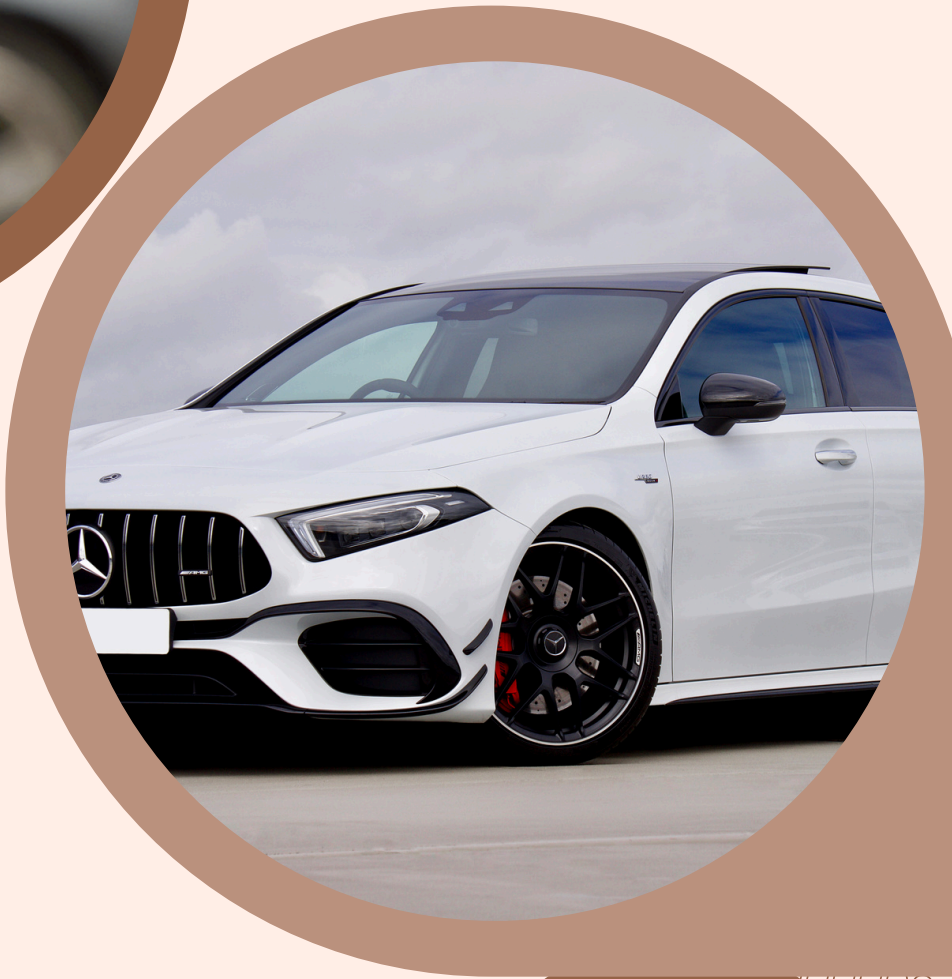
car Industries

PASSIVE KEYLESS PROJECT ROADMAP

Proposal



China
Company

Proposed By :
Albert Camings

2024

Research & Planning (1-2 weeks)

Understand RF Protocols: We'll study how key fobs talk to cars, focusing on common frequencies like 433 MHz or 315 MHz.

Compliance & Security: Don't forget to research the rules around keyless entry devices! We should know the potential legal issues, such as hacking or security problems.

Component Selection & Procurement (1 week)

RF Modules: We need to pick out the right RF receiver & transmitter modules. They should work at the needed frequency.

Microcontroller: Let's go with a microcontroller like Arduino or ESP32 since they have RF communication libraries.

Power Supply: It's important to choose something reliable. Portable power options like lithium-ion batteries are great!

Antenna: Time to research antennas! We want ones that can boost range but are small & effective.

Signal Capture Development (2-3 weeks)

RF Receiver Setup: Set up an RF receiver to catch those key fob signals! We'll program our microcontroller to listen for them.

Tools: Let's use tools like SDR (Software Defined Radio). They help us analyze and decode RF signals nicely!

Software: Start developing scripts that can capture the key fob signal & decode it to use later.

Signal Amplification & Transmission (2-3 weeks)

Amplifier Design: Let's use RF amplifiers! They will make our captured signal stronger. We need to create circuits that will amplify the signal clearly.