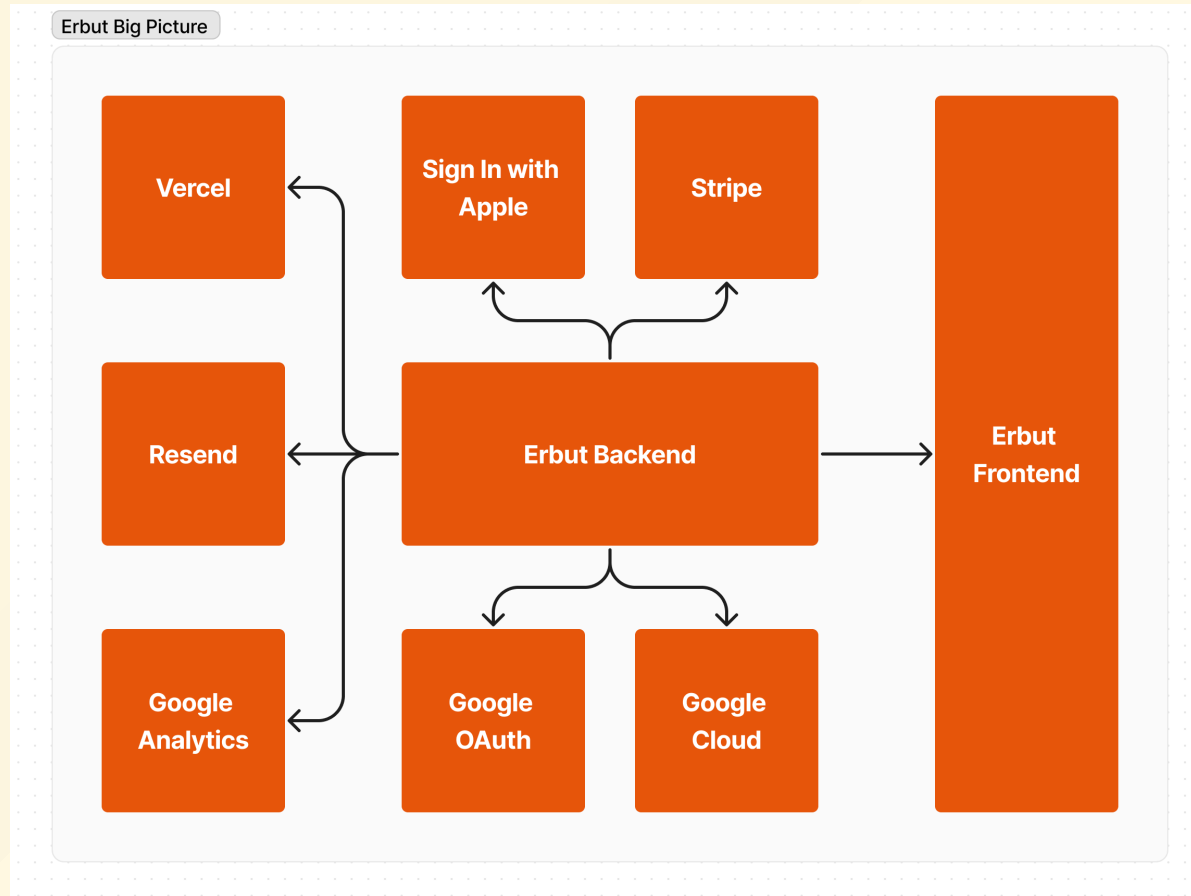# **Erbut**: An Elegant Web-Based Linkfolio

Introduction

- **What is Erbut?** A platform for creating 'Erbuts'—elegant, personalized linkfolios.

- **Creators:** Yazeed AlKhalaf, Khalil Melhem, Khaled Hazzam

- **Course:** SWE 302 - Software Design & Architecture

- **Instructor:** Dr. Ahmed Ghoneim
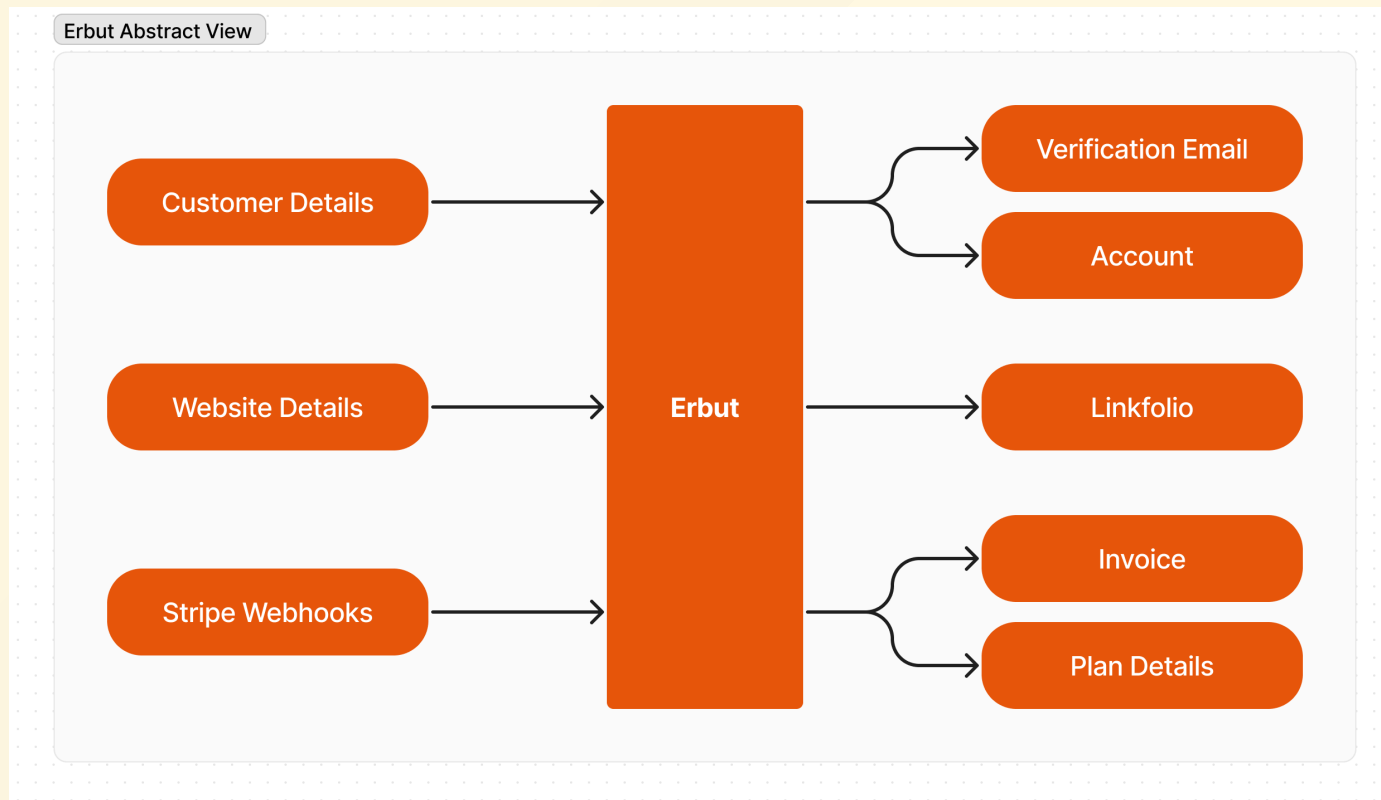
- **Date:** 25 Mar, 2024

System Overview

Big Picture

A glance at Erbut's architecture, integrated with **Vercel**, **Stripe**, **Google Analytics**, and more.
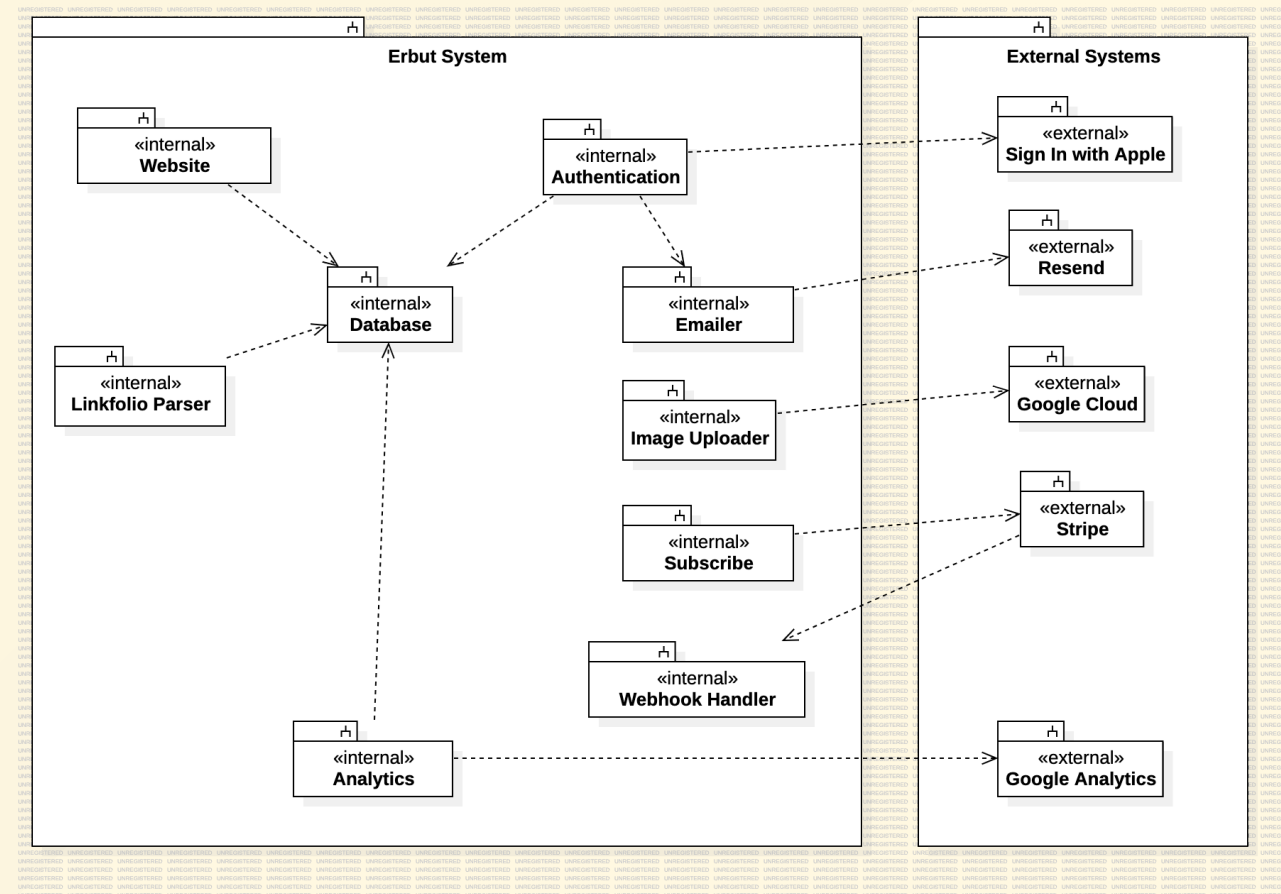
Abstract View

- **Inputs:** Customer Details, Website Details
- **Outputs:** Erbut Linkfolio

Subsystem View

Highlighting both **Internal** and **External** Components, focusing on modularity and integration.

Subsystem Functionalities

Discussing the functionalities of **Database, Authentication, Website**, and **External Services** like Google Cloud and Stripe.

Key Internal Subsystems

- **Database:** For customer and website data.

- **Authentication:** For user login and security.

- **Website & Linkfolio Parser:** For creating and customizing linkfolios.

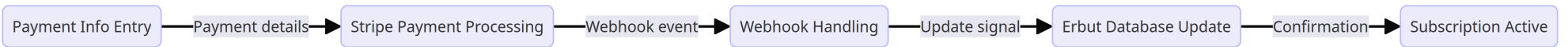- **Emailer & Image Uploader:** For enhancing user engagement.

Key External Subsystems

- **Google Analytics:** For visitor tracking.
- **Stripe:** For payment processing.
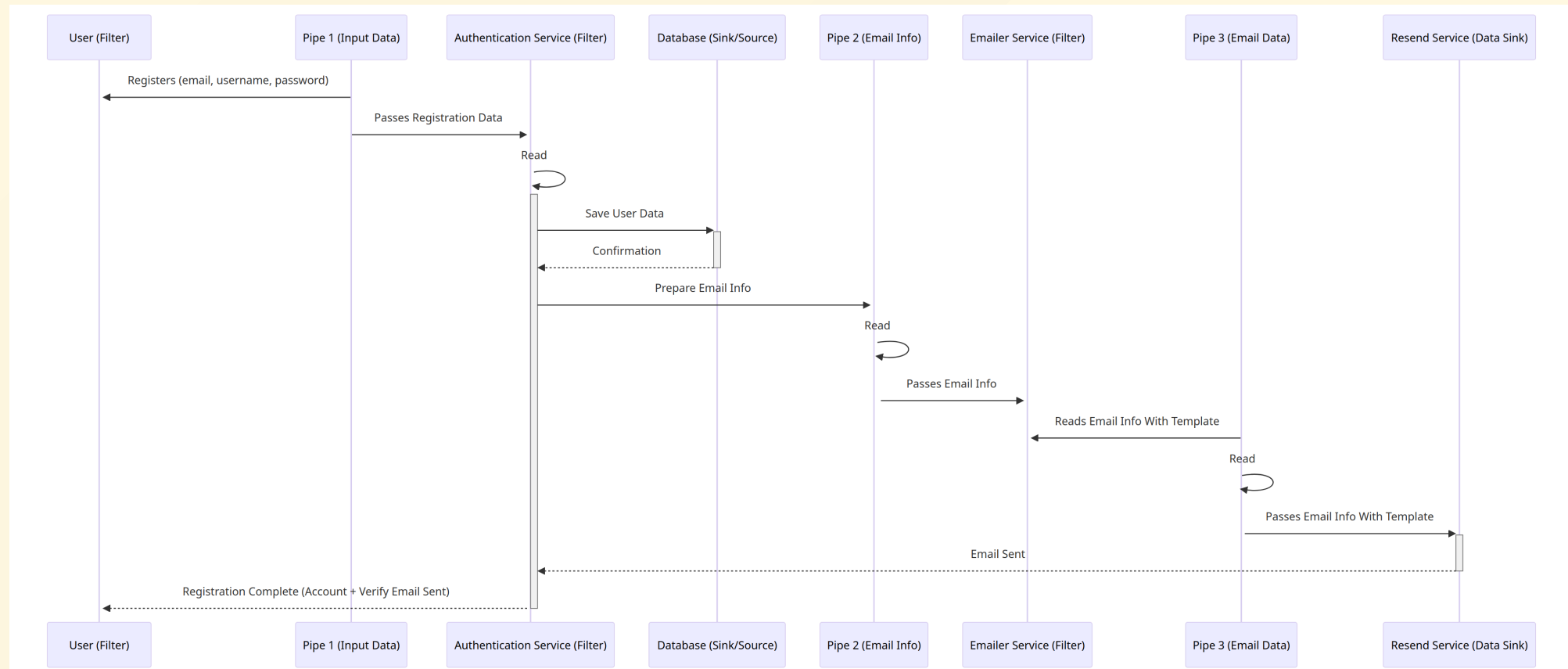- **Resend:** For email automation.

Data Flow Diagrams

Batch Sequential

From **payment information** to **subscription activation**.

Payment Info Entry — Payment details → Stripe Payment Processing — Webhook event → Webhook Handling — Update signal → Erbut Database Update — Confirmation → Subscription Active
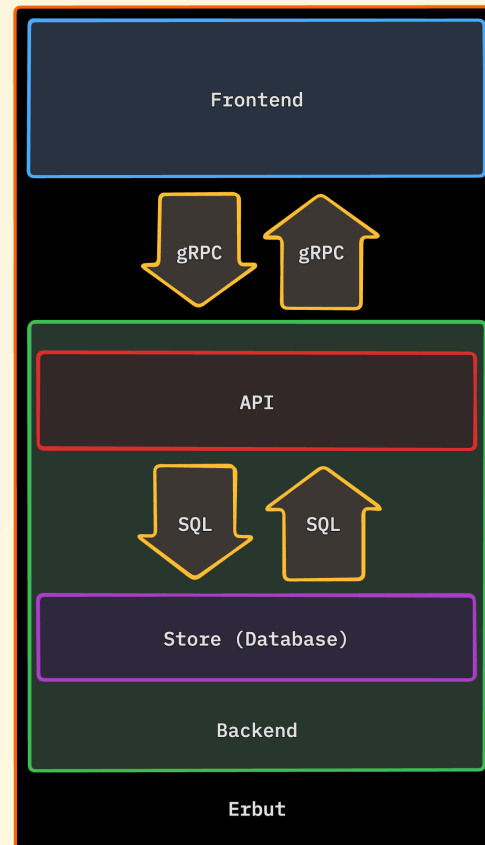
Pipe and Filter

Visualizing the **user registration** data journey.
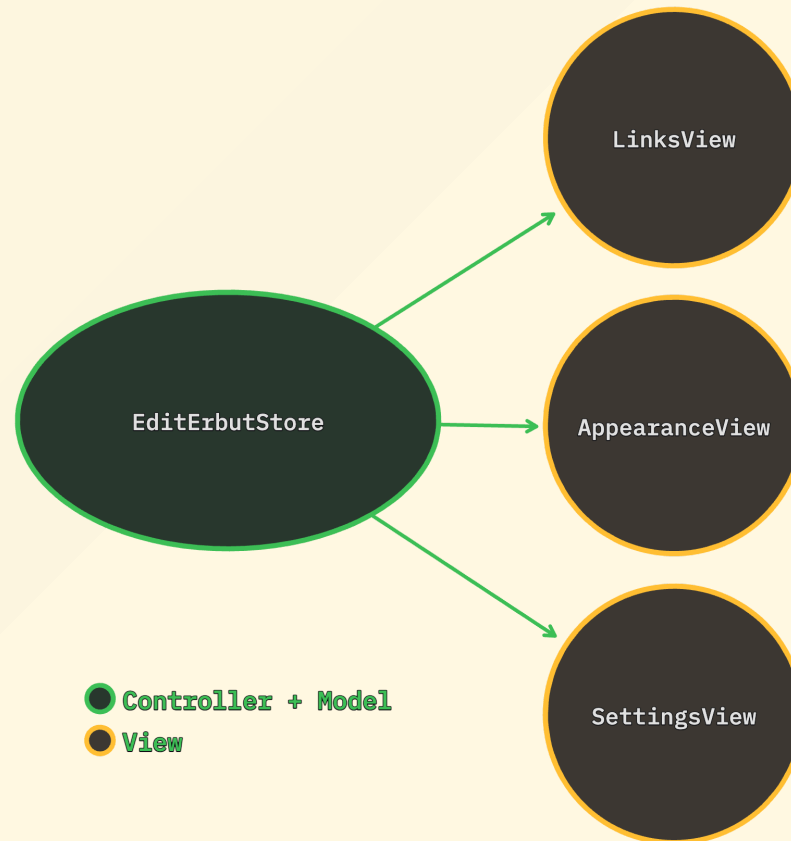
Architecture Deep Dive

Layered Architecture

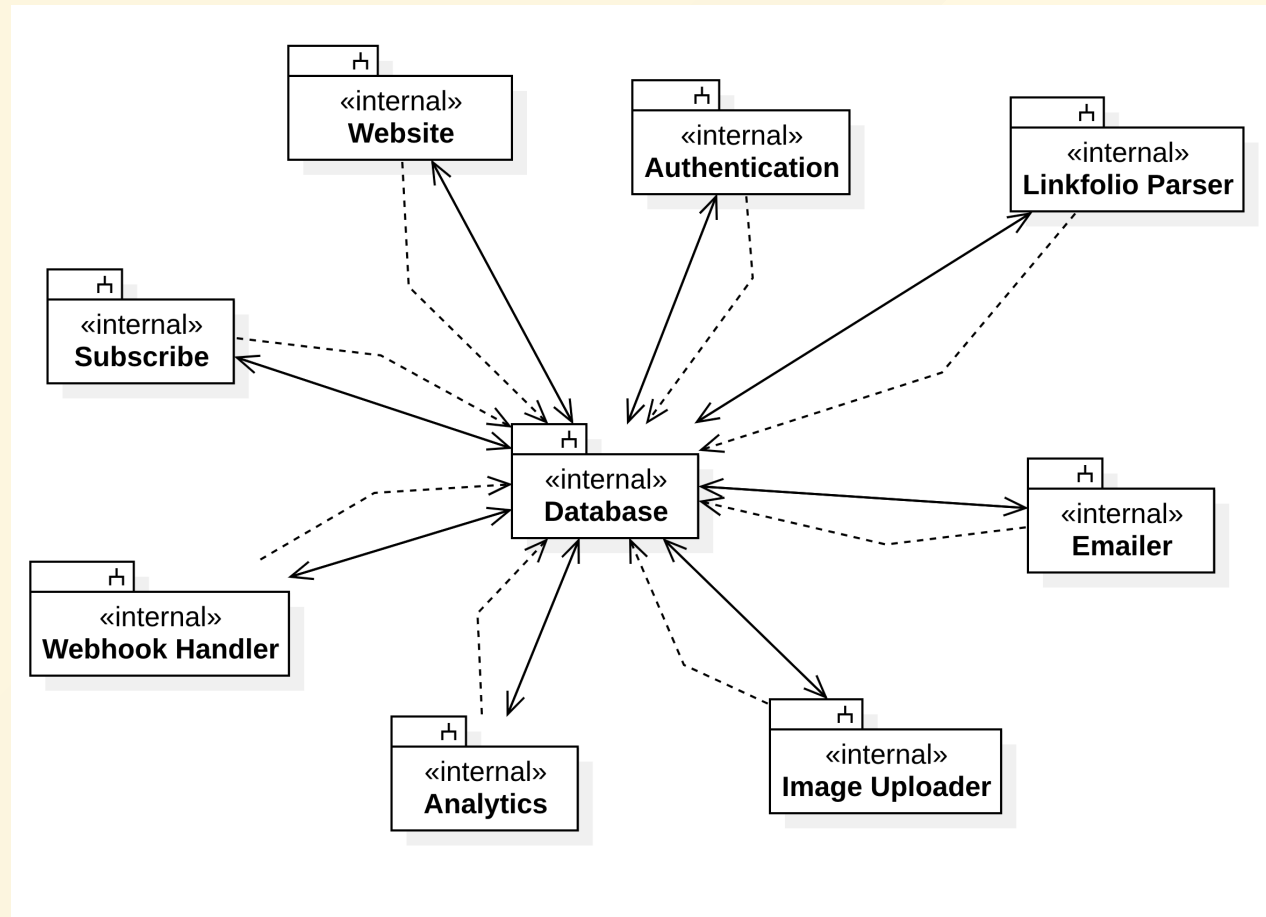Detailing the **Presentation, Application, and Data layers**.

MVC in Action

Exploring the **Model-View-Controller** pattern in our frontend development.

- Controller + Model
- View

Repository Diagram

Detailing **data management** and subsystem interactions.

Conclusion

Erbut blends scalable architecture with user-centric design for a unique online presence.