UTM

UNIVERSITI TEKNOLOGI MALAYSIA

SYSTEM ANALYSIS AND DESIGN (SECD2613)

PROJECT PROPOSAL AND PLANNING

DR ROZILAWATI BINTI DOLLAH

NAME	MATRIX NUMBER
RADHA D/O MORGAN	SX220359ECRHS01
LOUIS PAUL S/O KUALIANTAISAMI	SX240262ECRHS01
SRITHAR S/O NARAYANAN	SX221591ECJHF01

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1.0 INTRODUCTION

Grab is a popular mobile app used in Southeast Asia that offers many everyday services. It started as a ride-hailing app (like Uber), but now it's a super app—meaning it combines many services in one app. Grab is a leading Southeast Asian super app that offers services like ride-hailing, food delivery, and digital payments. This proposal focuses on enhancing and analyse the existing Grab system of food delivery and grocery and package delivery to address performance inefficiencies and improve the overall user experience. Through a systematic approach in system analysis and design, the project will identify critical issues and propose viable solutions for optimization. Grab has emerged as a dominant force in the on-demand economy of Southeast Asia. Initially launched as a ride-hailing platform, Grab has expanded its services to include transportation, food delivery, financial services, and more.

2.0 BACKGROUND STUDY

2.1 ORGANIZATIONAL BACKGROUND

Grab Holdings Inc., founded in 2012 in Malaysia and now headquartered in Singapore, provides a range of services including Grab Car, Grab Food, and Grab Pay. It operates extensively in Malaysia, catering to millions of users daily. As Grab continued to diversify its services, it rebranded once again in 2016, dropping the "Taxi" from its name and becoming simply "Grab."

The new name reflected the company's vision to provide a broader range of on-demand transportation services beyond taxis. In subsequent years, Grab expanded its services beyond transportation. It introduced Grab Car, which allowed users to book private cars, and later launched Grab Food for food delivery, grocery and package delivery, Grab Express for courier services, and Grab Pay for digital payments. Grab also ventured into financial services through Grab Financial, offering services such as digital wallets, lending, and insurance. Grab has continued to grow and innovate, securing significant funding from various investors and partnering with local governments and businesses to expand its reach and offer new services. Grab remains one of the leading technology companies in Southeast Asia, serving millions of users across multiple countries.

2.2 SYSTEM SCOPE

2.2.1 INCLUDED

- Ride-hailing services (Grab Car).
- Food delivery (Grab Food).
- Grab Mart (Groceries & Essentials).
- Grab Express (Delivery Services).
- E-wallet and payment services (Grab Pay).
- Grab Rewards.
- User feedback and support portal.

2.2.2 NOT INCLUDED

- E-Commerce (Full Online Shopping) Grab Mart offers groceries and daily essentials, but it's not a full e-commerce platform like Shopee or Lazada.
- Hotel or Flight Booking- unlike apps like Traveloka or Agoda, Grab doesn't offer hotel or vacation bookings.
- Partner (merchant/driver) internal systems.
- Logistics and fleet management.
- Regulatory compliance modules.

2.3 BENEFITS

- Better user satisfaction and loyalty.
- Faster response and load times.
- More intuitive navigation and functionality.
- Enhanced transaction tracking and transparency.
- Wide Range of Services.

2.0 PROBLEM STATEMENT

The current Grab application, while functional, suffers from several issues. These include inconsistent response times during peak usage, a complex user interface that confuses new users, and irregular fare pricing that leads to dissatisfaction. The system's feedback and support features

are not easily accessible, which hinders timely problem resolution. These problems are interrelated as performance and usability directly influence user retention and service efficiency.

4.0 PROPOSED SOLUTIONS AND FEASIBILITY STUDY

4.1 PROPOSED SOLUTIONS

- Redesign the user interface for clarity and ease-of-use.
- Implement AI-driven features: Personalized suggestions based on time of day, weather, mood (user-set), or dietary preferences. Users discover meals they're more likely to enjoy and order.
- Real-time queue & prep time feature: Display how many orders are ahead and estimated prep time. Sets better expectations and reduces cancellations.

4.2 FEASIBILITY STUDY

4.2.1 TECHNICAL FEASIBILITY:

Uses existing cloud platforms and scalable architecture to handle additional features.

4.2.2 OPERATIONAL FEASIBILITY:

Minimal disruption to current workflows; new features align with existing operations.

4.2.3 ECONOMIC FEASIBILITY:

Estimated Cost (Development)	**Estimated Value (RM)**
Hardware	20000
Software	30000
Consultant	5000
Training	2000
Team and Staff Salaries	10000
Marketing	12000
Total Cost	79000

Estimated Cost (Production Cost)	Estimated Value (RM)
Supplies	10000
IS support	2000
Maintenance	3000

Estimated Benefit	Value (RM)
Inventory savings	2000 per week

Assumptions	
Discount rate	10%
Sensitivity factor (cost)	1.1
Sensitivity factor (benefits)	0.9
Annual change in production costs	7%
Annual change in benefits	5%

COSTS		Year 0	Year 1	Year 2	Year 3
Development Cost (One-time)					
Hardware	20000	**22000**			
Software	30000	**33000**			
Consultant	5000	**5500**			
Training	2000	**2200**			
Team and Staff Salaries	10000	**11000**			
Marketing	12000	**13200**			
Total (Development Cost)		**86900**			
Production Cost					
Supplies	10000		11000	11770	12594
IS Support	2000		2200	2354	2519
Maintenance	3000		3300	3531	3778
Annual Production Costs			**16500**	**17655**	**18891**
(PRESENT VALUE)			**15000**	**14591**	**14193**
ACCUMULATED COSTS			**101900**	**116491**	**130684**

BENEFITS		Year 0	Year 1	Year 2	Year 3
Inventory Savings	2000	104000	93600	98280	103194
(PRESENT VALUE)			**85091**	**81223**	**77531**
ACCUMULATED BENEFITS			85091	166314	243845
GAIN OR LOSS			-16809	49823	113161
PROFITABLE INDEX		**1.302202**			

Table 4.3 Cost-Benefit Analysis (CBA)

5.0 OBJECTIVES

- Improve Grab app usability and response time.
- Enhance feedback and support capabilities.
- Maintain scalable infrastructure.

6.0 SCOPE OF THE PROJECT

6.1 IN SCOPE

- Frontend redesign (user app).

- Backend optimization (response and load management).
- Wallet and support system improvements.

6.2 OUT OF SCOPE

- Driver/merchant app backend.
- Corporate or government modules.

7.0 PROJECT PLANNING

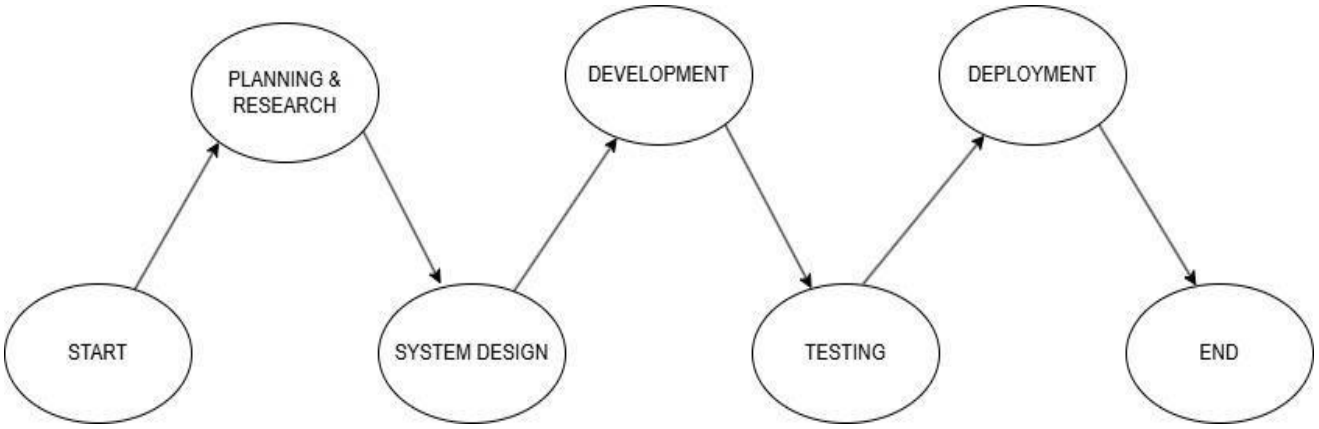
7.1 HUMAN RESOURCE ALLOCATION

Role	Name
Project Manager	Radha Morgan
System Analyst	Louis Paul
UI/UX Designer & Developer	Srithar Narayanan

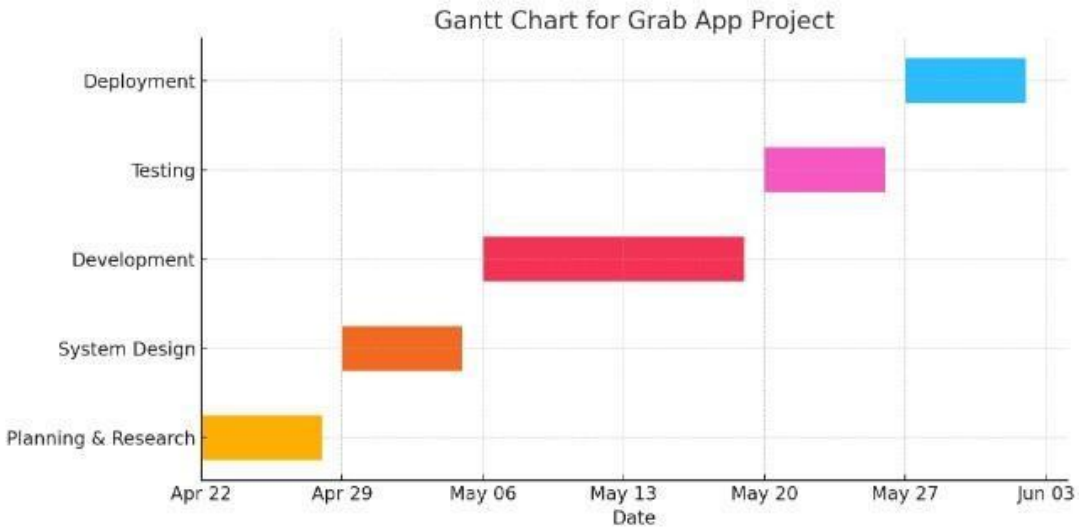
7.2 WORK BREAKDOWN STRUCTURE (WBS)

1. Requirements Gathering.
2. System Design and Mock up.
3. Frontend and Backend Development.
4. Testing and Debugging.
5. Deployment and Feedback Integration.

7.3 PERT CHART



7.4 GANTT CHART



8.0 BENEFIT AND OVERALL SUMMARY

By resolving technical inefficiencies and usability problems, the enhanced Grab App system will lead to higher customer satisfaction, increased usage, and better brand perception. This proposal is technically viable, economically justified, and operationally aligned with Grab's ongoing expansion and innovation strategies.