Household Intelligent Assistant

J. Burant, J. Drápela, M. Klučka, J. Konrád,
P. Kovář, P. Trutman

Intelligent assistant

Intelligent, fully voice controlled device

Connection to information servers / application control

Completes tasks based on user queries

Searches for information on the internet - ie. weather forecast

Answer is also fully voiced

Motivation

Great potencial in connection with the "Internet of things"

Household modernisation

Connection to "Intelligent house / household"

Easier, more convinient way of control

Friendly towards disabled people

Motivace II

Approx. 4 000 000 households in Czech Republic

Assume device cost - 10 000 Kč

10% households buys assistant -> market size: 4 billion Kč

Many times larger market worldwise

Conclusion: Right now is the right time to invest to this technology

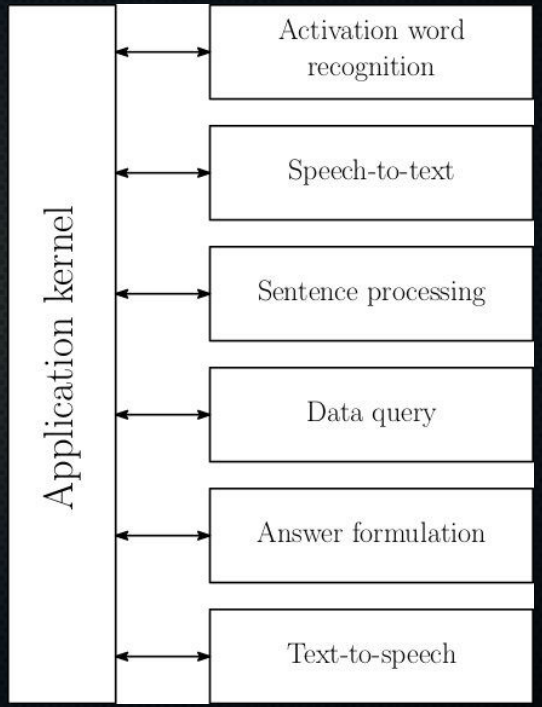
Proposed solution

Fully Open Source

Modular architecture

Consists of 7 independents modules

Communication between modules and program control provided by application kernel



Project schedule

I - assignment specifications

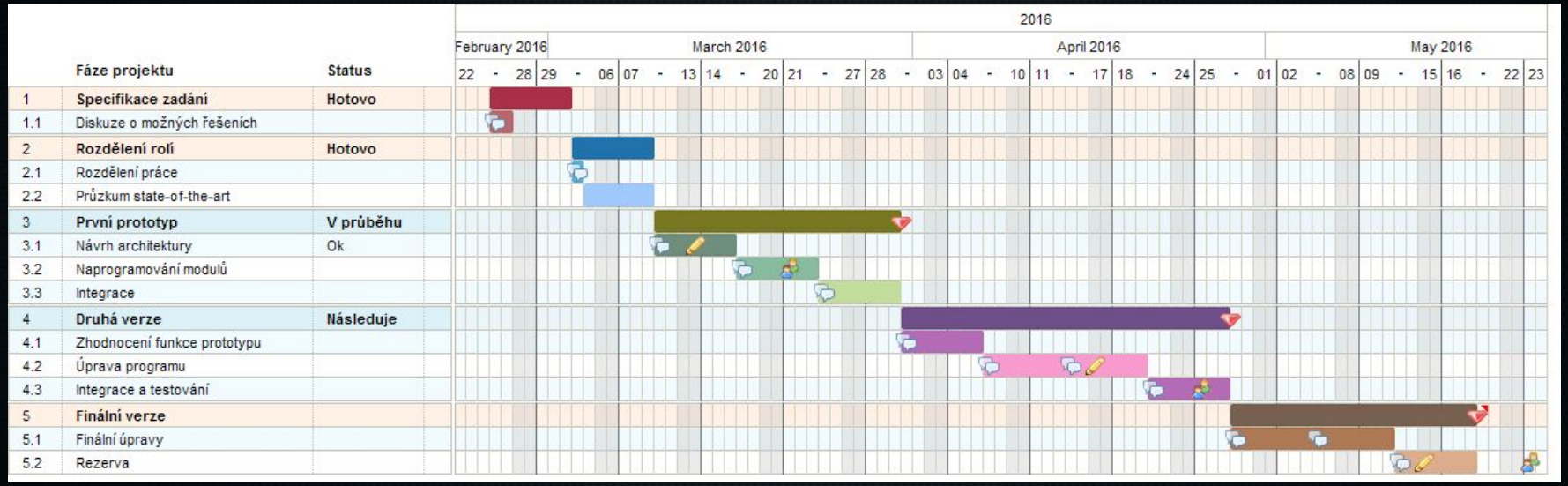
II - work distribution and survey of resources

III - first prototype

IV - fully functional defice

V - final adjustments

Project schedule II



	Fáze projektu	Status
1	**Specifikace zadání**	**Hotovo**
1.1	Diskuze o možných řešeních	
2	**Rozdělení rolí**	**Hotovo**
2.1	Rozdělení práce	
2.2	Průzkum state-of-the-art	
3	**První prototyp**	**V průběhu**
3.1	Návrh architektury	Ok
3.2	Naprogramování modulů	
3.3	Integrace	
4	**Druhá verze**	**Následuje**
4.1	Zhodnocení funkce prototypu	
4.2	Úprava programu	
4.3	Integrace a testování	
5	**Finální verze**	
5.1	Finální úpravy	
5.2	Rezerva	

Risk analysis

Subpar functionality of one of the modules

Illness

Lack of resources

Lack of communication

Project delay

Inadequate or incomplete testing phase

Preliminary results

Keyword detection

PocketSphinx

Text to speech and intent recognition

wit.ai, PocketSphinx

Query processing

forecast.io

Thank you for your attention

QUESTIONS?