

BAIK Language for Visual Programming with Indonesian Natural Language

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Abstract—Computer language with visual programming has big impact in not only the interface usability of end user, but also in educating computer language to the beginner. Figuring research for using local natural language in computer programming has been explored, but lack of implementation in supporting visual functions. Since the basic purpose of using computer language is to give a command to a machine and get the result for the user, it is a must to consider both user and programmer in how easy to make a command and see the result via graphical interface.

In this paper, we introduce the design of visual function of BAIK scripting language which uses Indonesian natural words for GUI implementations.

Keywords—scripting language; natural language processing; Indonesia lexical parser; visual programming

I. INTRODUCTION

Programming language for both education and business development should consider the aspect of using keywords in natural language and GUI design in order to speed up deep understanding both of the creation of algorithm logic and the serving of information result to end user. Developing GUI with keywords using natural language is the best combination to realize the true user friendly design for developer and end user.

In this paper, we describe the visual design of BAIK [1][2] [3] – a scripting language with Indonesian lexical syntax and visual programming features in multi platform environment, in order to create business application or to introduce computer language using GUI approach. The basic parsing[4][5] design of BAIK scripting language including Indonesian parsing engine(IPE) and memory allocation of variable(MAV) has been introduced as illustrated in Fig. 1 below :

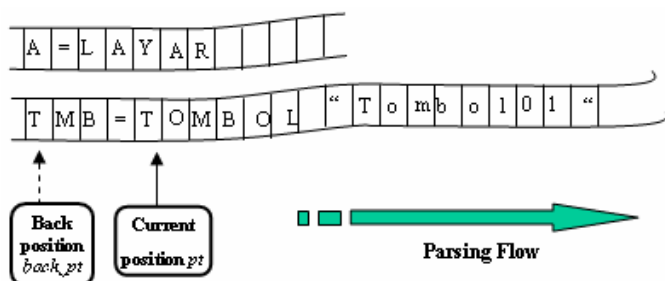


Fig 1 Code Parsing Flow

BAIK language was designed to use Indonesian word parsing for all keywords inside the language. There are two advantages to use BAIK language in application development. The first is no gap of syntax meaning, which means easier to understand the algorithm and information processing for Indonesian which native language is not in English. The second is there is no dependency of computer environment in writing and confirming the program with visual result, which means easier to introduce programming by visual functions in any operating system. Since BAIK syntax is in Indonesian and specific with technical terms orientation, BAIK language is also adoptable to be used widely for people with native language derived from Malay language (including Indonesia, Malaysia, Brunei, Singapore and other neighboring countries).

The design of GUI features of BAIK supports basic desktop components (such as window, button, label and input element), business application components (such as common dialog, table, tooltip, clipboard and calendar) and basic event handler for detecting and processing event of Keyboard, Mouse and GUI components themselves. .