UNIVERSITI TEKNOLOGI MARA

BeMyEyes: DAILY LOGS FOR BATTERED MEN USING IMAGE-BASED STEGANOGRAPHY MOBILE APPLICATION

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ABSTRACT

Domestic abuse occurs when various forms of manipulation and violence are used by one intimate partner to retain power and control over the other intimate partner. Society has been conscious of the issue of domestic abuse against women over the last few decades while domestic abuse against men is being ignored. Battered men feel reluctant to search for help because they are fearful that they will not be believed. The victims also have difficulty recording any abuse event because the perpetrator might know about it and the abuse might become worse than before. Thus, this project's purpose is to provide an initiative to help the male victims record the evidence of the abuse using an android-based mobile application (BeMyEyes) where the data will be masked using image-based steganography in the form of text as protection. The objectives of this project are to identify user requirements, design and develop BeMyEyes mobile application. The approach used during the development is Mobile Software Development Lifecycle (MSDLC) because it is a suitable approach to build a mobile application sequentially. This mobile application consists of a daily log feature for the user to document the abuse experienced by them in the form of text using image-based steganography technique to hide the daily logs before sending it to the Non-Governmental Organization (NGO) through email. Besides, weather features act as the masked feature to make the application appear nonprominent while the logs feature hides behind it. However, the limitation of this project is that internet connection is needed and can only be used by Android users. The apps could potentially be a lifeline for abused victims where they have a safe platform to make recordings and able to make reporting without worrying that their abuser might know about it. The content of the logs will be encoded by the battered men and the decoded process will be done by the NGO. The project is recommended to include other image-based steganography features for future enhancement in the form of image, video and audio to increase the efficiency of evidence collected.

Keywords: Domestic abuse, daily logs, battered men, NGO, image-based steganography technique.

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CHAPTER 1

INTRODUCTION

An outline of this project is given in this section. This chapter includes background information, problem statements, project priorities, scope and project significance.

1.1 Project Background

Domestic abuse occurs when physical aggression, manipulation, threats, intimidation, alienation or mental, sexual or economic abuse is used by one intimate partner to retain power and control over the other intimate partner (Brooks, & Corttany, 2019). Men also faced the same type of violence as women. For example, physical and emotional abuse, isolation, financial abuse and controlling behaviors (Barkhuizen, 2016). Domestic abuse against men constitutes an enigmatic and severe problem. It may involve attacks such as pushing, dragging, punching, shooting and hitting that are categorized as minor assaults and more severe attacks such as rape and even murder (Kumar, 2018). Men victims cannot find a way to cry for help and are being neglected, while there were many services that existed and provided for women victims of domestic abuse for these past few years (Marshita & Guru, 2017). Based on the statistics from the Social Welfare Statistic Malaysia Report stated on Figure 1.1, the number of male victims' cases from year 2016 to year 2018 increased from 46 cases to 50 cases. It is clear that male victims of domestic violence exist in Malaysia (2018).