

# Laporan On Job Training PT. Global Service Indonesia

*Research & Development Innovation  
Division*

Rafly Rizqullah Yusuf  
24 Desember 2024

# TENTANG SAYA

## RAFLY RIZQULLAH YUSUF

*NIS : 80224023*  
*Trenggalek, Jawa Timur*

**Placement**

**PT. Global Service Indonesia**

**At Team**

**Digital Solution**

**At Divission**

**Research and Development**  
**Innovation Division**

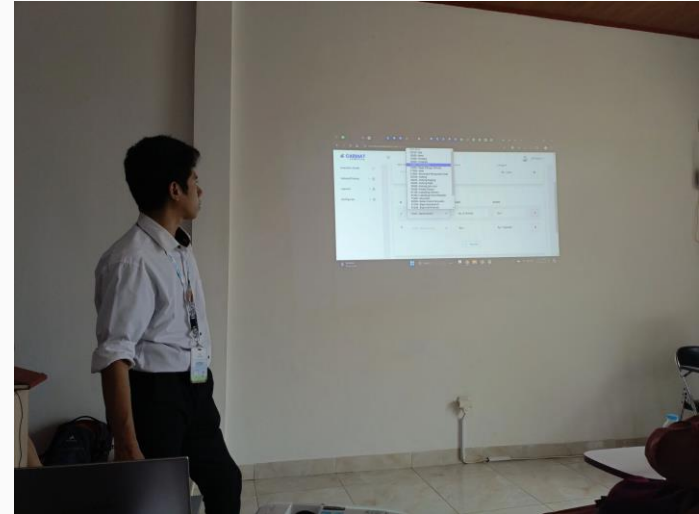






CERMAT Accounting adalah aplikasi web yang dirancang untuk memudahkan para UMKM dalam mengelola bisnis mereka.

1. POS ( *Point Of Sales* )
2. Manajemen Stok
3. Laporan Keuangan
4. Laporan Hutang Piutang
5. Pencatatan Jurnal



Enroll Cermat pada 7 Agustus 2024 di YDBA

Baru dua bulan setelah rilis, Cermat sudah mengalami banyak masalah dan isu pada aplikasinya, antara lain:

1. **Antarmuka pengguna (UI)** yang berantakan.
2. **Flow aplikasi** yang tidak teratur dan sulit diikuti.
3. **Maintenance** aplikasi yang tidak berjalan lancar.

Selain itu, Lead R&D sekaligus PIC proyek ini, telah mengundurkan diri pada akhir bulan September kemarin.

Oleh karena itu, saya bersama Lead R&D baru serta salah satu rekan saya memutuskan untuk melakukan **revamp** dan membangun ulang Website Application Cermat.



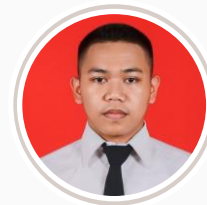
# Anggota Tim



**Nayaka Syahreal Al Kanaka**  
Leader of RND



**Rafly Rizqullah Yusuf**  
Fullstack Developer































**Muhammad Viko Ramayudha**  
Fullstack Developer

# Konfidensial

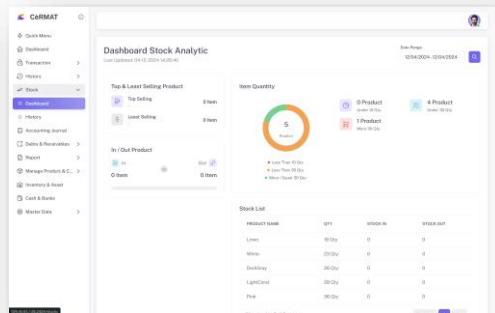
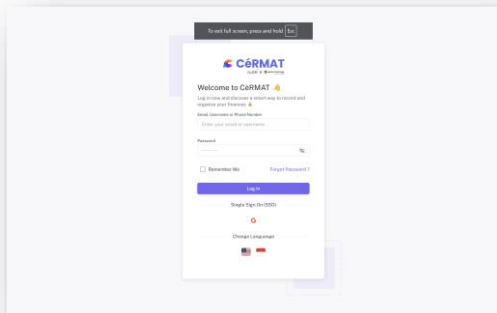
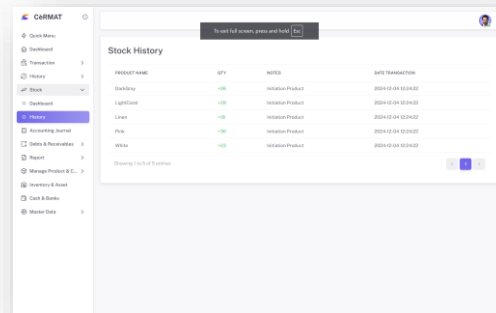
Beberapa dokumen pada project Cermat Accounting seperti Blueprint, Functional Specification Document (FSD), Entity Relationship Diagram (ERD), Product Specification Document (PRD) bersifat rahasia dan merupakan informasi konfidensial perusahaan.

# Timeframe

<input type="checkbox"/>	Type	#	Key	Summary	Status	Assignee	Due date	Priority	Labels	+
<input type="checkbox"/>		CERMAT-29	↳ CERMAT-55	As a BE, i want create API for store a sale	ON TESTING	Rafly Rizqullah Yusuf		=		
<input type="checkbox"/>		CERMAT-29	↳ CERMAT-57	As a BE, i want create API for void sale	TO DO	Rafly Rizqullah Yusuf		=		
<input type="checkbox"/>		CERMAT-64	↳ CERMAT-66	As a Fullstack, implement multi language in transaction	ON TESTING	Rafly Rizqullah Yusuf		=		
<input type="checkbox"/>		CERMAT-64	↳ CERMAT-69	As a Fullstack, implement multi language in Authentication	ON TESTING	Rafly Rizqullah Yusuf		=		
<input type="checkbox"/>		CERMAT-79	↳ CERMAT-81	As a Frontend, i want make sure all input validation in proces...						
<input type="checkbox"/>		CERMAT-79	↳ CERMAT-82	As a Fullstack, i want make feature for delete user						
<input type="checkbox"/>		CERMAT-79	↳ CERMAT-83	As a Frontend, i want make button whatsapp when clicked wi...						
<input type="checkbox"/>		CERMAT-79	↳ CERMAT-84	As a Frontend, i want after add Vendor & Customer it will aut...						
<input type="checkbox"/>		CERMAT-79	↳ CERMAT-85	As a Backend, i want make unique customer name validation						
<input type="checkbox"/>		CERMAT-79	↳ CERMAT-86	As a Backend, i want make unique vendor name validation						
<input type="checkbox"/>		CERMAT-79	↳ CERMAT-87	As a Backend, i want make unique category name validation						
<input type="checkbox"/>		CERMAT-79	↳ CERMAT-88	As a Backend, fix issue on update product data						
<input type="checkbox"/>		CERMAT-79	↳ CERMAT-89	As a Backend, i want make product can't be deleted when th...						
<input type="checkbox"/>		CERMAT-76	↳ CERMAT-96	As a Fullstack, create feature for manage asset & inventory						

<input type="checkbox"/>	Type	#	Key	Summary	Status	Assignee	Due date	Priority	Labels	+
<input type="checkbox"/>		CERMAT-16	↳ CERMAT-17	Create initial project with Laravel 11	DONE	Rafly Rizqullah Yusuf		=		
<input type="checkbox"/>		CERMAT-18	↳ CERMAT-19	As a BE, i want create a migration for products table	ON TESTING	Rafly Rizqullah Yusuf		=		
<input type="checkbox"/>		CERMAT-19	↳ CERMAT-20	As a BE, i want create a migration & factory for companies ta...	ON TESTING	Rafly Rizqullah Yusuf		=		
<input type="checkbox"/>		CERMAT-19	↳ CERMAT-22	As a BE, i want create a migration for customers table	ON TESTING	Rafly Rizqullah Yusuf		=		
<input type="checkbox"/>		CERMAT-19	↳ CERMAT-23	As a BE, i want create a migration for vendors table	ON TESTING	Rafly Rizqullah Yusuf		=		
<input type="checkbox"/>		CERMAT-18	↳ CERMAT-25	As a Fullstack, i want create a CRUD for customers	ON TESTING	Rafly Rizqullah Yusuf		=		
<input type="checkbox"/>		CERMAT-36	↳ CERMAT-39	As a Fullstack, i want create a Index page for manage product	ON TESTING	Rafly Rizqullah Yusuf		=		
<input type="checkbox"/>		CERMAT-36	↳ CERMAT-44	As a Fullstack, i want create a service store & update product...	ON TESTING	Rafly Rizqullah Yusuf		=		
<input type="checkbox"/>		CERMAT-36	↳ CERMAT-43	As a Fullstack, i want create a factory & model for Category P...	ON TESTING	Rafly Rizqullah Yusuf		=		
<input type="checkbox"/>		CERMAT-36	↳ CERMAT-46	As a Fullstack, re-layout menu product and category as pare...	ON TESTING	Rafly Rizqullah Yusuf		=		
<input type="checkbox"/>		CERMAT-29	↳ CERMAT-53	As a BE, i want create migration & model for sales & sale_ite...	ON TESTING	Rafly Rizqullah Yusuf		=		
<input type="checkbox"/>		CERMAT-29	↳ CERMAT-55	As a BE, i want create API for store a sale	ON TESTING	Rafly Rizqullah Yusuf		=		
<input type="checkbox"/>		CERMAT-29	↳ CERMAT-57	As a BE, i want create API for void sale	TO DO	Rafly Rizqullah Yusuf		=		
<input type="checkbox"/>		CERMAT-64	↳ CERMAT-66	As a Fullstack, implement multi language in transaction	ON TESTING	Rafly Rizqullah Yusuf		=		

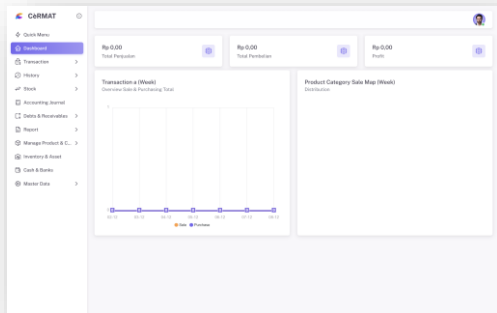
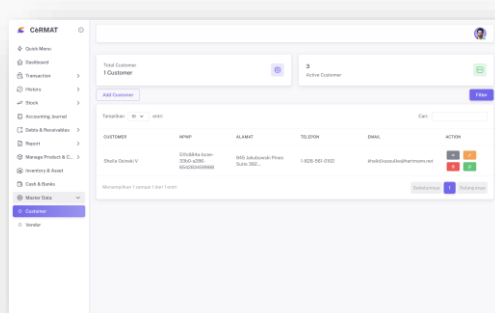


**Stock History**

PRODUCT NAME	QTY	NOTES	DATE
Loan	1000	Initiation Product	2024-10-04 02:00:00
LightCard	1000	Initiation Product	2024-10-04 02:00:00
Link	1000	Initiation Product	2024-10-04 02:00:00
Pink	1000	Initiation Product	2024-10-04 02:00:00
White	1000	Initiation Product	2024-10-04 02:00:00

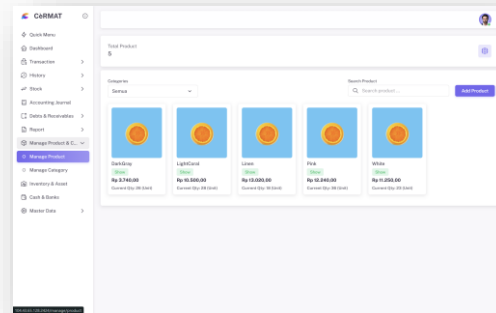
Showing 1 of 5 of 5 items

**Transaction a (Wholesale)**  
Transaction Date: 2024-10-04

**Transaction a (Wholesale)**

DATE	TIME	QTY	PRICE	TOTAL
2024-10-04	02:00	1000	1000	1000

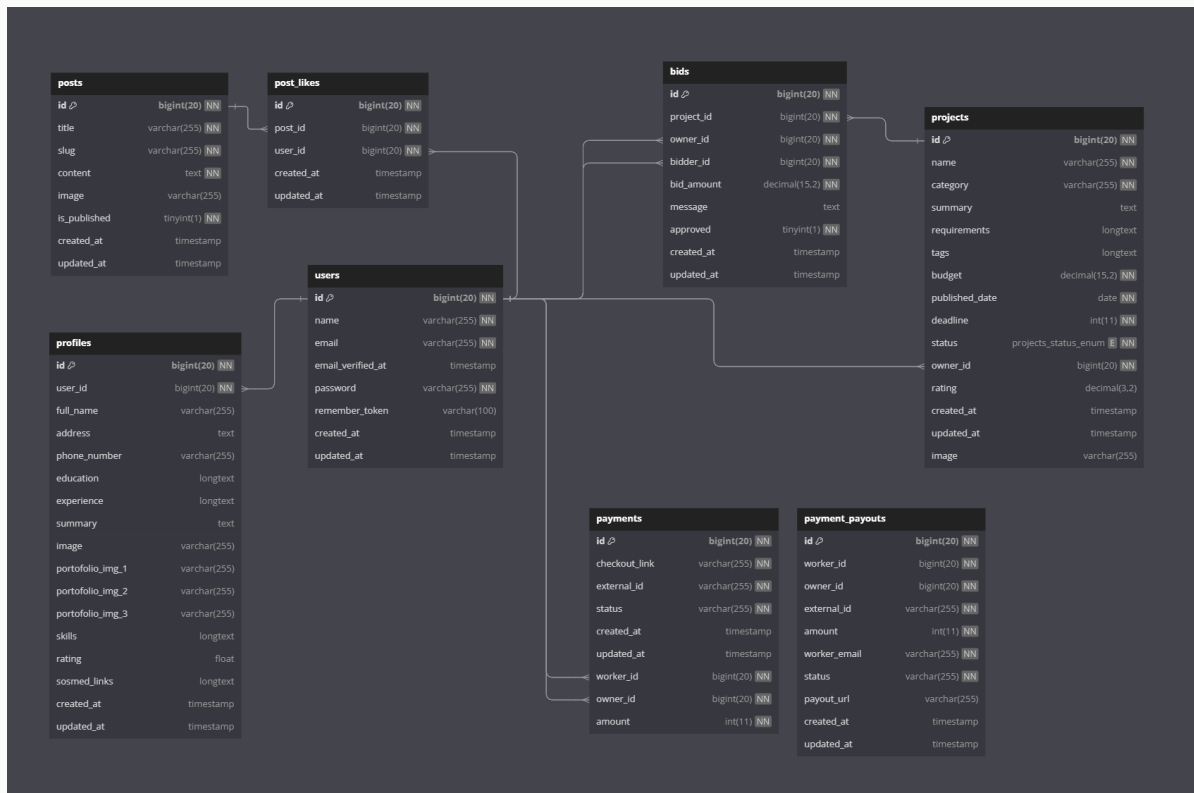






















**Workspace** adalah aplikasi web berupa portal freelancer yang mempertemukan orang yang memiliki proyek yang ingin dikerjakan (owner) dengan orang yang akan mengerjakan proyek tersebut (worker/freelancer).





















**Workspace** pada awalnya hanyalah sebuah ide abstrak dari salah satu ide dari program GNOVATION, GSI Innovation, dan hingga kini belum memiliki dokumen untuk pengembangannya. Lead dari RND yang lama menyarankan saya untuk mengembangkan Workspace.

# ERD Workspace



# Timeframe

NO	HARI	TANGGAL	Status	KETERANGAN	PARAF
1	Kamis	01/08/2024	WFO	Onboarding to GSI, Introduction Session	
2	Jumat	02/08/2024	WFO	Introduction to Laravel Framework	
3	Senin	05/08/2024	WFO	Practicing Laravel Development (Prototyping Project Laravel)	
4	Selasa	06/08/2024	WFO	Develop Workspace Core Application	
5	Rabu	07/08/2024	WFO	Develop Workspace, Enroll Cermat Accounting Web Application to UMKM Fostered by United Tractors in LPB Cakung	
6	Kamis	08/08/2024	WFO	Diving into Project Management.	
7	Jumat	09/08/2024	WFO	Learning about Work Breakdown Structure, Technical Specification Document.	
8	Senin	12/08/2024	WFO	Learning: Project Management Essentials.	
9	Selasa	13/08/2024	WFO	Learning Project Management Tools: Trello, Monday, ClickUp.	
10	Rabu	14/08/2024	WFO	Develop Workspace	
11	Kamis	15/08/2024	WFO	Develop Workspace: Portal Freelancer	
12	Jumat	16/08/2024	WFO	August Competition	
13	Senin	19/08/2024	WFO	Develop Workspace : Converting Html code to Blade	
14	Selasa	20/08/2024	WFO	Helping Business to Update GSI Website	
15	Rabu	21/08/2024	WFO	Develop Workspace : Make Login and Register and Authentication	
16	Kamis	22/08/2024	WFO	Develop Workspace : Refactoring, Separating Navbar and Footer	
17	Jumat	23/08/2024	WFO	Develop Workspace : Updating Project Information	
18	Senin	26/08/2024	WFO	Helping Business to Update GSI Website	
19	Selasa	27/08/2024	WFO	Develop Workspace : Matching Looping Projects Data,	
20	Rabu	28/08/2024	WFO	Develop Workspace : Fixing Tags Input	
21	Kamis	29/08/2024		SICK LEAVE	
22	Jumat	30/08/2024	WFO	Develop Workspace : Add Pagination	

NO	HARI	TANGGAL	Status	KETERANGAN	PARAF
1	Senin	9/2/2024	WFO	GSI News - Global Service Website Update	
2	Selasa	9/3/2024	WFO	Develop Workspace : Search Input	
3	Rabu	9/4/2024	WFO	Develop Workspace : Search and Filter Input	
4	Kamis	9/5/2024	WFH	Develop Workspace : Profile User Information	
5	Jumat	9/6/2024	WFO	Develop Workspace : Profile User Authorization Owned Project	
6	Senin	9/9/2024	WFO	Develop Workspace : Bidding Project Features	
7	Selasa	9/10/2024	WFO	Develop Workspace : Bidding Project, Authorization for Owner and Bidder	
8	Rabu	9/11/2024	WFO	Develop Workspace : Image Upload	
9	Kamis	9/12/2024	WFO	Develop Workspace : Verification Email	
10	Jumat	9/13/2024	WFO	Develop Workspace : Blog	
11	Senin	9/16/2024	WFO	Develop Workspace : Optimizing error page and blogs	
12	Selasa	9/17/2024	WFO	Develop Workspace : Testing Google Drive Upload	
13	Rabu	9/18/2024	WFO	Develop Workspace : Improve OTP Email Verification view	
14	Kamis	9/19/2024	WFO	Develop Workspace : Firebase configuration as a realtime database for chat features	
15	Jumat	9/20/2024	WFO	Develop Workspace : Optimizing chat features	
16	Senin	9/23/2024	WFO	Introduction to Flutter in Google IDX	
17	Selasa	9/24/2024	WFO	Develop Workspace : User Search and Filter	
18	Rabu	9/25/2024	WFO	Develop Workspace : About Page and Footer update	
19	Kamis	9/26/2024	WFO	Develop Workspace : Updating Project Closed and Unapproved Project	
20	Jumat	9/27/2024	WFO	Introduction Xendit Payment Gateway	

# Features

1. **Login SSO Google & Facebook** : Pengguna dapat login menggunakan akun Google atau Facebook.
2. **OTP Verifikasi Email** : Verifikasi email melalui kode OTP.
3. **Bidding ( *tawar - menawar* )** : Mengajukan penawaran harga untuk proyek.
4. **Realtime Chat** : Komunikasi langsung antara klien dan freelancer.
5. **Deposit / Pembayaran** : Sistem pembayaran aman dengan opsi deposit.
6. **Portofolio** : Menampilkan karya atau proyek yang telah selesai.
7. **Pencarian Proyek dan Freelancer** : Freelancer dapat mencari proyek atau pekerjaan sesuai kategori dan klien dapat melihat freelancer yang berkompeten.
8. **Rating dan Review** : Memberikan ulasan dan rating untuk freelancer atau proyek klien.
9. **Blog** : Berbagi artikel, tips, atau berita terkait industri.
10. **History** : Riwayat transaksi dan proyek.

# Technologies

## PROGRAMMING LANGUAGE & DATABASE



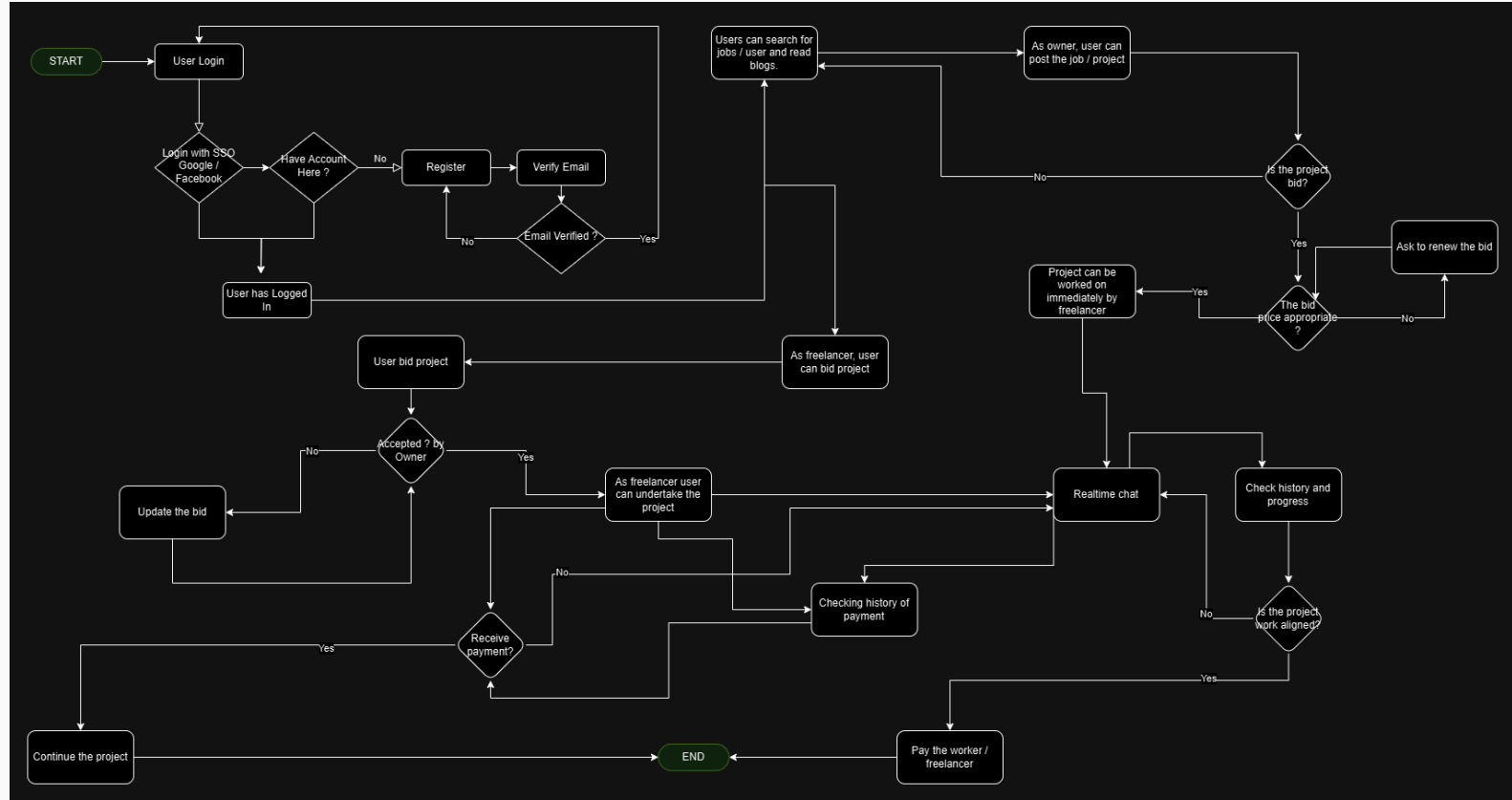
## TOOLS AND IDE

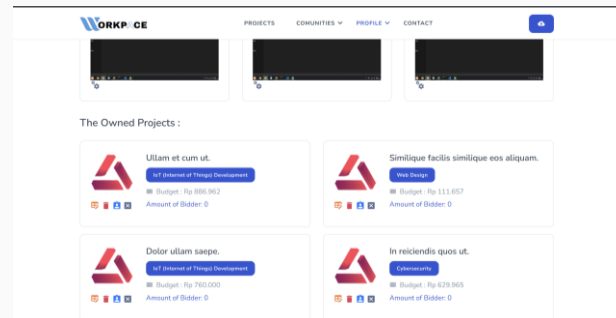
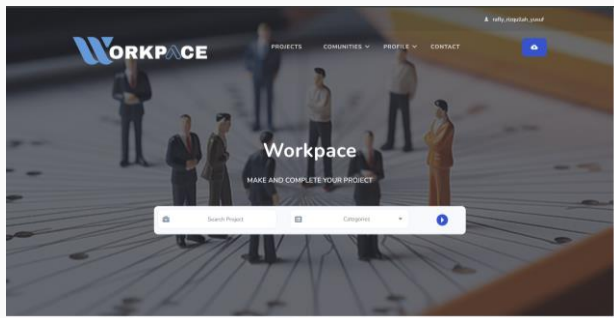
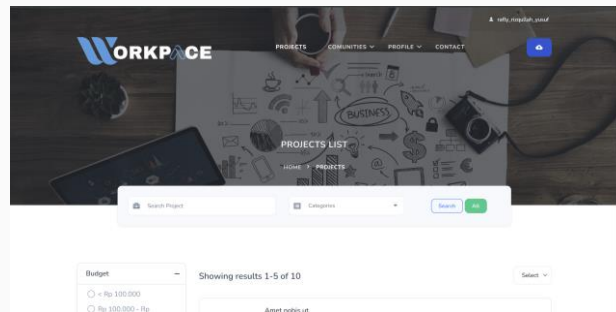
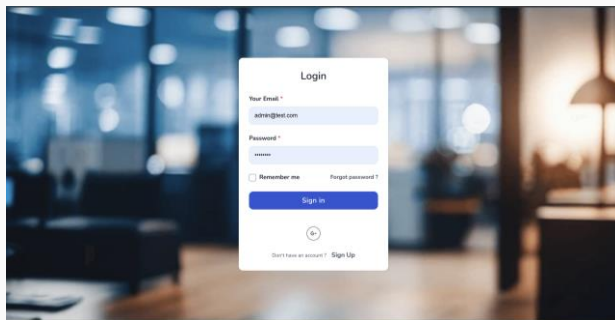


## 3rd PARTY LIBRARY



# Flowchart







# Problematika

## Masalah

- Pemahaman mengenai quality code, clean code, dan pengelolaan kode yang baik masih perlu ditingkatkan.
- Cenderung memprioritaskan penyelesaian tugas daripada kualitas kode.
- Komunikasi mengenai proyek kurang efektif.

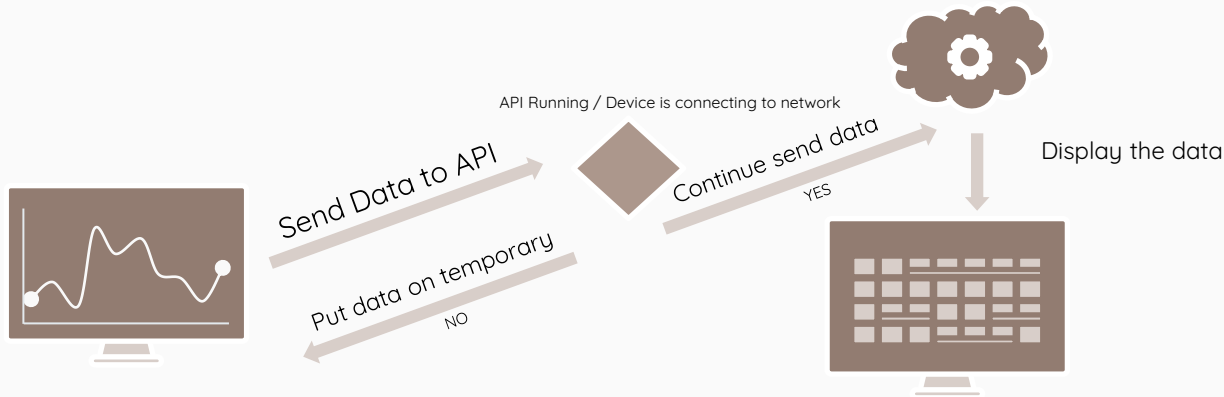
## Dampak

- 1 Kurangnya akses dan pemeliharaan mengakibatkan kesulitan dalam mengingat lokasi penyimpanan kode.
- 2 Terdapat kebingungan terkait desain fitur, penempatan fitur, serta alur logika aplikasi
- 3 Kurangnya pemeliharaan atau maintenance juga menyebabkan banyak kerusakan pada library atau komponen pihak ketiga yang digunakan dalam kode.

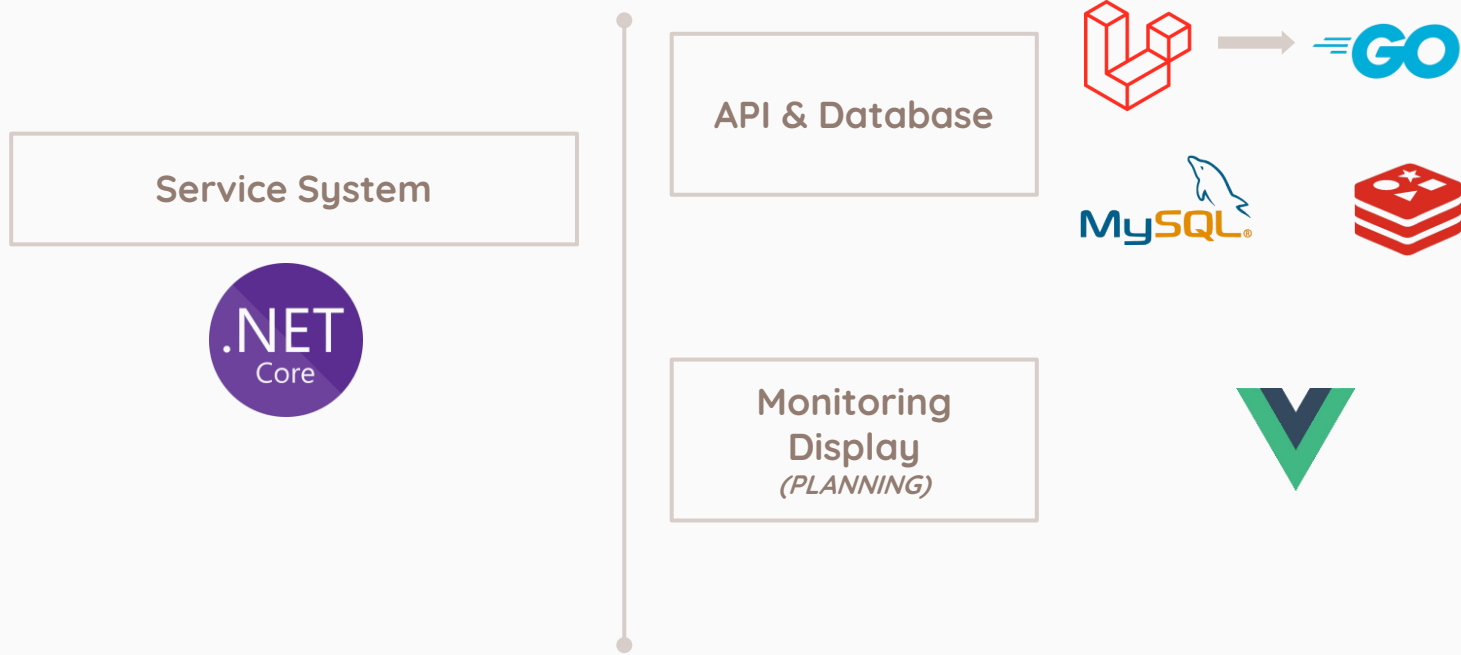
Meskipun sempat berencana untuk melakukan refactoring besar-besaran, saya memutuskan untuk menunda rencana tersebut hingga waktu yang lebih tepat.

## SYSTEM SERVICE MONITORING

Salah satu inovasi dan gagasan dari Lead R&D saat ini, mengembangkan sistem untuk memonitor kondisi, situasi, dan status aset, khususnya laptop dan computer. Sistem akan berjalan di latar belakang sebagai layanan (service), sehingga tidak terdeteksi sebagai aplikasi.

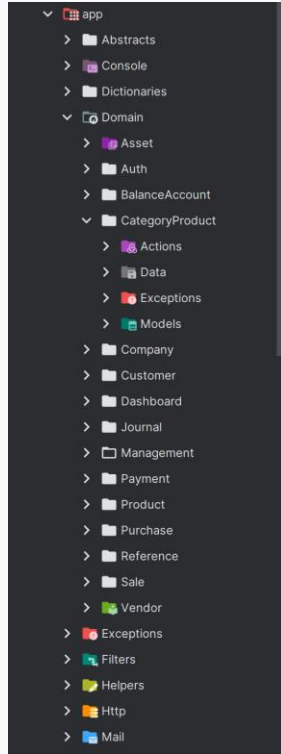


```
{
  "DeviceName": "LAPTOP-BQV6RM86",
  "BatteryInfo": {
    "BatteryStatus": 2,
    "EstimatedChargeRemaining": "40%",
    "EstimatedRunTime": "06:28:00",
    "IsCharging": true,
    "BatteryStatusDescription": "Connected and charging (sedang diisi)"
  },
  "SystemInfo": {
    "LastBootTime": "2024-11-17T17:01:33.5+07:00",
    "SystemUptime": "00:27:43.3437009"
  },
  "DiskInfo": {
    "TotalSize": "231 GB",
    "FreeSpace": "56 GB",
    "UsedSpace": "174 GB",
    "PercentUsed": "75 %"
  },
  "WiFilInfo": {
    "SSID": "GSI",
    "State": "connected",
    "SignalQuality": "93%",
    "RadioType": "802.11ac",
    "Authentication": "WPA2-Personal"
  },
  "TemperatureInfo": {
    "Temperature": 0
  },
  "Created_At": "17-November-2024 17:29:16",
  "SendToApiOnTime": false
}
```

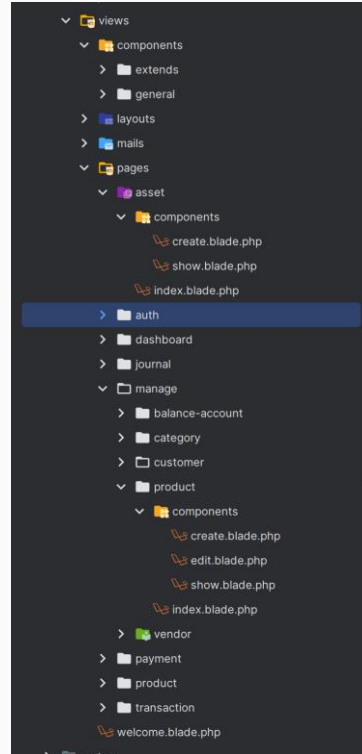


# KESIMPULAN

## Domain Drive Design



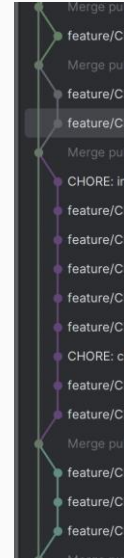
## Consistent Naming



## Commit Message

```
feature/CERMAT-66: As a Fullstack, implement multi langu Rizqullah Yusuf*
feature/CERMAT-69: As a Fullstack, implement multi langu Rizqullah Yusuf*
```

Using Git properly and correctly, and how to avoid conflicts



# SARAN & MASUKAN

# Thanks!

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