



I N A M O T O & C O

TOYOTA

How might we ease people into trusting self-driving cars?

Self-driving cars are an inevitable part of our future and Toyota's business plan.

Recent studies have shown that consumers have serious apprehensions about their reliability and safety.





BUSINESS PROBLEM

TODAY

While looking towards the future, Toyota's current sales are stagnating, and competitors are beginning to catch up.

TOMORROW

As Toyota shifts its product strategy towards autonomous mobility, Toyota faces the challenge of easing consumers into trusting autonomous vehicles.


OPENING

KAIZEN

From Toyota's principle of continuous improvement, we see an opportunity to iteratively improve and extend the value proposition of Toyota's current products to their future concept offerings, providing an immediate & tangible preview of tomorrow.

PROPOSAL

Creating a transparent and meaningful relationship with the owner, Toyota Guardian looks out for their drivers throughout their ownership experience and builds trust with Toyota's technology today.





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CUSTOMER SEGMENT

LEASEHOLDER

Commits to a periodic payment plan and has short-term intentions to keep the car

BORROWER

Commits to a periodic payment plan and has long-term intentions to keep the car

PURCHASER

Financially stable and wants to own their car





CUSTOMER SEGMENT

LEASEHOLDER

Commits to a periodic payment plan and has short-term intentions to keep the car



FOCUSING ON LEASE

- 01** Makes return visit
- 02** More likely to be receptive to autonomous technology
- 03** Existing owner's aren't excluded





ADAPTER

An individual who is looking for a new car with thoughtful features to manage their ever changing responsibilities efficiently and safely.

NEEDS

- Appearing professional in some situations
- Understand new technology's impact on daily routine
- Comfortable ways to approach everyday tasks
- Safe options to enjoy driving

GOALS

- Confidence in investment decisions
- Ensure car accommodates changing needs
- Share unique experiences with others
- Safety of dependants

BEHAVIOURS

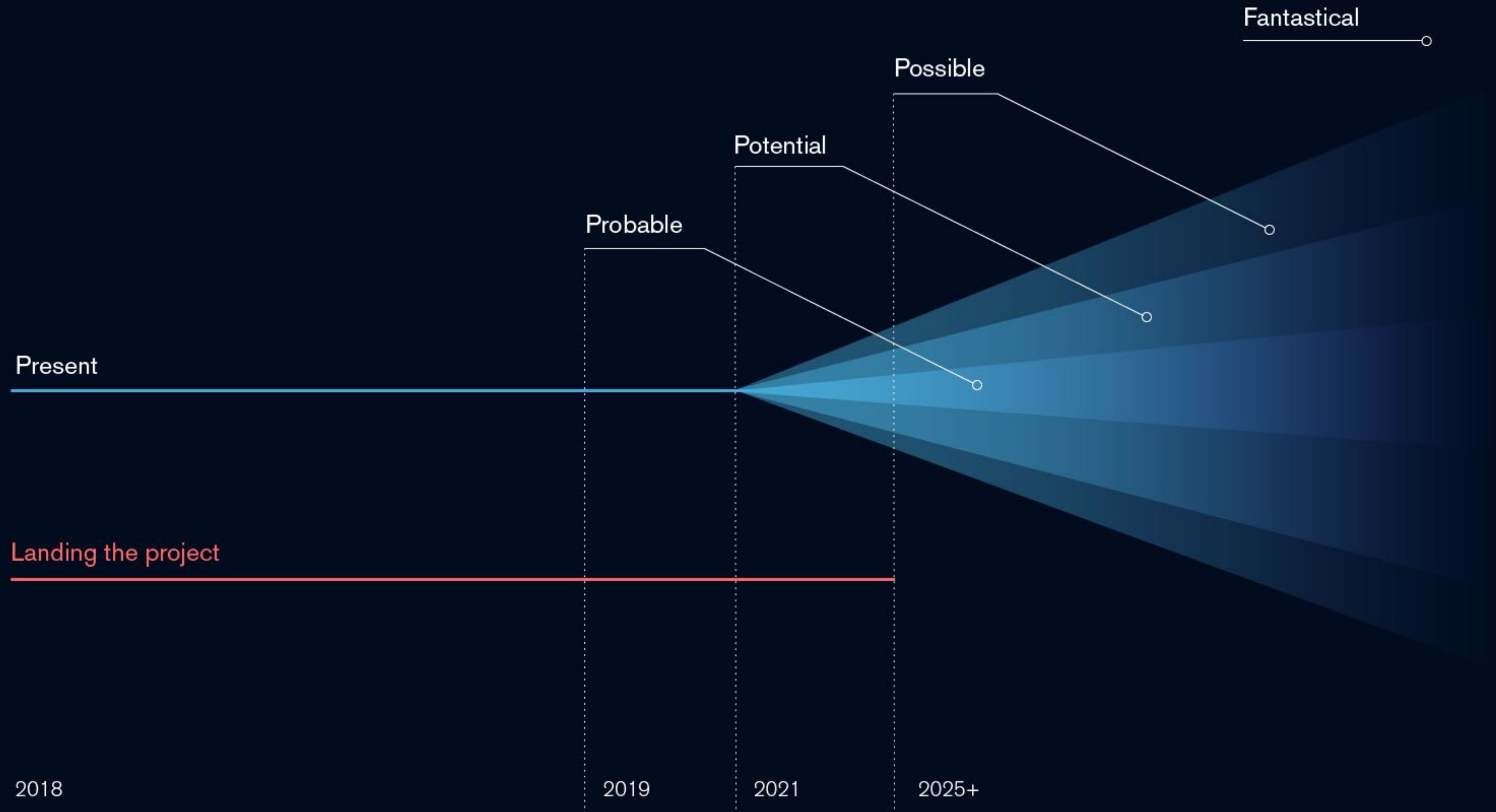
- Occupied with work activities
- Spends time evaluating the right purchase
- Provide transportation for dependents

PAINS

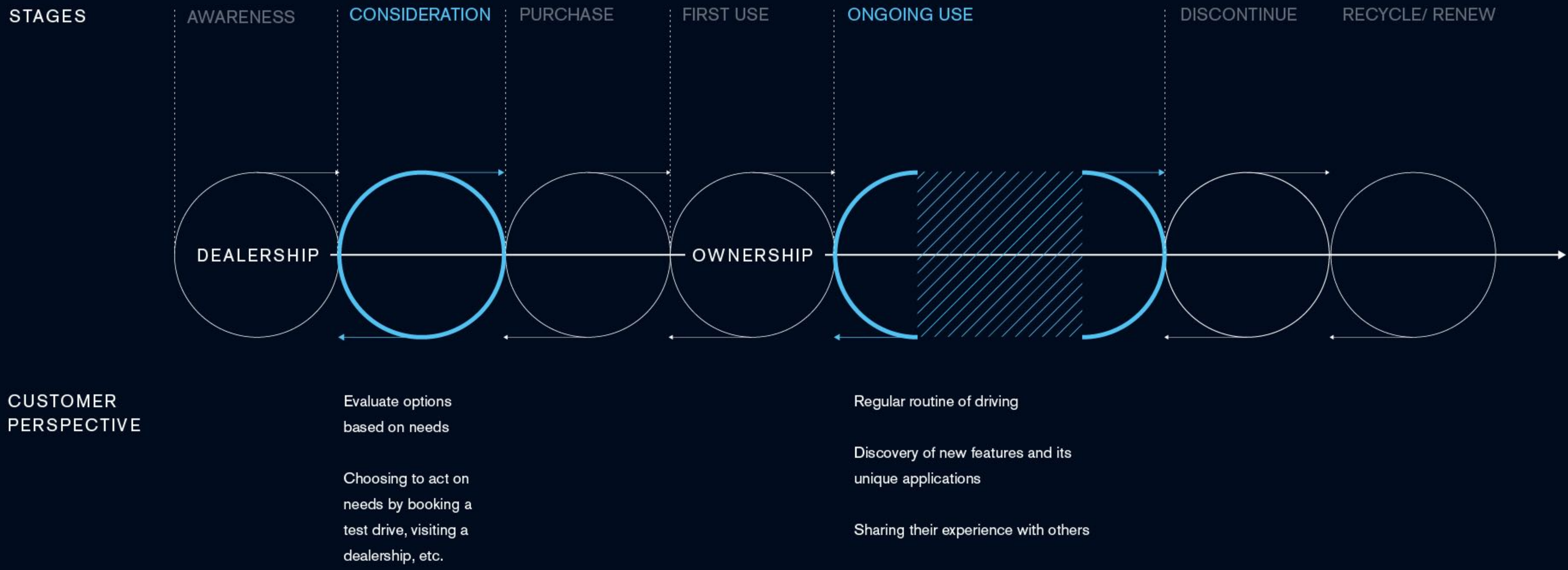
- Hard to understand how new features work
- Balance financial responsibilities and novelty
- Many car models to evaluate
- Justifying costs and find the best fit



FUTURE DIAGRAM



OUR INTERVENTION





ONGOING USE STAGE

STAGES

ENTICE

ENTER

ENGAGE

EXIT

EXTEND

ACTIVITIES

Reading manual of the car
Trying out various features

Plan route
Start the car

Drive the car

Park car at the destination
Turn off engine

Disengage with vehicle
Interact with destination
Think of our next trip

VALUE PROPOSITION

increasing



PERCEIVED

MISSED OPPORTUNITY

Overlooking autonomous features that already exist in current vehicles

Difficulty in recognizing how Toyota's current technology can support driver decisions

Difficulty in understanding how Toyota's AI supports drivers over time



MISSED OPPORTUNITIES

01

Overlooking autonomous features that already exist in current vehicles

ENTICE

Advances in technology between vehicle generations appear greater and unfamiliar

02

Difficulty in recognizing how Toyota's current technology can support decisions

ENTER

Reluctance in trusting technology to support complex driving decisions

03

Difficulty in understanding how Toyota's AI supports drivers over time

EXTEND

Lack of belief in the predictive capabilities of Toyota's AI on driving



MISSED OPPORTUNITIES

01 Overlooking autonomous features that already exist in current vehicles

02 Difficulty in recognizing how Toyota's current technology can support decisions

03 Difficulty in understanding how Toyota's AI supports drivers over time

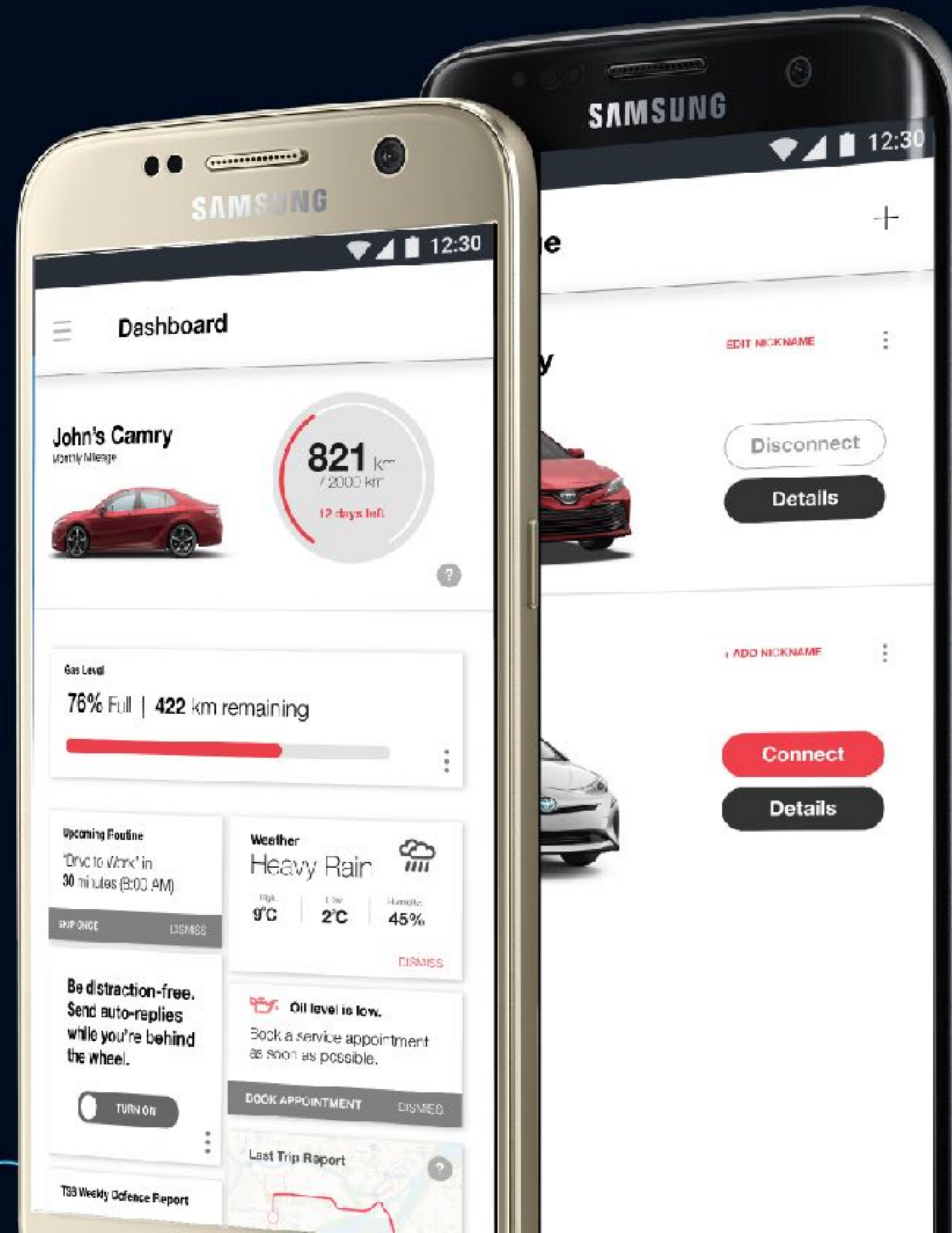
COGNITIVE OVERHEAD

Potential impact of self-driving cars on enhancing the driver's experience is not immediately understood or trusted



TOYOTA GUARDIAN

Toyota Guardian provides driver insights, digestible vehicle diagnostics, and automated routines to help drivers make better decisions and focus on simply driving.



PROTOTYPE

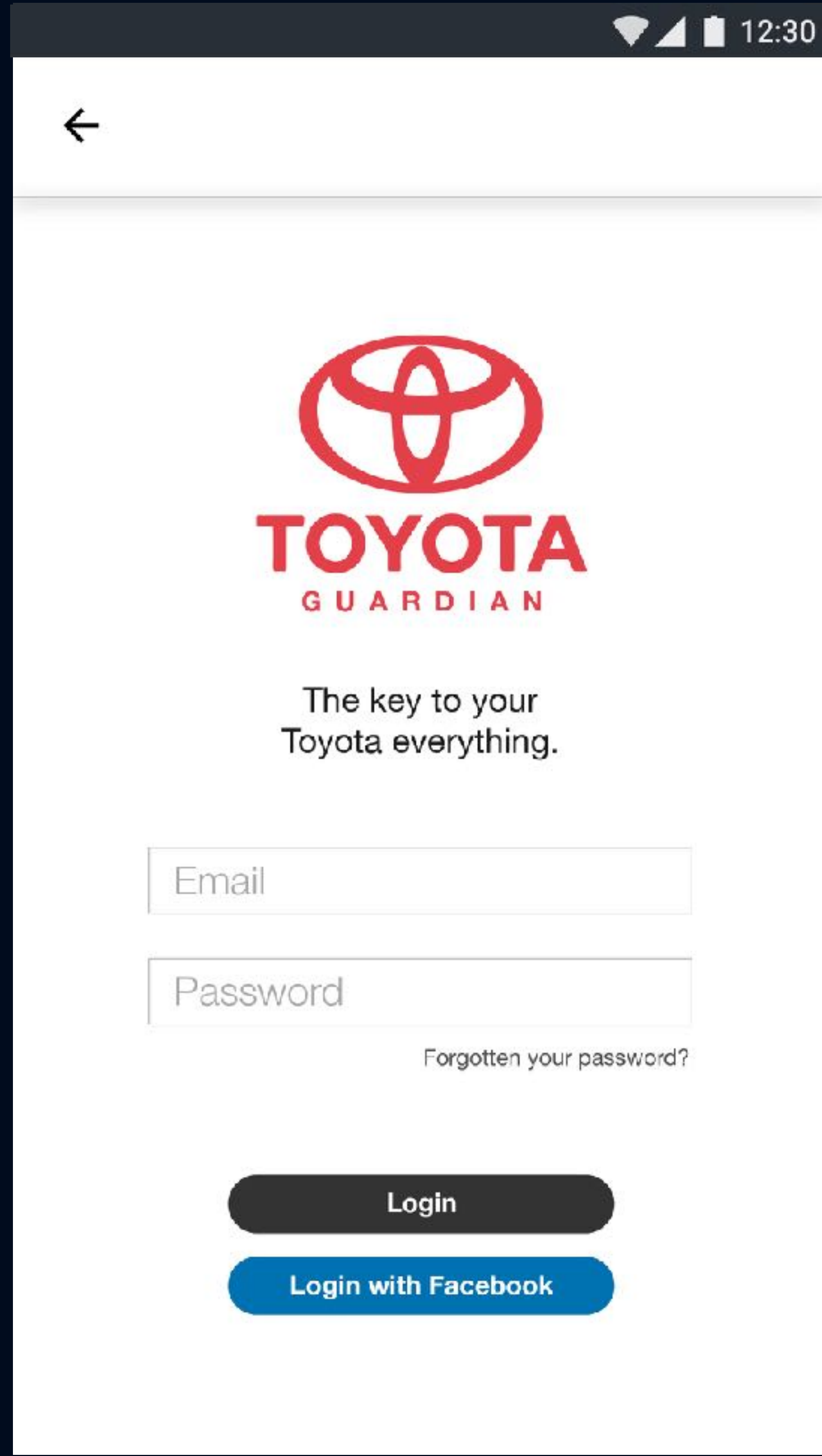
01
Onboarding

02
Garage

03
Dashboard

04
Activity

05
Routines



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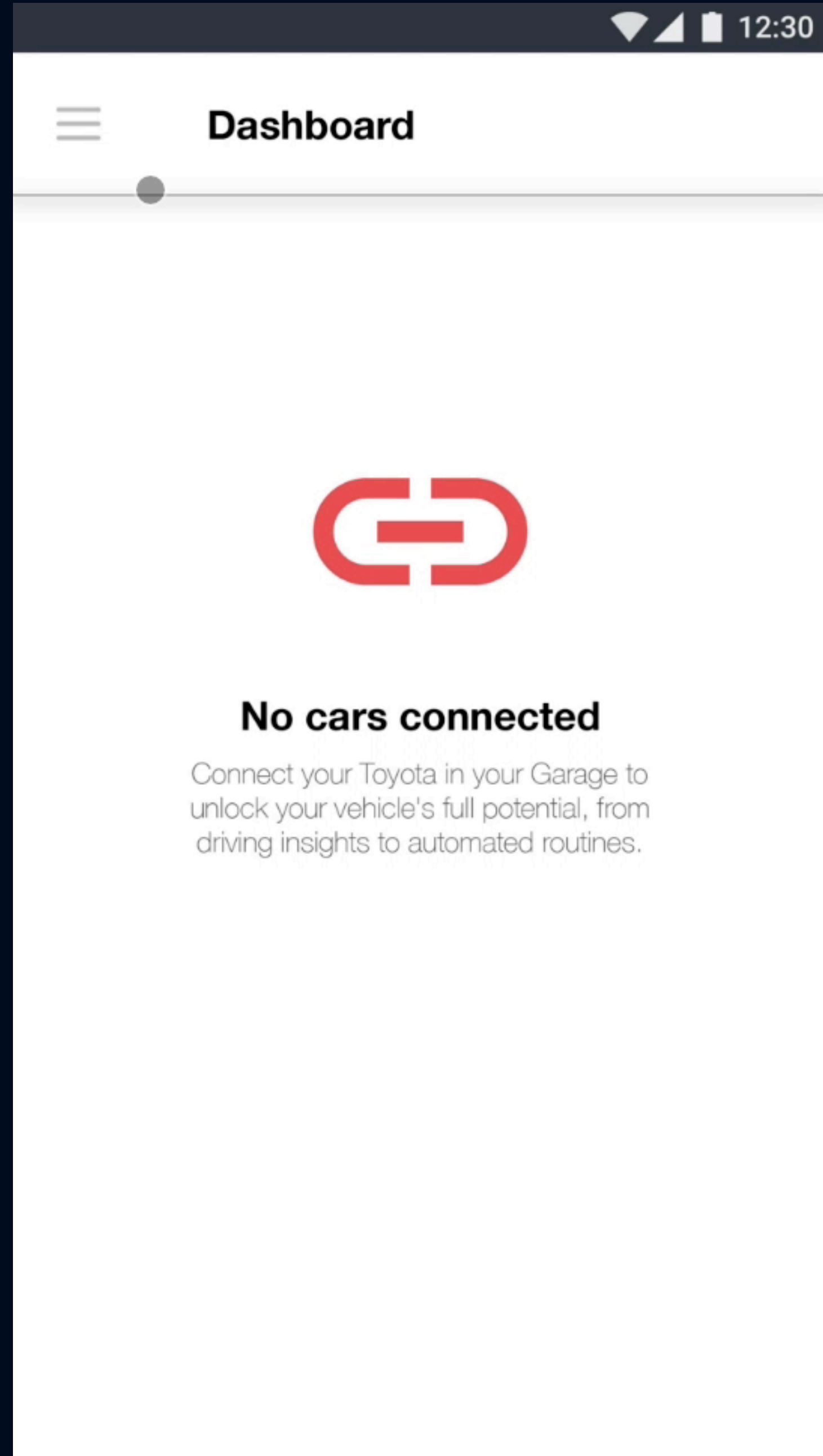
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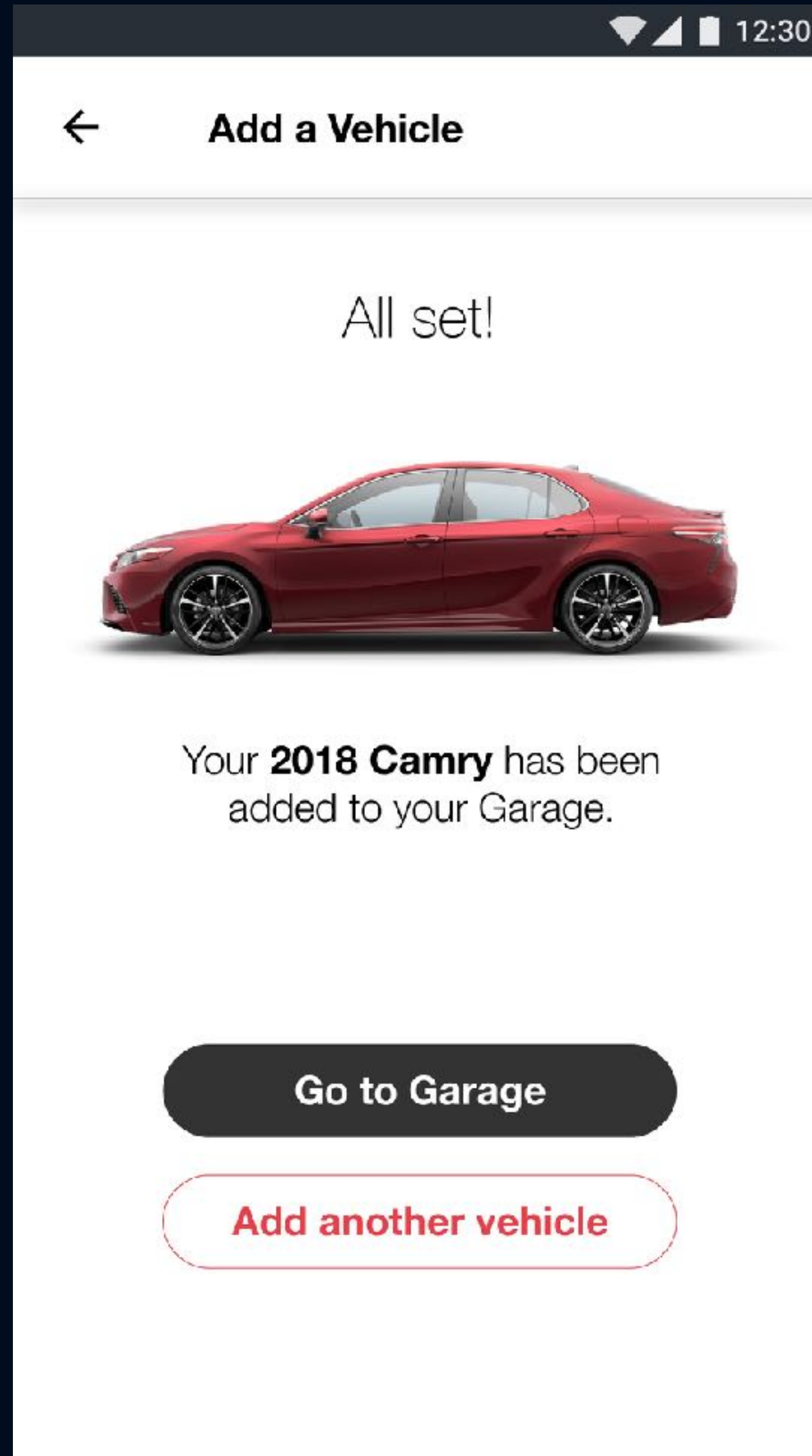
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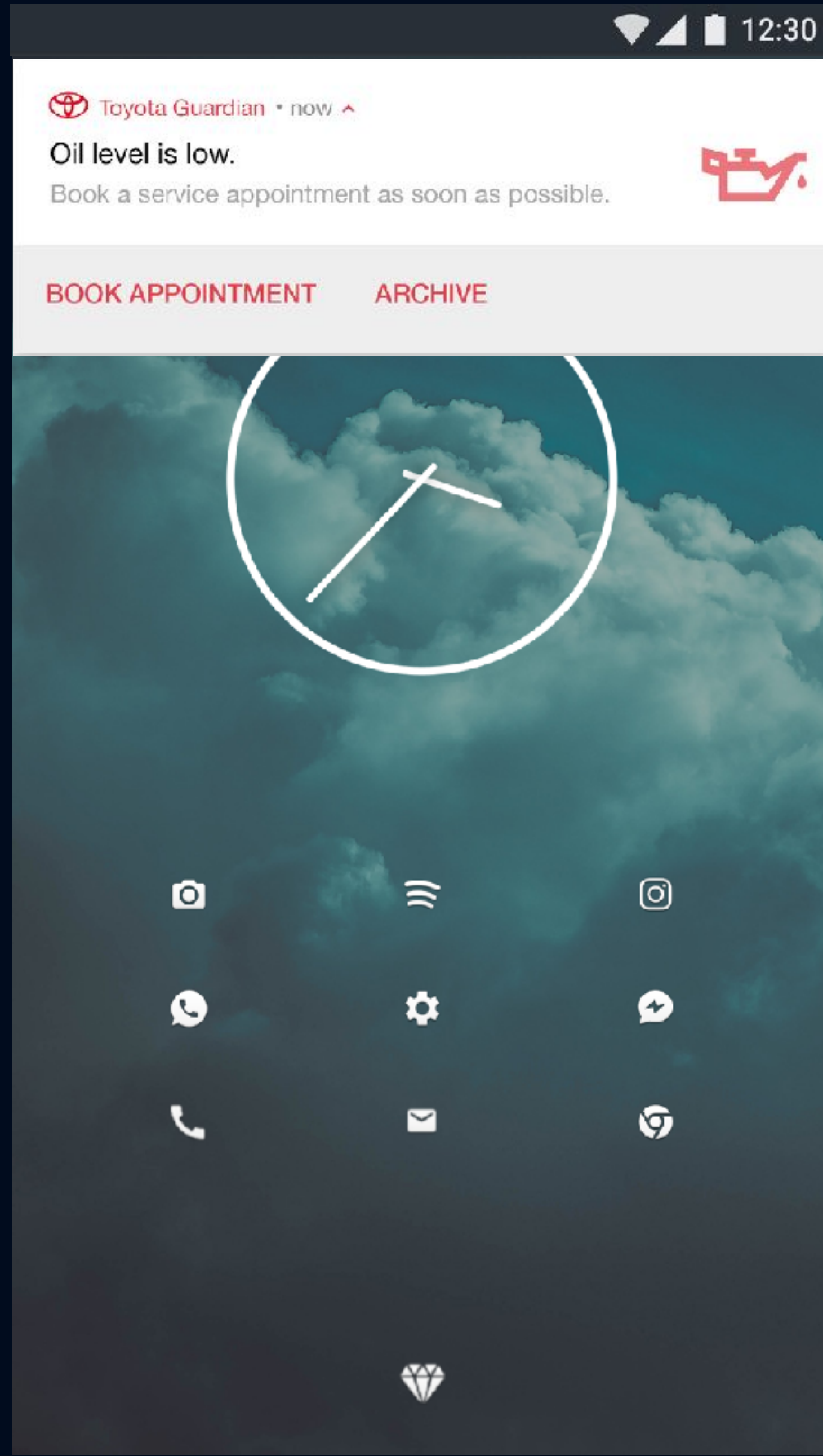
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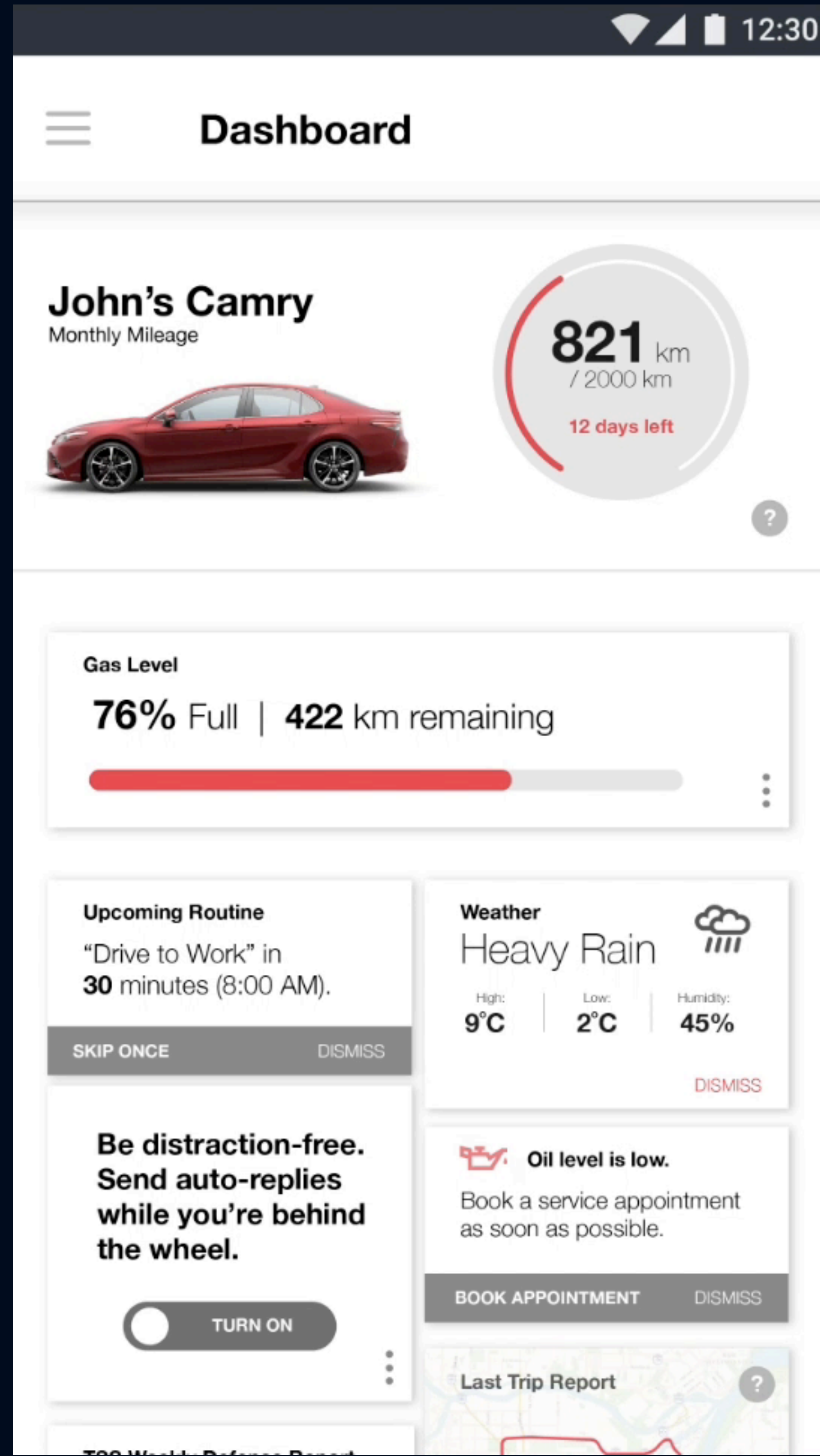
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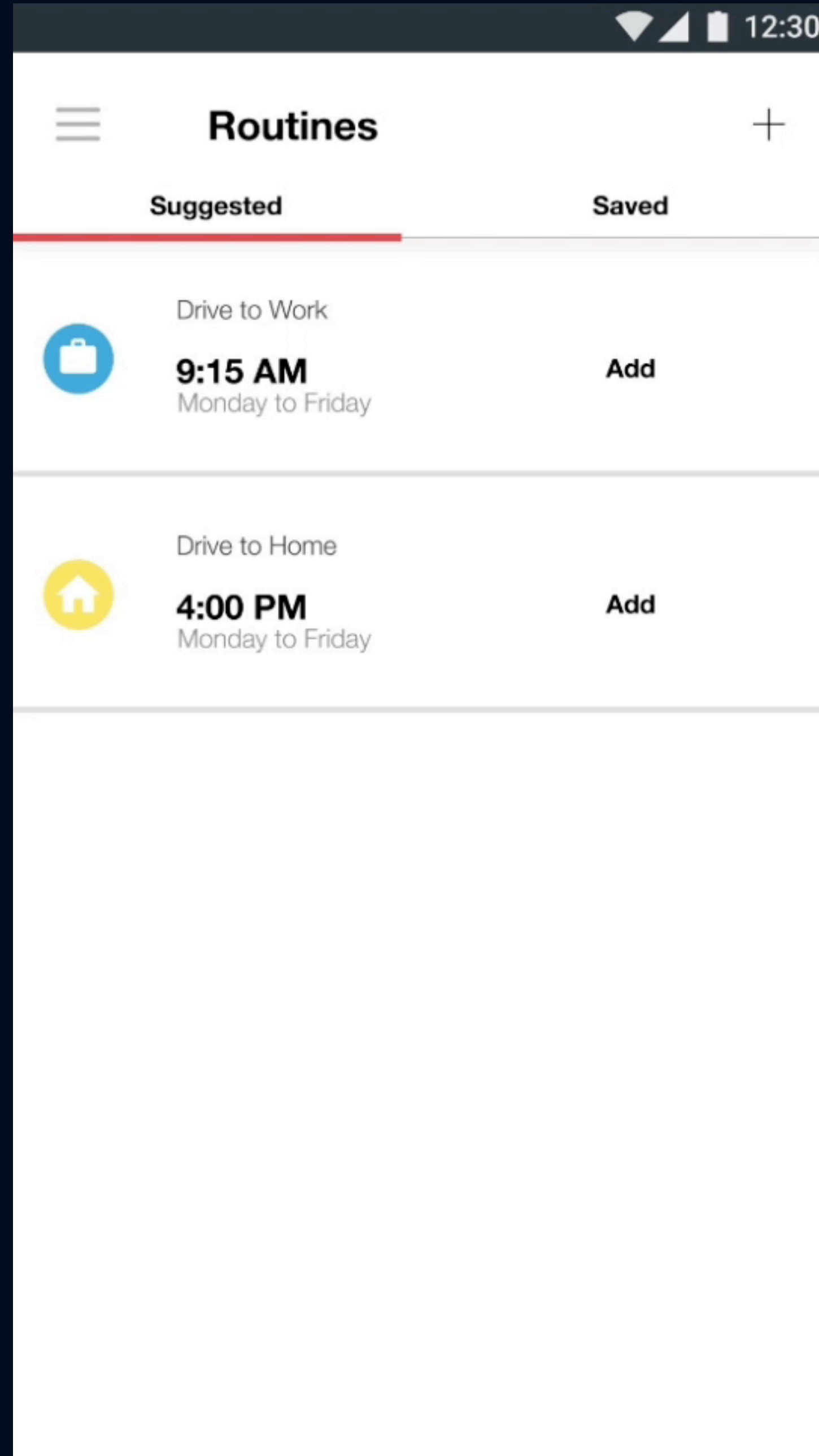
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SOCIAL & ECONOMICAL FRICTION

"By 2030...95% of U.S. passenger miles will be served by on-demand autonomous electric vehicles owned by fleets...in a new business model we call 'transport-as-a-service' (TaaS)"

RethinkX Think Tank

Rethinking Transportation 2020-2030



OUR APPROACH

“Tools based on [blockchain] have the potential to empower vehicle owners to monetize their asset by selling rides, cargo space or even the use of the vehicle itself.”

Toyota Research Institute
Press Release, May 2017





DESIGN DECISIONS

GUARDIAN

OUR CONCEPT

Guardian's name is inspired by Toyota's approach to self-driving cars, as well as connotes protection and guidance

A FACE AND VOICE


TRANSFORMATIONAL METAPHOR

Use of conversational, easy to understand language

WHY MOBILE APP

SELECTED MEDIA

Afford the ability to provide immediate notifications as need, provide on-the-go personal access



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