

In recent years, when you try to search about specific information through the internet, it will return a huge number of results which refers to an information overload problem, therefore there is an essential need to provide solutions to get the related information without spending time and effort, text summarization is one of these solutions. In general summarization extract amount of information by keeping the most important and related content without changing the main idea. Manual summarization, which is done by humans is a costly process because it requires time and effort. As a result, automatic summarization, which is the summarization process done automatically, can be a solution to this problem [1]. Horacio Saggion and GuyLapalme [2] defined a summary as: “a condensed version of a source document having a recognizable genre and a very specific purpose: to give the reader an exact and concise idea of the contents of the source”. The field of automatic summarization appeared in the late 50's by Hans peter luhn's [مصدر الخمسينات3] (see figure1), his summary was a single document. and over the years scientist used more features to develop the domain. In the beginning of 90's scientist used machine learning techniques [4]. Figure 1 Summarization can be categorized into several types based on several factors (see figure2)[5]. Based on the input factor, the summary can be a single document, in which the input is only one document, and multi-document, in which the input is a set of related documents. Based on the language factor, the summary can be mono-lingual, multi-lingual, and cross-lingual. In mono-lingual documents written in one language, in which the language of input document and output summary is the same. While cross-lingual and multi-lingual can work with documents written in several languages, in which the languages of the input document and output summary are the different or same, respectively. Based on the output factor, the summary can be extractive, or abstractive. An extractive summary is built by selecting the important sentences while abstractive summary is built by reformulating the important ideas in the original document after understanding it. Based on the generality factor, the summary can be generic, or query-driven. Generic summary represent all related topics in the input document .query-driven summary depends on users' questions. Based on the media factor, the summary can be text, images, video, and speech