REPUBLIC OF MACEDONIA
Ss. Cyril and Methodius University in Skopje
Faculty of Computer Science and Engineering

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Final project proposal

Type	Undergraduate
Title	***Text recognition and translation by using mobile camera***
Supervisor	ass. prof. Gjorgji Madjarov
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Department / Group	
Software engineering	
Topic(s)	
Pattern recognition, machine learning, image processing	
Project can start from	01.04.2014 – 01.03.2015
Project duration	4 months
Short description	
This project is inspired by the well‑known iPhone app "Word Lens". It identifies, recognizes the text captured by the camera on a mobile device, translates it to another language, and renders the translation onto the screen. The motivation of this project is to enable the user to navigate in a foreign language setting with the assistance of a mobile device. The application should work on Android phone, while the OCR and translation engines should run on a server. The goal is to achieve near real‑time mobile‑based system of text extraction, recognition and translation.	
Results and assessment	
The final result from the project should be a written report on the methods that segment and recognize the letters. Also implementation of some chosen methods and possible improvements should be provided. This implementation will be tested and evaluated on existing database. The results from the testing and evaluation should be also reported and presented.	
Other (additional) information	