UNIVERSITY OF TECHNOLOGY
MARA

MOBILE FORENSIC
EXTRACTION TOOL

NUR AQILAH BINTI SARBAINI

BACHELOR OF COMPUTER SCIENCE (HONS.)
NETCENTRIC COMPUTING

JANUARY 2019

ACKNOWLEDGEMENT

Alhamdulillah, praises and thanks to Allah because of His Almighty and His utmost blessings, I was able to finish this research within the time duration given. Firstly, my special thanks goes to my supervisor, Dr. Fakariah Hani binti Hj. Mohd Ali, who encourages, guides and support me throughout my final year project to completion. I would like to give thanks to my CSP650 lecturer, Dr. Nor Shahniza Kamal Bashah for all guidance and advices given to me throughout the semester in order to finish this project development.

Special appreciation also goes to my beloved parents for all support and loves given to me so my eagerness towards completing this project will not fade away. My appreciation also goes to the rest of my family that support and pray for my success.

Last but not least, I would like to give my gratitude to my dearest friends who give their full cooperation and support throughout this semester in order to complete the project together. My friends have helped me in many ways until this project is accomplished.

ABSTRACT

Recently, as we can see everybody in this world used smartphone as a medium that can be replace a computer to a handy devices to send text messages, make a voice or video call, take a picture, record a video, playing games, connect to the internet, and many more. There are plenty of mobile architecture offered in the market such as iOS, Android, Blackberry, Windows Phone, Symbian, and others. According to Brian Barrett (2018), the moment user clicked the wrong link; the mobile phone will easier to be vulnerable and might be the target of crime or be source of crime. Although, there are many existing tools available, it is expensive and this poses a major challenge to forensic investigator and law enforcement to handle a case. In this project, tool is developed to extract the evidence from the mobile devices.

TABLE OF CONTENTS

CHAPTER 1

INTRODUCTION

1.0 Introduction

This chapter will explain the background of project, the problem statement, the project objectives and the scope of the project that are linked to development of the Mobile Forensic Extraction Tool.

1.1 Background Project

The growth of technology made every individual has their own mobile device. Everyone use smartphone to perform daily lives activities such as communicate each other in digital world and keep the personal and sensitive information in the mobile devices. However, this information can be targeted and used by the criminal to steal individual information. The increasing number in mobile device has led to increasing number of cases in cybercriminals.

In addition, when there are cases involving the digital devices, the forensic investigator will take action in order to make the cases clear. The forensic investigator needs to extract the artifacts from the evidence that they get from the crime scene. There are several techniques to perform extraction. The first method is physical extraction, which need to do the imaging of the mobile devices first before make an extraction. The next techniques will be the logical extraction. In this method, tool that has been used need to communicate with the operating system before make an extraction.