

BAIK (BAHASA ANAK INDONESIA UNTUK KOMPUTER) – PROGRAMMING LANGUAGE BASED ON INDONESIAN LEXICAL PARSING FOR MUTI-TIER WEB DEVELOPMENT

Haris Hasanudin, *Member, IEEE*

Email: hariscom@ieee.org

Abstract

Business software development with global team is increasing rapidly and the programming language as development tool takes the important role in the global web development. The real user friendly programming language should be written in local language for programmer who has native language is not in English. This paper presents our design of BAIK scripting language which syntax is modeled with Indonesian language for multi-tier web development. We propose the implementation of Indonesian Parsing Engine and Binary Search Tree structure for memory allocation of variable and compose the language features that support basic Object Oriented Programming, Common Gateway Interface, HTML style manipulation and Database connection. Our goal is to build real programming language from simple structure design for web development using Indonesian lexical words.

Keywords: scripting language, multi-tier web development, database access, Indonesian lexical parser.

I. INTRODUCTION

The need of programmer job for building web based business software with global team in the Cloud computing era is increasing rapidly. However, the number of global programmer is not growing as fast as market demand. The web global software development with involving developers from many countries faces the language barrier not only in spoken communication between members, but also in programming code level. The programmers should focus not only on program algorithm, but also should write and understand the English based programming languages. In this paper, we explain the scripting language which is suitable for building multi-tier web application using lexical sentence in Indonesian language. The main concept of this local scripting language is easy to use for everyone and more easily to be introduced to the programmer since junior or senior high school level.