# UNIVERSITY TEKNOLOGI MARA

# WEBSITES ACCESSIBILITY AND USABILITY

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Independent study submitted in partial fulfillment of
the requirements for the degree of
**Master of Science in Information Technology**

**Faculty of Computer and Mathematical Science**

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# CANDIDATE'S DECLARATION

I declare that the work in this research was carried out in accordance to the regulations of Universiti Teknologi Mara. It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced material. This topic has not been submitted to any other academic or non-academic institution for any other degree or qualification.

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# ABSTRACT

A considerable amount of design standards has been applied to the World Wide Web by academic researchers and standards boards and organizations. Accessibility and usability standards are one of the most important and effective design standards. They are improving enormously. However there is a considerable lack of research on the accessibility and usability concepts, standards and guidelines dedicated for a specific domain of the web. Furthermore, the lack of research on the accessibility and usability of mobile phone operators domain of the web is noticeable. In this research accessibility and usability literature is discussed and studied intensely in order to extract the existed accessibility and usability concepts, standards and guidelines. The extracted accessibility and usability concepts, standards and guidelines are analysed to reach the most relevant guidelines to the domain of mobile phone operators websites. The related guidelines are listed in checklist tables provided with a scale of 1 to 5, where 1 is poor or not available and 5 is excellent, and a brief remarks field. Two Malaysian mobile phone operators websites and one International mobile phone operator website are observed and analysed against the related guidelines through the checklist tables in order to find out if the chosen mobile phone operators websites are practicing the related standards or not. The scale provided in the checklist tables is a measurement system in order to assess the chosen mobile phone operators websites conformance to the guidelines. Results from the observation show that there is variation of practicing the standards by these chosen mobile phone operators websites. The chosen mobile phone operators websites are following different approaches in their conformance to the related accessibility and usability guidelines. The assessment and evaluation are supported by interviews with end-users of each of the Malaysian companies. The assessment and evaluation results are explained in details. The findings from this study outline key usability and accessibility guidelines related to mobile phone operators domain of the web.

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*In The Name of **Allah**. The Most Gracious and The Most Merciful.*

*All praises and thanks to be to **Allah**, the Lord of all the worlds, and peace be upon*

*our prophet **Muhammad**, his family and companions in entirety.*

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