

Vorlesung

Automotive Software Engineering

Integration von Diensten und Endgeräten

Ergänzung zu „Telematik“

Sommersemester 2014

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Dienste und Endgeräte

- Endgeräte und Datenträger
 - (Musikkassetten)
 - CD
 - DVD
 - Blu-ray
 - Festplatte
 - Mobiltelefon
 - Smartphone
 - iPod
 - Wearables
 - Google Glass
 - ...
 - ...
- Standards für Daten und Kommunikation
 - MP3, M4A
 - MPEG
 - Bluetooth
 - GSM
 - EDGE
 - 4G
 - ...
- Dienste
 - Telefonie
 - Audio
 - Video
 - Navigation
 - ...
- Entwicklungszyklen im Monats-/Jahresbereich
- Automobil 5 Jahre, Produktion 6 - 8 Jahre

CES 2014: Integration von „Google Glass™“ bei Mercedes-Benz



Innovationen als Schlüssel für die Mobilität der Zukunft



Prof. Dr. Thomas Weber
Mitglied des Vorstands der Daimler AG
Konzernforschung & Mercedes-Benz Cars Entwicklung

Weitere Informationen (1)

- Entwickelt von der Daimler Forschung in Palo Alto
 - iPod-Integration wurde angeblich auch in Palo Alto gemacht
 - Tatsächlich aber im Forschungszentrum Ulm
- Hallo Ralf, hallo Daniel,
 - ich habe im Januar einen Vortrag Eures Oberchefs Weber gehört, Inhalt u.a.
 - Integration von Google Glass, siehe Anlage.
 - Habt Ihr dazu weitere Informationen, die weitergegeben werden dürfen?
- Kal,
Would you be able to share public information about MBRDNA Google Glass activities with my former boss Bernhard Hohlfeld, now professor at University of Dresden. He was made aware of the activities by a presentation of Prof. Weber.
Daniel

Weitere Informationen (2)

- Hi Daniel,

Thanks for the introduction.

@Prof. Hohlfeld,

My team worked on few concepts for Google Glass. Some of these are already public like our Door-to-Door Navigation concept. Please let me know what you would like to know and I will be happy to share some info with you.

Best Regards

Dr. Kal Mos

Sr. Engineering Director

Mercedes-Benz Research & Development North America

kal.mos@daimler.com

Weitere Informationen (3)

- Hallo,

Thanks to you and to Daniel for your kind cooperation.

I am teaching Automotive Software Engineering at the Technical University of Dresden.

Part of my lecture is an overview on the four automotive domains powertrain, chassis, body and telematics. In telematics the integration of wearables such as google glass is one of the challenges of today and tomorrow.

So I am interested in any free information you could give me.

Further a student of mine is working on applications of wearables. She also is interested in any free information.

Weitere Informationen (4)

- Prof. Hohlfeld,

Attached are few slides explaining what we did. If your student google the term {Mercedes Pebble} or {Mercedes Glass} , she will get additional info

She can also contact me with het questions.



Connected Vehicles & Wearables

Dr. Kal Mos

Sr. Engineering Director
Mercedes-Benz Research & Development North America, Inc



Mercedes-Benz

— An intelligently networked vehicle becomes a part of the "internet of things" —



*Pebble smartwatch integration
product*



*Google Glass integration
concept*

First OEM to market with smartwatch app on Pebble AppStore



The advertisement features a central image of a Pebble smartwatch with a black metal link band. The watch screen displays the Mercedes-Benz logo, the time "2:16 PM", and a hand icon. Below the hand icon, it says "While driving, get alerted of road hazards, accidents, and speed limits." and the "pebble" logo at the bottom. Surrounding the watch are several floating notification cards. On the left, a card shows the Mercedes-Benz logo, the text "2014 CLA", and a note: "This Watchapp requires a Drive Kit Plus accessory in your Mercedes-Benz." To the right of the watch, a card shows a fuel pump icon and "16.1 gal" with the timestamp "at 03:30pm on 02/10/14". Further right, a card shows a location pin icon and the text "Keep up-to-date with your car's stats, performance, and location." To the right of that, a card shows a tire pressure gauge icon and "32 31 37 40 psi" with the timestamp "at 03:30pm on 02/10/14". On the far right, a card shows a location pin icon and the address "309 N Pastoria Ave Sunnyvale, CA 94085" with the timestamp "at 03:30pm on 02/10/14". The background is a dark, abstract image of a car's interior with a steering wheel and dashboard. At the top left of the background, the Mercedes-Benz logo and "Mercedes-Benz" text are visible. At the top center, the words "Social · Media · Places" are written in a light, stylized font. Below the watch, the text "Mercedes-Benz on Pebble" is written in a serif font. Underneath that, it says "Vehicle information at a glance. Road hazard and speed limit notifications. Custom remote controls." At the bottom center, it says "AVAILABLE NOW" in white capital letters with a small red circular icon containing a white "i" to its right.

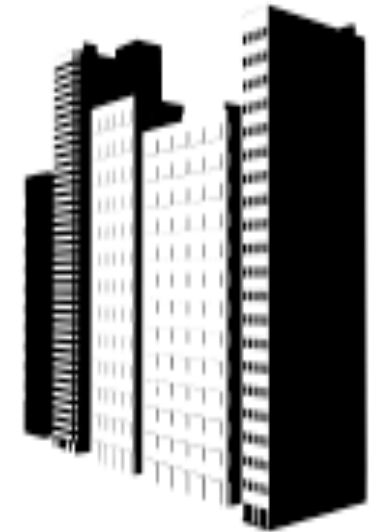
Mercedes-Benz on Pebble

Vehicle information at a glance.
Road hazard and speed limit notifications.
Custom remote controls.

AVAILABLE NOW ⓘ

Mercedes-Benz

Door-to-Door Navi Concept



User selects a destination on Glass at home

Glass gives user walking directions to the car

User gets in the car & use car Navi to drive to selected destination

Once arrived, user exits the car & Glass gives user walking directions to the door of her final destination

Seamless transition of destination between Glass & car Navi to use Glass for walking & car Navi for driving.

Was ist neu?

- Dienst Door-to-Door Navi Concept
 - Konzepte schon länger in Diskussion
 - Ende-zu-Ende Navigation
 - Verkehrsträgerübergreifende Navigation
 - Multimodaler Verkehr
 - ...
 - Ziel: Von A (z. B. zu Hause) nach B (z. B. Konzert) kommen
 - Nicht:
 - Von Parkplatz zu Parkplatz
 - Von Haltestelle zu Haltestelle
 - Erste Ansätze
 - Routenplanung am PC, Übernahme ins Naiv (navi)
 - Besser mit Smartphone (Datenintegration)
 - Noch besser mit Google Glass (Darstellung)

Integration von Wearables

Beschreibung	Dienst	Endgerät	Daten- und Kommunikationsformate
Google Glass mit Door to Door Navigation	bekannt	(relativ) neu	?
	Welche neuen Anwendungen für Wearables?	Welche Wearables?	?