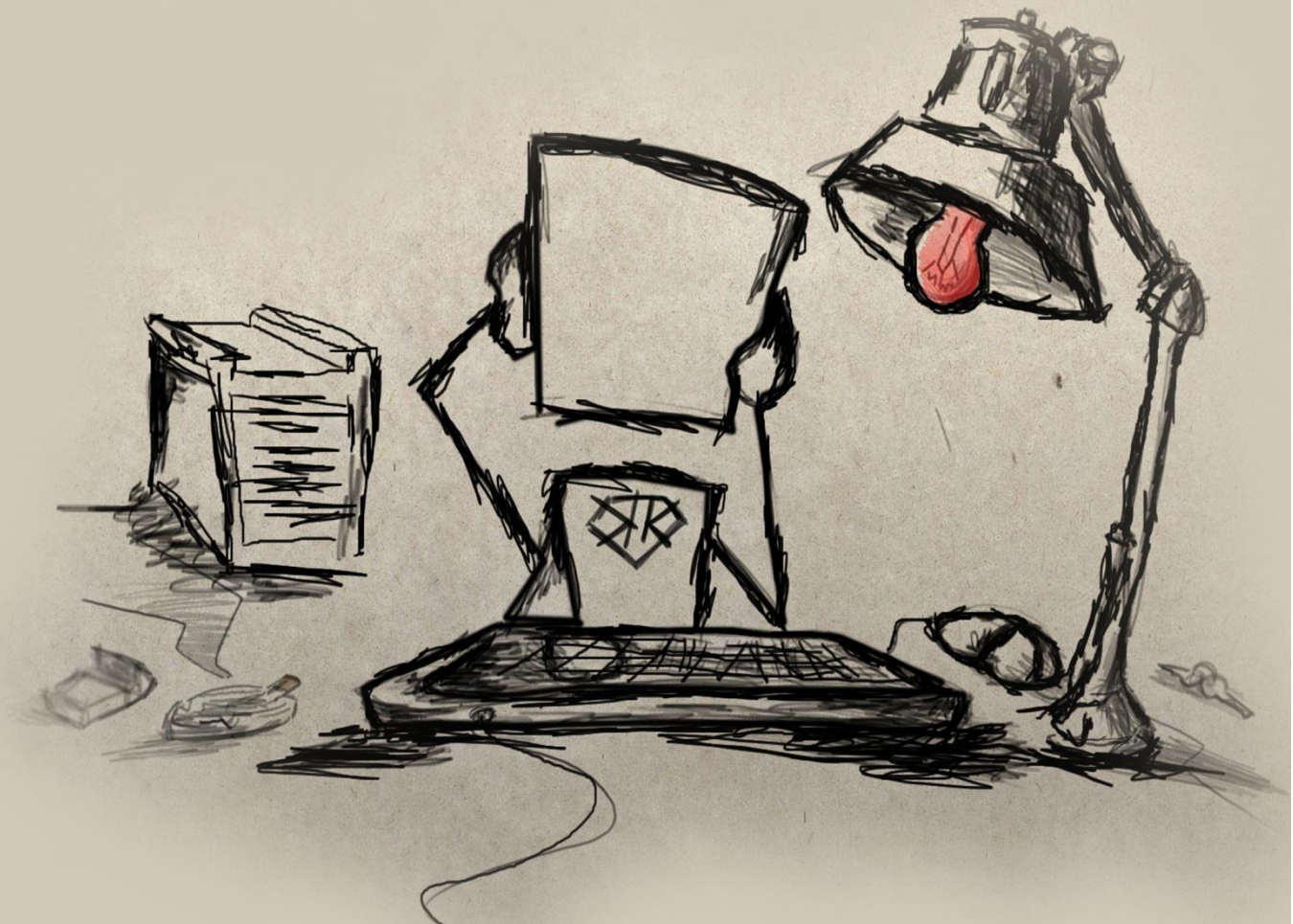


THE GRUNERS



Tender Proposal

Project : Dot Slash - Auto Mart

18 March 2013

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THE GRUNERS

1. Introduction

The purpose of this document is to propose an agreement between the developers; '*The Gruners*' and the client: Dot Slash, to develop a solution to the problem as defined in the project submitted. While this document is a proposal; it also aims to ensure that the project scope is correct, together with introducing new suggestions that will improve the functionality of the system.

2. Group Description

The Gruners is a competitive team of three students in the Department of Computer Science that have been in collaboration for the most for their undergraduate years of study. The name of the team was inspired by a Computer Science professor at the University of Pretoria, Prof. Stefan Gruner. We have, throughout our different years of undergraduate study, been exposed to numerous technologies and techniques that do not only effectively address software design and development problems, but also provide efficient solutions for current industry development problems. We rely not only on the technologies that we have learnt thus far, but we rely as well on skills such as problem-solving, systems design, decision-making, collaboration, and work-balance in order to successfully develop different kinds of efficient systems.

3. Problem Description

Auto mart is an advertising website owned by dot slash, it advertises second hand cars. When an advert is created, each user has to upload a picture of the car to which they want to advertise. At the moment there is no way of telling that the picture uploaded is indeed that of the specified car, other than having an administrator who will have to confirm the accuracy of each picture, this is a lot of work however, since there are more than 300k pictures in the auto-mart database.

This project is an extension of the Auto Mart website, in that the pictures in the database have to be verified by this system, either before or after submission.

4. Proposed Solution

In this section we will explain how we aim to solve the problem that was explained above.

4.1 Fundamental Solution

The solution to the defined problem is to build a system that will read the images in the auto mart database, so as to verify that the images contain what they are said to contain. This system should be able to see if the picture contains a car, if the car is visible enough, if the picture is of good quality, the make and model of the car, as well as the colour of the car.

4.1.1 System Environment

- The system should be reachable from the auto mart interface when a customer uploads an image.
- It is supposed to interface with a database attributes that will be used to check and verify picture adequacy.

4.1.2 General Constraints

- This system is supposed to be developed using C# on windows using visual studio.
- The project should not use any third party libraries, this in order to commercialize it.
- The system interface should be reachable by an administrator who wants to check the validity of all the 300k images in the database.

4.2 Additional Suggestions

As a group we thought, on top of building a system that does all these above mentioned requirements, it would be a good idea to have a mobile application from which customers can upload their adverts together with the pictures, In which case the system would need to be reachable from the mobile application before the pictures reach the database.

5. Glossary

The glossary will explain the terms used in this document that need explanation.

- **Client:** In this case we refer to Dot Slash, the owners of Auto Mart in the person of Attie Gelderblom.
- **Customers:** The Auto Mart website users that do the actual advertising and picture uploads.
- **Developers:** This refers to the *'The Gruners'*, the team that will build the system.
- **Administrator:** Personnel from Dot Slash that will be responsible for overlooking the system and have all privileges provided by the system.