Feature:

Usage-Based Premiums: Users' insurance costs are determined by their driving behavior, including factors like distance, speed, braking, and more. This feature ensures that users pay a fair and personalized premium based on their actual risk.

Feature Prioritization Criteria:

Alignment with User Problem and Goal:

- How directly does this feature address the primary problem of users, which is the unfairness of annual insurance premiums for low-mileage drivers?
- This feature supports the project's goal of providing equal and personalized insurance pricing based on driving behavior.

User Impact:

- How much value does the "Usage-Based Premiums" feature bring to users in terms of cost savings and fair pricing?
- Will this feature significantly enhance the user experience and promote fairness in insurance costs?

Technical Feasibility:

- Consider the technical complexity of implementing the usage-based premium calculation. Can it be integrated effectively with data from GPS and driving behavior monitoring devices?
- Are there any potential technical challenges or limitations that need to be addressed?

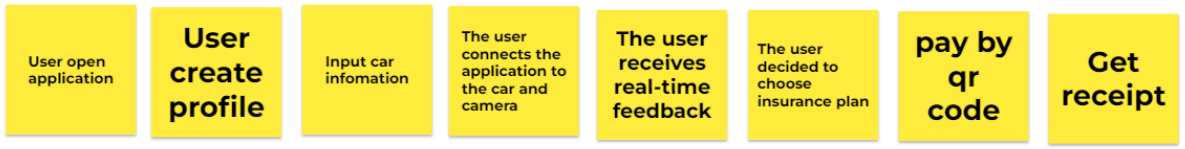
Competitive Advantage:

- Evaluate whether this feature will give your app a competitive edge in the insurance market by offering personalized pricing.
- Assess if other insurance providers are already offering similar features and if this feature will help you stand out.

ROI and Financial Viability:

Calculate the return on investment (ROI) and the potential impact on the company's financials. Assess the costs associated with implementing the feature, including data collection and processing, and compare them to the expected increase in revenue or cost savings due to more accurate premium pricing.

User Journey: Usage-Based Car Insurance App



Step 1: Start Application

- Users begin their Usage-Based Premiums auto insurance subscription by opening the application

Step 2: Profile Setup

- Users set basic information such as vehicle details and personal information.

Step 3: Usage-Based Premium Calculation

- The app starts collecting data on the user's driving behavior, including distance, speed, braking, and more.
- The user receives real-time feedback on their driving habits through the app, encouraging safer driving.

Step 4: Payment and Responsibilities

- Users pay for insurance using appropriate methods such as credit cards or online payment systems.
- The insurance company assumes responsibility for providing coverage based on the risks shown in the user's driving data.

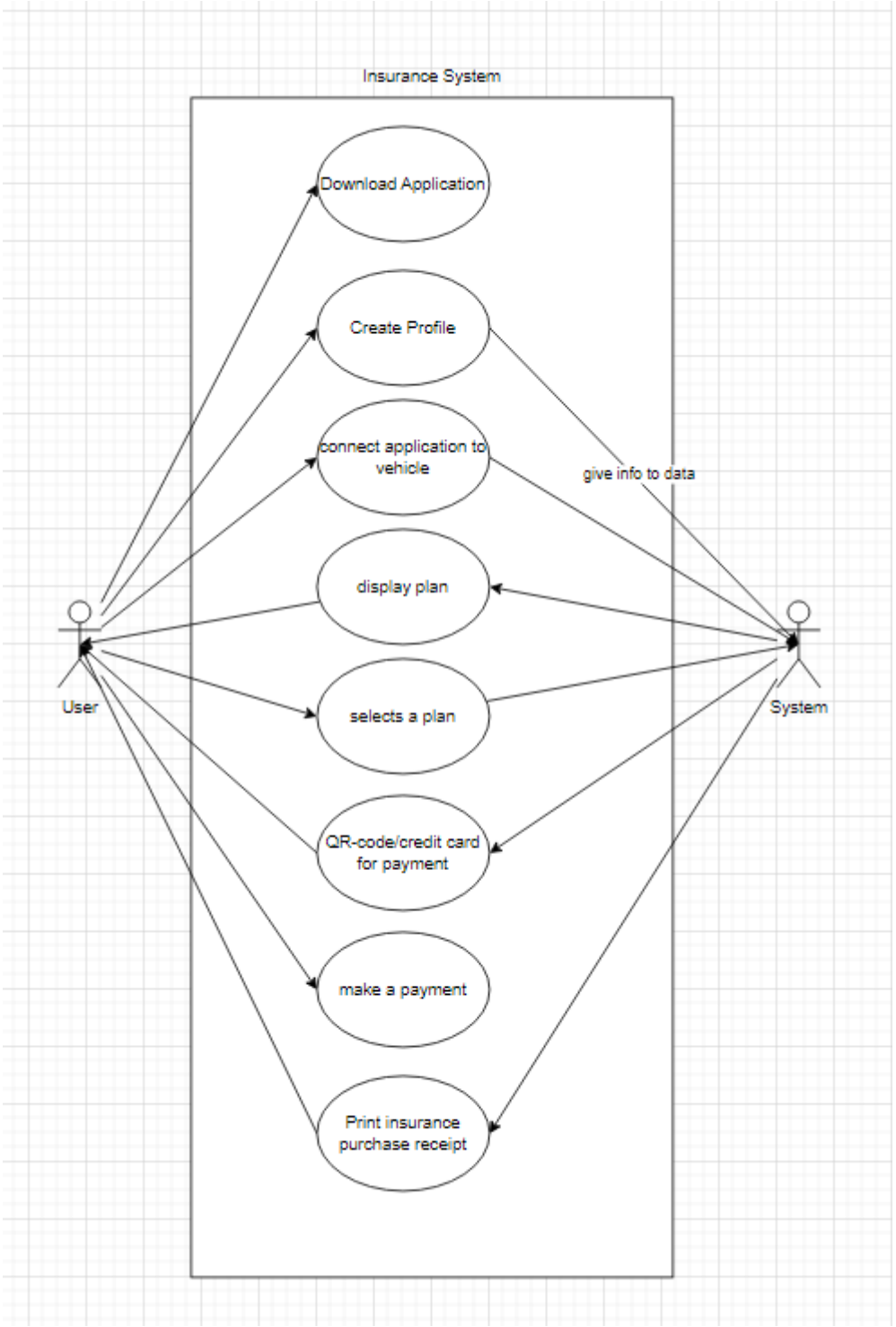
URS of user journey

URS01: The user can open the application and create the profile
URS02: The user connects the application to the car and camera (if the car has one).
URS03: The user receives real-time feedback on their driving habits through the app.
URS04: The user decides to purchase the usage-based insurance policy.

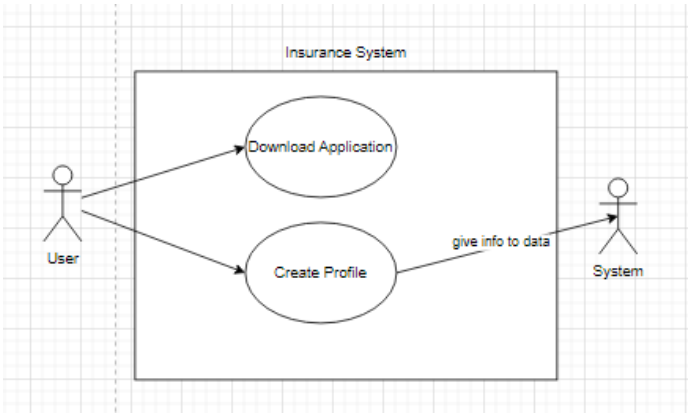
SRS of user journey

SRS01: The app starts collecting data on the user's driving behavior, including distance, speed, braking, and more.
SRS02: The app figures out a special price for your car insurance based on how you actually drive. It looks at things like how much you drive, how fast you go, and how you brake.
SRS03: The application creates a QR code or uses a credit card for payment.
SRS04: Print insurance purchase receipt.

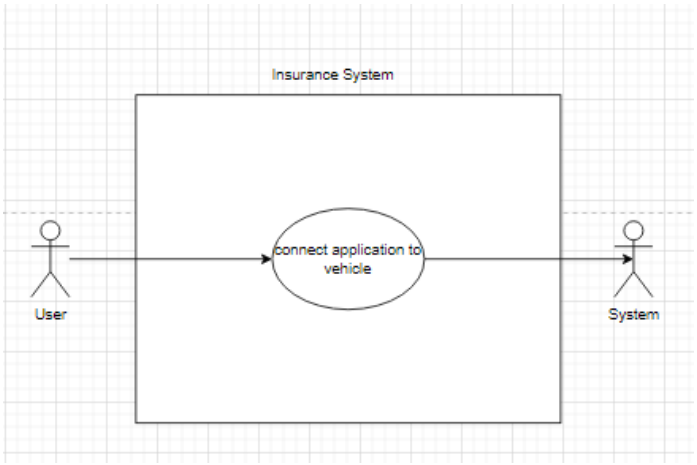
Use case diagram



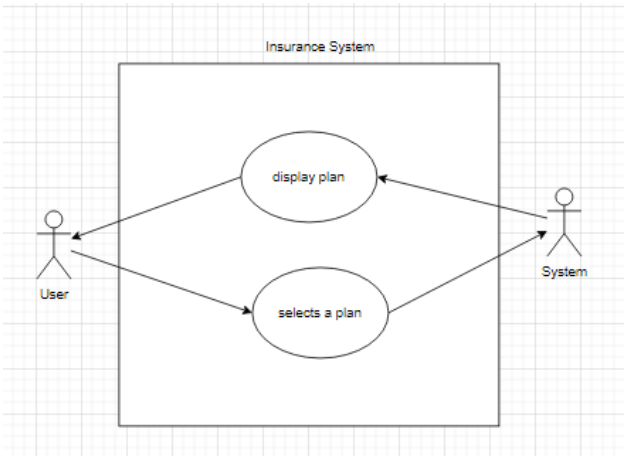
1. **UC-001:** Setup Profile and Car Information



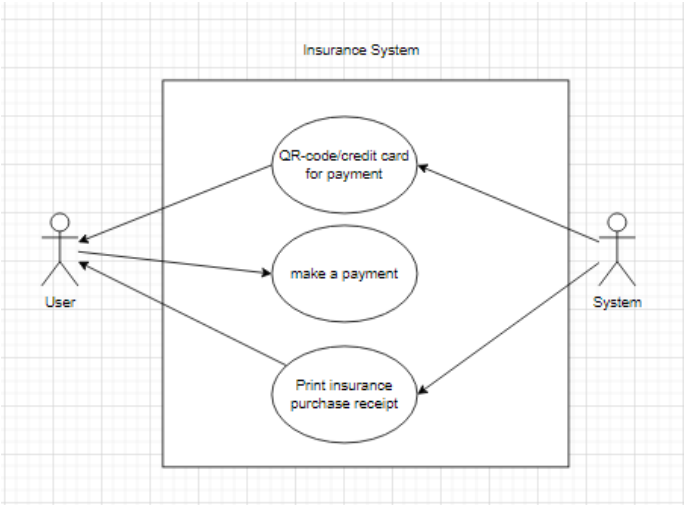
2. **UC-002:** Connects the application to the car and camera



3. **UC-003**: select Plan



4. **UC-003:** Payment



Use case description

Use Case ID	**UC-001**		
UseCase Name	**Setup Profile and Car Information**		
Created By	**Thiwakon S.**	**Last Update By**	**Phiriyakorn M.**
Date Created	**17/09/2023**	**LastRevision Date**	**18/09/2023**
Actors	**User(Customer)**		
Description	**Users set basic information such as vehicle details and personal information.**		
Trigger	**the User's set up a profile to use the application.**		
Preconditions	**- The user has access to the mobile application. - The user has downloaded and installed the Usage-Based Car Insurance App. - The user has access to a compatible vehicle with the necessary equipment for tracking driving behavior.**		

Use Case Input Specification			
Input	**type**	**Constraint**	**Example**
Name	**String**	**Must be a valid user information**	**John**
Surname	**String**	**Must be a valid user information**	**Chaorai**
Birt Date	**String**	**Must be valid user information**	**01/01/22**
Identification Card	**String**	**Must be valid user information**	**898-888-888-8888**
Address	**String**	**Must be a valid user information**	**CMU**

Vehicle details	**Image**	**Must be valid vehicle detail**	**-**
Vehicle Registration Book	**Image**	**Must be valid vehicle detail**	**-**
Driver's License	**Image**	**Must be valid vehicle detail**	**-**
Vehicle Inspection Certificate	**Image**	**Must be valid vehicle detail**	**-**

Post conditions	**- Profile has successfully setup**	
Normal Flows	**User**	**System**
	1. Open Application	
		2. The system will display the setup profile on page
	3. The user input information	
		4. The system will save information
Alternative Flow	**-**	
Exception Flow	**- Invalid Information Input** **- No Compatible Vehicle Available** **- Technical Issues**	
Assumption	**The user possesses valid information and can access the application.**	

Use Case ID	**UC-002**		
UseCase Name	**Connects the application to the car and camera**		
Created By	**Thiwakon S.**	**Last Update By**	**Phiriyakorn M.**
Date Created	**17/09/2023**	**LastRevision Date**	**18/09/2023**
Actors	**- User (customer)**		
Description	**The user connects the Application to their vehicle and, optionally, to the vehicle's camera if one is available. Connecting the application to the car and camera enables the app to collect real-time data on the user's driving behavior.**		
Trigger	**The users begin using the app and enable data collection from their vehicle.**		

Preconditions	- The user has downloaded and installed the application on their mobile device. - The user's vehicle is compatible with the application. - The user's vehicle is equipped with a camera, and the camera is operational.		
Use Case Input Specification			
Input	**type**	**Constraint**	**Example**
-	-	-	-
Post conditions	- The app is successfully connected to the user's vehicle, enabling real-time data collection on driving behavior.		
Normal Flows	**User**	**System**	
	1. The user clicks connect the application to the vehicle.		
		2. The system will connect with the vehicle.	
Alternative Flow	-		
Exception Flow	- The user's payment fails due to issues like insufficient funds or invalid payment details		
Assumption	The user's vehicle and application are connected successfully.		

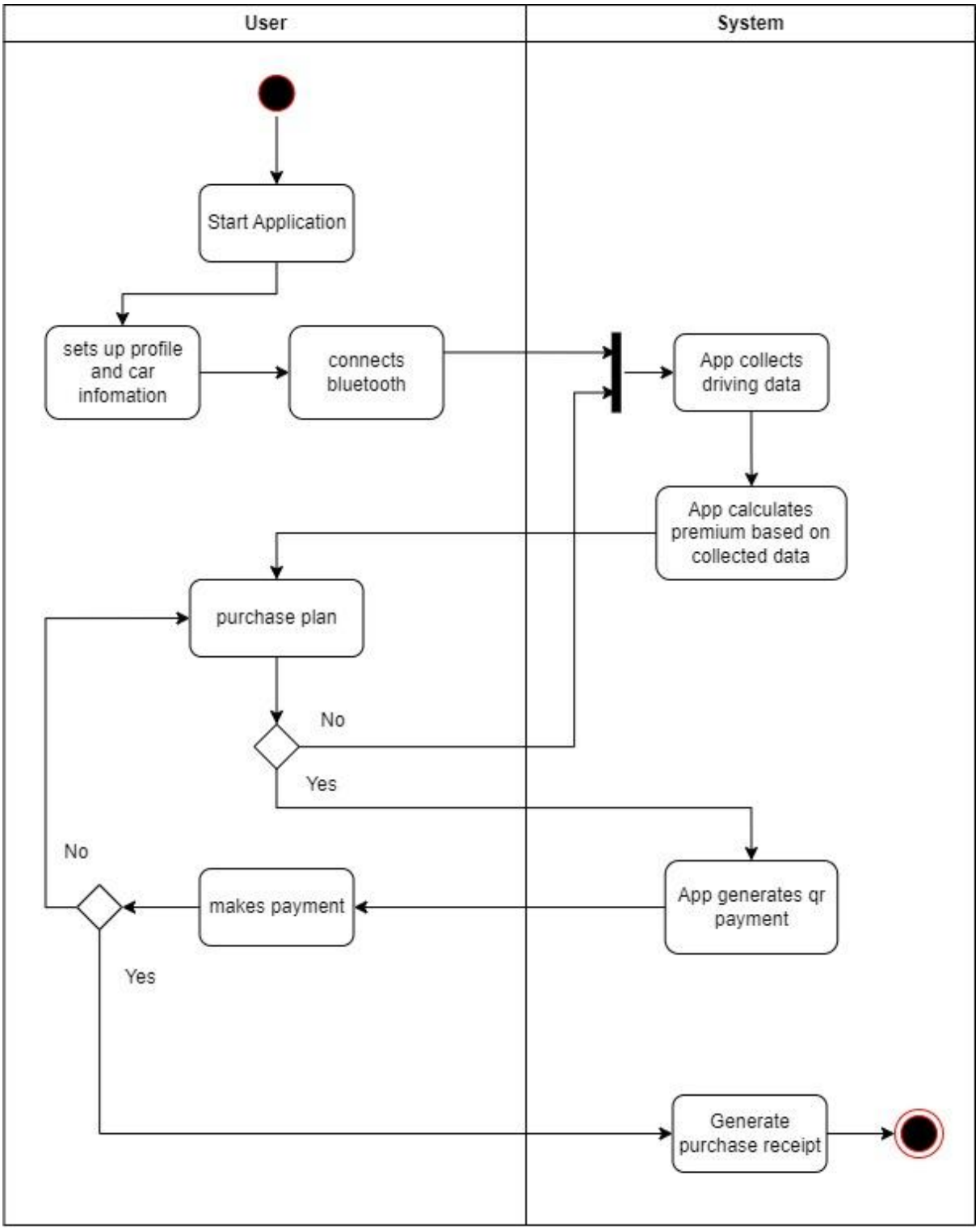
Use Case ID	**UC-003**		
UseCase Name	**Select plan**		
Created By	**Thiwakon S.**	**Last Update By**	**Phiriyakorn M.**
Date Created	**17/09/2023**	**LastRevision Date**	**18/09/2023**
Actors	- User (customer)		
Description	The user is a vehicle owner looking to purchase car insurance. They may be a first-time car owner or looking to switch insurance providers to find a more suitable plan.		
Trigger	The user's decision to proceed with the purchase of the usage-based insurance policy.		
Preconditions	- The user has received the calculated premium and coverage details. - The user has a valid payment method and financial means to purchase the policy.		
Use Case Input Specification			
Input	**type**	**Constraint**	**Example**

-	-	-	-
Postconditions	- The user has successfully completed the "Usage-Based Premium Calculation" use case. - The user has received the calculated premium and coverage details. - The user has a valid payment method and financial means to purchase the policy.		
Normal Flows	**User**	**System**	
		1. The system display plan.	
	2. The user selects a plan.		
Alternative Flow	-		
Exception Flow	- Mobile users can't use the internet. - The application has an error and can't connect. - The mobile is broken.		
Assumption	The user selects a successful plan.		

Use Case ID	**UC-004**		
UseCase Name	**Payment**		
Created By	**Thiwakon S.**	**Last Update By**	**Phiriyakorn M.**
Date Created	**17/09/2023**	**LastRevision Date**	**18/09/2023**
Actors	- User (customer) - System		
Description	The users make payments for their usage-based auto insurance using various methods.		
Trigger	The successful completion of the Payment.		
Preconditions	- The user has successfully completed the "Usage-Based Premium Calculation" use case. - The user has selected an insurance plan and received the calculated premium.		
Use Case Input Specification			
Input	**type**	**Constraint**	**Example**
Payment information	-	The input payment information must be accurate and valid.	**credit card details**
Post conditions	- The user has received real-time feedback on their driving habits. - The app has calculated a usage-based premium for the user. - The app has collected and processed the user's driving behavior data.		
Normal Flows	**User**	**System**	

		1. Application creates QR-code or shows account number for payment.
	2. The users make a payment.	
		3. Print the insurance purchase receipt.
Alternative Flow	**-**	
Exception Flow	**- The user's payment fails due to issues like insufficient funds or invalid payment details**	
Assumption	**The System processes payment successfully**	

Activity diagram



Non-functional requirement with fit criteria

- **Look and Feel**: The user interface should maintain a modern and intuitive design, ensuring ease of navigation and a visually appealing experience for users.

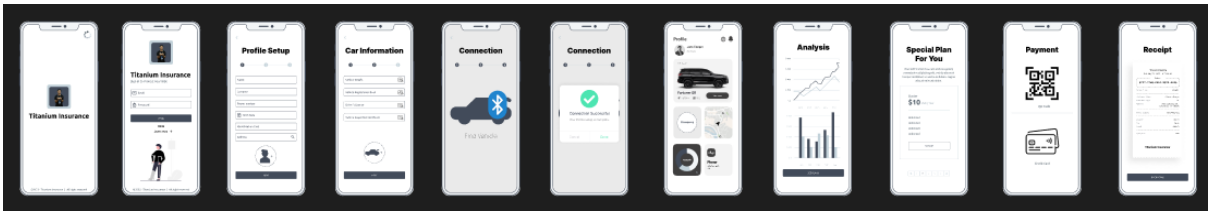
- **Usability and Humanity**: All users should have access to the system. according to web accessibility standards and provide clear instructions and user-friendly error messages to improve the overall user experience.

- **Performance Operational**: The system must handle a high volume of user data efficiently, ensuring quick data processing and minimal downtime, even during peak usage hours.

- **Maintainability and Support Security**: The codebase should be well-documented, modular, and easy to maintain, and regular security audits should be conducted to safeguard user data and privacy.

- **Cultural and Political Legal**: The system should comply with all applicable data privacy regulations and laws in the regions in which it operates. To ensure the protection of user information.

UI (wireframe or prototype)



https://www.figma.com/file/9zDiHZjyuXzPJ7IHGkLtYo/Usage-Based-Car-Insurance-App?type=design&node-id=0%3A1&mode=design&t=7YNHPzI0sJtQsyxl-1

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