

# Implementing a Smart Access prototype to lock and unlock cars with Google Assistant

Thema:

Implementing a Smart Access prototype to lock and unlock cars with Google Assistant

Art:

BA

Betreuer:

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Status:

in Bearbeitung

Stichworte:

Automotive, Mobile, Software Engineering

angelegt:

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Antrittsvortrag:

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## Hintergrund

The mobile world is changing from Apps for everything to the new available assistant, like Google Assistant or Amazon Alexa. Voice is the new UX!

Continental is evolving the car access from a classic key to a new system using the user's smartphone and virtual key. Currently the development of an app for this smart access system is in progress.

## Zielsetzung der Arbeit

Furthermore the thesis should include a documented demonstration app, which demonstrates the flow of information, but does not respect things like the virtual key management or an overall security concept.

## Konkrete Aufgaben

To ensure our future market leadership, we would like to investigate how we can adapt our car access system to make it usable for the Google Assistant respectively the Actions on Google API. The bachelor thesis shall contain answers to the following questions.

## 1. How does the Actions on Google API system work ?

1. How can we lock or unlock a specific car using the Google Assistant ("ok google, unlock my car")
2. What solutions are possible using the API?
3. does the car always require an Internet connection
4. Can we re-use a connection between smartphone and vehicle based on BLE
5. what are the requirements on vehicle side ?
6. Is there a reusability with different assistant competitors like Amazon Alexa?

## Erwartete Vorkenntnisse

Software Engineering

## Weiterführende Quellen

<https://developer.google.com/actions/sdk/>

From:  
<https://wiki.mi.ur.de/> - MI Wiki

Permanent link:  
[https://wiki.mi.ur.de/arbeiten/implementing\\_a\\_smart\\_access\\_prototype\\_to\\_lock\\_and\\_unlock\\_cars\\_with\\_google\\_assistant?rev=1523967888](https://wiki.mi.ur.de/arbeiten/implementing_a_smart_access_prototype_to_lock_and_unlock_cars_with_google_assistant?rev=1523967888)

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