

Project proposal

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1. Title of the project: Online Contact Details Manager

2. Overview of the Project

To survive in this fast growing and tech based world we need to manage many contacts and a lot of information. When it comes to manage manual visiting cards or get a note about an advertisement or get a note about a shop's board or memorizing them are very difficult to manage and difficult to refer them again. So, I introduce myself with my project to say goodbye for the troubles you had in these circumstances.

This project is all about give more flexible in managing and retrieving your contacts and information via a mobile application. This application is capable to take a picture (of a visiting card or business card or shop detail board) and collect the data from the picture and will store the details of the collected data (no need for data enter). The information will be stored in a well-structured manner (for example company contact details and personal contact details will be distinguished). Application will add contact details in main phone contact list.

Input of the application will be a picture that contain contact detail of a person or company simply a picture of a business card. Output will be well structured details of the contacts and contact will be stored in main mobile contact list.

3. Objectives of the Project

- ❖ To develop a mobile application that act like a personal assistance to store the contact details.
- ❖ Provide a functionality that extract information of the cards by picturing them.
- ❖ Provide a simple and attractive GUI to users to easily sort and retrieve their contacts.
- ❖ Provide sharing facilities for contact details via social media.
- ❖ Provide online backups if user needed.
- ❖ Provide login functionality for the security.

4. The need for the project

The need for the project is we cannot handle many contact details just with a diary or notepad or contact book or card bucket. We need to store our contact details in our mobile and we need to retrieve the information very quickly and easily. The key part of this project is data entering is not needed, all you want, just take a picture of the card or board and do some clicks. Another key thing of the application is contact details will be stored in a well-structured way. From this approach we can easily retrieve the information as well as we can find the relationship among the contacts (for example employees of a specific company or

same kind of companies or workers who are in Colombo or a specific type of companies in Kandy). These functionalities will give us a great support in storing contact details. We can share our contacts with our friends nice and easily.

5. Scope of the Project

The target users of this project are people who have many contacts (CEOs, project managers, other people who suffer from the current contact managing way). A user wants to sign in to the application then he/she will get a GUI containing options for view their contacts, profile settings, take a picture for extract details. In the view of contacts user can view the details, taken date time, category of the contact. User can sort the contact details with using preferred filter in the contact view. User can take a picture by using camera or from gallery based on their wish. In the profile view user can edit his/her details. Application will save contact number with related contact name once user click ok after details extracted from card. One user can share his contact details using social media such as (WhatsApp, Facebook Messenger, Viber). If user need to store the details in the internet he/she can store. User can add notes to a specific contact whenever he/she need.

6. Deliverables

System is going to be a mobile application using for android operating system.

1st deliverable system application will contain detail extraction from picture and convert them to the contact details. It will store contact details on the main phone call log.

2nd and final system application will contain all the functionalities specified in the scope of the project.

Timeline for Deliverables.

Project Proposal	12/01/2018
Feasibility report	19/01/2018
Project Schedule	27/01/2018
Project report1	09/02/2018
Software requirement specification	16/02/2018
Design Documentation	16/02/2018
1 st deliverable increment	02/03/2018
Progress report2	09/03/2018
Testing report	23/03/2018
2 nd and full increment	30/03/2018
Final report	06/04/2018

7. Overview of Existing Systems and Technology

There are many several existing systems like this. They use tesseract OCR API and OpenCV for the text extraction from the image. Most of the existing systems cover Android as well as IOS. Some of the systems provide messaging, sharing, digital card features.

Our application will be developed using android studio and it will be an android mobile application. Application will use android-OpenCV for the pre-processing of the detail extraction. Tesseract will be used as OCR engine. Application will use OTSU algorithm for thresholding of the image.

References

- [1] Vala, HJ & Baxi, Astha (2013). "A review on Otsu image segmentation algorithm". *International Journal of Advanced Research in Computer Engineering & Technology (IJARCET)*.
- [2] Jianzhuang, Liu and Wenqing, Li and Yupeng, Tian (1991). "Automatic thresholding of gray-level pictures using two-dimension Otsu method".
- [3] Pulli, Kari; Baksheev, Anatoly; Korniyakov, Kirill; Eruhimov, Victor (1 April 2012). [*"Realtime Computer Vision with OpenCV"*](#).
- [4] [*"Android Studio Release Notes"*](#). Android Developers Official Website. accessed on 10th January 2018.