Requirements and Analyses: Project Proposal -

LSK Car Finder

Version: 1.0

Project name	LSK Car Finder	
Project leader	Leon Schlömmer, Leon Kuchinka, Lukas Stransky	
Responsible	Executive	
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	X	submitted
		completed
Document file	ProjectProposalTemplate.odt	

Further Product Information

Participating	Lukas Stransky, Leon Kuchinka, Leon Schlömmer
Creation	Initial Extern

Change Listing

Change			Changed Chapters	Description of changes	Author	State
No	**Date**	**Version**				
1		1.0	all	Initial product creation		

Test Listing

The following table shows an overview of all tests – both self-tests as well as tests by independed quality assurance – for the present document.

Date	Tested Version	Notes	Inspector	New Product Status

CONTENT

1 INTRODUCTION

This text introduces the implementation of a system which supports people at finding the car that suits them best, like www.wahlkabine.at helps people find the political party that fits their political standpoints best.

The basic idea is to provide a service, where users are asked some questions concerning their interests and the system suggests cars that match the personality profile.

It is planned to implement this project in a step by step approach, where the first steps already result in a usable product. Further improvements, which mainly go into more sophisticated questions and better selection algorithms, can follow.

The product proposed here differs from already existing products, because all products that are currently available only address the UK and US market. In the first step our primary focus lies on the Austrian market, and in further stages we could expand to other and maybe even the global market.

2 INITIAL SITUATION

The already existing “car finding” services only scratch the surface of the possibilities of matching general interests with taste in cars. In 2016 about 330.000 cars have been sold in Austria, with a rising tendency. Now, as a matter of fact, around 50% of people are unhappy with their current car, and about 30% are willing to switch cars, which means that in Austria every year around 165 000 people buy cars which they are unhappy with, and 30% of the 4.7 million Austrians with registered cars would be willing to switch cars, so our potential users would count 1.7 million. Even though not every one of those people have access to a PC or a phone with internet, but with 85% of all Austrians having access to internet, our potential customers would still count 1.4 million people. To be realistic, not all of these 1.4 million people have the financial resources to buy a new car, and unfortunately there are no statistics showing this, but we think that around 70% won’t be able to buy a new car.

So, there are still about 400.000 potential customers remaining.

That means that 400.000 willing to buy a car could see ads from paying car salesmen, which could be a big source of income.

3 GENERAL CONDITIONS AND CONSTRAINTS

- A car database is mandatory
- The primary Language is German, further languages to come with expansions, because multilinguistic development would be too much effort, given our time constraints
- An internet connection is a necessity, obviously because the product is based on a website
- The GUI should be cleaned up, so first-time-users won’t be intimidated by the amount of buttons
- The GUI should also have a simplistic and minimalistic design to keep the effort / good-looking ratio low
- A backup concept for the user and car database is a must have, so that, for example, power blackouts can be coped

4 PROJECT OBJECTIVES AND SYSTEM CONCEPTS

- The user answers questions like:
  - What will the car primarily be used for?

  For all:
    - What is the maximum budget?
    - What type of car do you prefer (SUV, limousine, coupé…)?
    - Are there any brand preferences?
    - Is there any brand you can't stand?
    - What size should the car be?
    - Should it be an electric vehicle?

  For utility:
    - How many persons do you plan on transporting on a regular basis?
    - Does the type of fuel matter?
    - Does fuel economy matter?

  For fun:
    - Will the car be used on track?
    - Should the car be comfortable too?
    - How fast should the car accelerate from 0 to 100 km/h?
      - for example, 4.0 seconds…

Cars should be clustered by following attributes:

- Type of car (SUV, limousine…)
- Utility type (Sportscar, Off-road vehicle, Family transporter…)
- Top speed
- Acceleration from 0 to 100 km/h
- Horse power
- Torque
- Type of Engine (V8, I6, W16)
- Number of seats
- Agility rating
- Trunk space (in liters)
- Make
- Model
- Release year
- Weight
- Size

- Every question should be rated with an importance-factor
- The app will track the user to find correlations between tracked data and taste in cars
- A database where all cars are saved must be set up

5 OPPORTUNITIES AND RISKS

The project has the following opportunities:

- Car related advertisements can be shown on the sidebar
- Used car dealers can list their cars and promote them
- The customer can decrease the time spent on looking for cars
- The time spent looking through various websites for used cars declines

The following risks must be considered:

- Used car dealers maybe won’t list their cars
- Insufficient marketing could be a problem
- The effort may be underestimated

6 PLANNING

- Major Project Milestones:

Milestone	**Due Date**
The car database skeletal structure is implemented	30.11.2017
The basic car finding algorithm works	14.12.2017
A basic App GUI layout is designed	18.01.2018
A server with the car database is set up	1.2.2018
A client that can access the server's data is programmed	15.2.2018
For every search a few cars can be presented	15.3.2018
GUI for all clients is polished	5.4.2018
The car finding algorithm is finished	10.5.2018
As much data as possible is put in the database	7.6.2018

- Leading Roles:

Role	**Name**
Chief Technology Officer	Leon Schlömmer
Chief Database Officer	Lukas Stransky
Chief Operating Officer	Leon Kuchinka

- Needed Resources
    - Database server

- Time Boundaries

Start	October 2017
End	June 2018
First prototype	February 2018
Implementation work start	November 2017

7 LIST OF ABBREVIATIONS

Abbreviation	Explanation
lsk	**L**eon**, L**ukas **S**transky**, S**chlömmer **K**uchinka

8 LIST OF LITERATURE

http://www.versicherungsjournal.at/markt-und-politik/fast-jeder-zweite-pkw-besitzer-will-ein-neues-auto-kaufen-16473.php

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http://www.nachrichten.at/nachrichten/wirtschaft/Autokauf-boomt-in-OEsterreich;art15,2620621

https://www.mobidrome.com/ (already existing car finder)