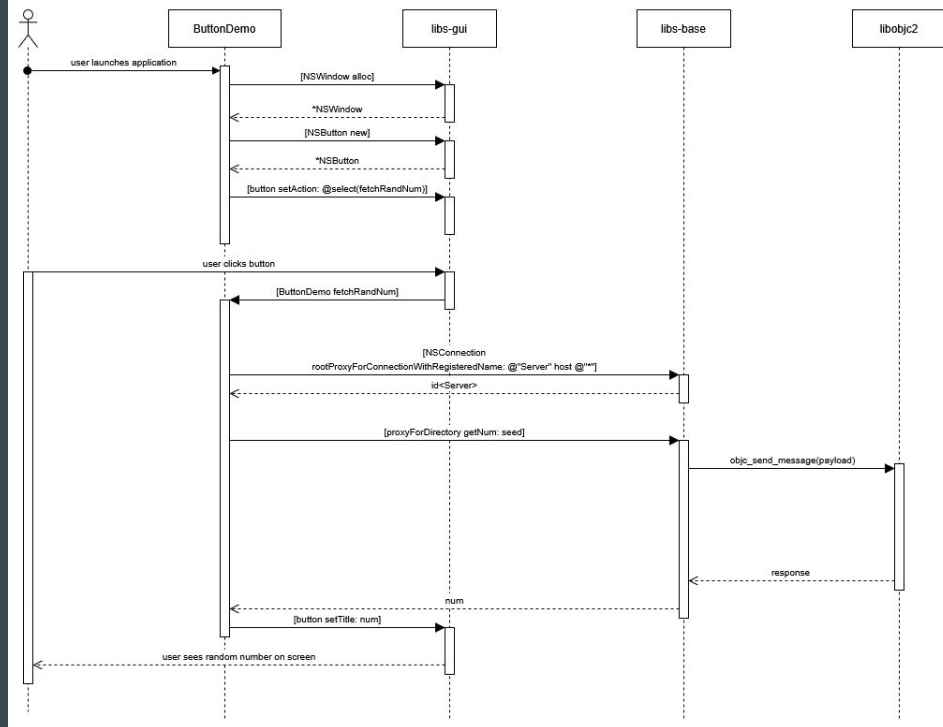Figure 7. Sequence diagram legend

Sequence diagram

Figure 9. Sequence diagram

Lessons Learned

❏ Confusion with Understand
❏ Confusion with which roles people should be filling

Limitations

❏   Poor documentation of subsystems

Thank You
...